# Clemson University **TigerPrints**

Clemson Newsletter News Services

1978

# Clemson Newsletter, 1978-1979

Clemson University

Follow this and additional works at: https://tigerprints.clemson.edu/clemson\_newsletter

Materials in this collection may be protected by copyright law (Title 17, U.S. code). Use of these materials beyond the exceptions provided for in the Fair Use and Educational Use clauses of the U.S. Copyright Law may violate federal law.

For additional rights information, please contact Kirstin O'Keefe (kokeefe [at] clemson [dot] edu)

For additional information about the collections, please contact the Special Collections and Archives by phone at 864.656.3031 or via email at cuscl [at] clemson [dot] edu

# Recommended Citation

University, Clemson, "Clemson Newsletter, 1978-1979" (1978). Clemson Newsletter. 13. https://tigerprints.clemson.edu/clemson\_newsletter/13

This Book is brought to you for free and open access by the News Services at TigerPrints. It has been accepted for inclusion in Clemson Newsletter by an authorized administrator of TigerPrints. For more information, please contact kokeefe@clemson.edu.









# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

Vol. 18 No. 1

August 15, 1978



EDIT 1 OF A A PORT.

# CLEMSON

PRESIDENT

August 9, 1978

TO THE MEMBERS OF THE CLEMSON UNIVERSITY FACULTY AND STAFF:

Mrs. Edwards and I will be "At Home" to the faculty and staff on Thursday evening, August twenty-fourth, from eight until nine-thirty. You are cordially invited to join us in welcoming our newcomers to the University and into the Clemson community.

Sincerely,

Robert C. Edwards

President



POULTRY SCIENCE ASSOCIATION MEETING—Participants in the opening session of the annual Poultry Science Association meeting included Dean L. P. Anderson, President R. C. Edwards, Dr. Ken May, Vice President of PSA; Dr. B. D. Barnett, Host Committee chairman and Dr. W. J. Stadelman, President of PSA. A total of 1250 members and guests attended the meeting which met in Clemson for the first time since 1947. Technical sessions were held throughout the week and the meeting was climaxed by an awards banquet on Thursday evening. Among major award winners was Clemson's B. W. Bierer (Emeritus Professor of Poultry Science) who received the National Turkey Federation's biannual research award. Dr. Bierer was recognized for development of a live fowl cholera vaccine which has been credited with saving millions of dollars for the nation's turkey producers.

# PROCESS FOR SELECTING NEXT UNIVERSITY PRESIDENT BEGINS

The Clemson Board of Trustees has begun a carefully planned and orderly process of selecting the university's ninth president.

President Robert C. Edwards, who has served as the university's chief executive officer since June 1958, will retire June 30, 1979.

Board chairman Paul W. McAlister has announced a 10-member screening committee that will begin its work in August. The

# members are:

--George H. Aull Jr. of Columbia, president of the Clemson University Foundati

--Melvin E. Barnette, vice president fo business and finance.

--T. Todd Lankford, president of the Student Senate.

--Thomas B. McTeer Jr. of Columbia, Clemson trustee who will serve as committee chairman.

August 15, 1978

--Hugh H. Macaulay, Alumni Professor of Economics and Industrial Management.

--Davis T. Moorhead of Alexandria, VA, president of the Clemson Alumni Association.

--Michael M. Ozburn, student body president.

--William F. Steirer Jr., president of the Faculty Senate.

--D. Leslie Tindall of Pinewood, SC, Clemson trustee who will serve as committee vice chairman.

--Melonie S. Willingham, affirmative action specialist, University Extension.

McAlister, who will serve as an ex-officio member of the committee, said: "The Board of Trustees faces a monumental task in choosing a successor to President Edwards. The entire Clemson family can contribute significantly to the list of potential candidates that we should consider. In that spirit I ask you to seriously consider persons that you feel are eminently qualified to serve this institution as president. It is imperative that we choose a chief executive officer who will continue the tradition of excellence that has been built meticulously and deliberately over the years."

Nominations will be accepted by the secretary of the Board of Trustees (Joseph B. McDevitt, vice president for executive affairs) until Sept. 30, 1978.

The work of the screening committee will begin in earnest following that Sept. 30 cut-off date. All candidates who have been nominated or who make application will be considered. In addition, the committee may search for other candidates who are highly qualified.

The screening committee is expected to complete its work by Nov. 30. Approximately 10 candidates considered "highly qualified" and who are available for employment by June 1979 will be asked to submit more detailed résumés and other

supporting documents.

The presidential selection committee will be appointed by the chairman of the board in November. The committee will have five members—three trustees, the president of the Faculty Senate and the president of the Student Body. The committee will study the list of candidates during December and January. Personal interviews will be conducted by the selection committee when appropriate. The committee will submit to the board chairman the names of no less than four or five final candidates by Jan. 31.

Final candidates and their spouses will be interviewed on campus in February and March by the full board, the president, cabinet officers, academic deans and separate faculty-student committees. Additional interviews will be conducted by the full board, if considered necessary, in order for the president-elect to be named on or before April 1, 1979.

Nominations from faculty and staff members should be submitted to: Secretary, Board of Trustees, Clemson University, P.O. Box 992, Clemson, SC 29631.

#### PUBLIC RELATIONS STAFF WINS AAACE AWARDS

The agricultural news and publications staffs of the Public Relations Department won five awards at the 1978 American Association of Agricultural College Editors Conference, held in July in Asheville, NC.

The news staff, headed by Harold Rogers, was cited for excellence in "news releases for newspapers."

Individual recognitions were awarded to graphics manager Shirley G. Owens and graphic artist Evelyn R. Gibson for "popular family living publications" and to Gibson for "popular miscellaneous publications."

Ronald D. Smith, former extension editor, was cited for "single black and white

photograph."

Clemson was co-host of the national conference along with North Carolina State University.

#### ACCOUNTING AND FINANCE

Alison C. Drews (Asst Prof) attended the Annual International Conference of the National Association of Accountants which was held June 21-24 in San Francisco. She accepted the eighth place banner on behalf of the Anderson Area Chapter, for which she is this year's president. The banners are awarded as part of a national competition among N.A.A.'s 306 domestic chapters.

## AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

J. E. Faris (Prof and Hd) participated in a meeting with Professional Leaders -Agricultural Economics, sponsored by ESCS, USDA, in Washington, DC, June 5-6.

## AGRICULTURAL ENGINEERING

John A. Collier (Asst Prof), Jerry B. Davis (Asst Prof), Thomas H. Garner (Prof), Frank H. Hedden (Assoc Prof), Jerry R. Lambert (Prof), James T. Ligon (Prof), Itzhak Meirson (Vstg Instr), and Robert E. Williamson (Assoc Prof) attended the Annual Meeting of the American Society of Agricultural Engineers held at Logan, Utah, June 27-30.

Prof. Collier presented a paper, "Herbicide Incorporation and Planting in One Field Operation," co-authored by himself, Prof. Garner and Prof. Davis.

Prof. Davis presented a paper, "Simulation of Heat and Moisture Movements During Drying of a Two-Dimensional Soil Profile," co-authored by himself and Prof. Garner.

Two papers were co-authored and presented by Prof. Williamson: "Preharvest Treatment of Transplant Beds for Mechanized Lifting" with J. S. Cundiff (Univ of GA) and "Quality Loss of Bulk-Handled Shelled Southern Peas during Field Loading and Transport" with D. A. Smittle (Univ of GA).

Prof. Garner took office as vice chairman in charge of program for the Agricultural Chemical Applications Committee of ASAE and served as a member of the Young Educator Award Committee.

Richard O. Hegg (Assoc Prof) and Clyde L. Barth (Prof) made a 10-day tour studying the state-of-the-art of commercial anaerobic digesters for methane production from livestock and poultry feedlot wastes. Operations serving beef and dairy cattle, swine and laying hens were visited in Nebraska, Oklahoma, Colorado, Minnesota, Wisconsin, Iowa, and Missouri.

#### **BIOCHEMISTRY**

J. M. Shively (Prof and Hd), A. Saluja and B. A. McFadden published an article, "Ribulose Bisphosphate Carboxylase from Methanol-Grown Paracoccus denitrificans," in Journal of Bacteriology Vol. 134, No. 3, June 1978, pp. 1123-1132.

Carolyn S. Brown (Asst Prof), Robert West, Richard H. Hilderman (Asst Prof), Frank T. Bayliss, and Ellis L. Kline published an article, "A new Locus (leu K) Affecting the Regulation of Branched Chain Amino Acid, Histidine and Trytophar Biosynthetic Enzymes," to appear in the ust 1978 issue of Journal of Bacteriology

J. K. Zimmerman (Assoc Prof) participated in a Gordon Research Conference on Biopolymers held June 24-30 at Plymouth,

Prof. Zimmerman was a visiting faculty member of the Biochemistry Department at the Medical University of South Carolina during the month of June. While there he conducted a class in physical biochemistry.

#### CIVIL ENGINEERING

Russell H. Brown (Assoc Prof) has been

selected a member of the Engineering Advisory Committee for the Brick Institute of America which is presently developing Building Code Requirements for Engineered Brick Masonry.

#### DAIRY SCIENCE

J. H. Martin (Prof & Hd), J. T. Lazar (Prof), G. E. Gramling (Assoc Prof), C. B. Reeves (Assoc Prof) and B. F. Jenny (Assoc Prof) attended the annual meeting of the American Dairy Science Association in East Lansing, MI, July 9-13. The following papers were presented: "New Trends in Cultured Dairy Products" by J. H. Martin; and "Effect of Early Gain on Calf Performance from 3 to 12 Weeks of Age" by B. F. Jenny, S. E. Mills (Grad Stu) and B. A. Costello (Grad Stu).

A paper, "Effect of Fluid Intake and Dry Matter Concentration on Scours and Water Intake in Calves Fed Once Daily," was published in the Journal of Dairy Science 61:765 by B. F. Jenny, S. E. Mills, W. E. Johnston (Prof, Exp Sta) and G. D. O'Dell (Prof).

# DIVISION OF INFORMATION SYSTEMS DEVELOPMENT

John C. Peck (Dir) was chairman of a meeting of the IDMS (Integrated Database Management System) User Association Technical Advisory Committee held on campus June 26, 1978.

Mr. Kenneth Pruitt attended the Office of Child Support Enforcement Information Systems Workshop in San Francisco, June 5-7, 1978. He presented the South Carolina Title IV-D Automated System, which was designed and is being implemented at Clemson University by the Division of Information Systems Development, to representatives from all states. He also attended the 1978 National Computer Conference in Anaheim, CA, June 7-8, 1978.

#### **ECONOMICS**

Dudley W. Blair (Assoc Prof) presented a

paper, "A Shift-Share Analysis of Housing Starts," in the Building Economics Session of Western Economic Association Conference at Kona, Hawaii, June 24, and chaired the Health Economics Session of the Western Economic Association Conference at Honolulu, Hawaii, June 21.

Hugh Macaulay (Alumni Prof) published "The Petition of the Candlemakers -- 1978" in World Research INK and attended the Third Legal Institute for Economists from May 21 to June 7, sponsored by the University of Miami School of Law.

# ENVIRONMENTAL SYSTEMS ENGINEERING

The Department of Environmental Systems Engineering has been awarded \$15,000 for an "Air Pollution Training Program" by the U.S. Environmental Protection Agency. T. J. Overcamp (Assoc Prof) is the program director.

#### HISTORY AND VISUAL STUDIES

M. David Egan (Assoc Prof) served as a facilitator of the AIA/RC Summer Seismic Institute at the University of Illinois at Urbana Champaign, held June 18-23. This conference was sponsored by the National Science Foundation.

Prof. Egan was a speaker on "Energy Conscious Design and the Fire Problem in America" at the June meeting of the Anderson Council of Architects.

James E. Dalton (Prof and Asst to the Dean) participated in the Associated Collegiate Schools of Architecture Teacher Seminar at Cranbrook Academy, Detroit, MI, June 18-23. The subject of the seminar was "Educating Architects for Corporate Clients."

#### HOME ECONOMICS

Ursula Holahan (Assoc Prof) recently attended and participated in a workshop on "Consumerism in Textiles" at the University of Tennessee, College of Home Economics. Prof. Holahan developed a paper on how consumers perceive quality of textile products in relation to their performance and price.

Robert H. Barker (Sirrine Prof of Tex Chem) was one of the speakers at this same workshop.

#### INDUSTRIAL MANAGEMENT

Clinton H. Whitehurst (Prof) has been reappointed as a consultant on Transportation Readiness to the Logistics and Communications Division of the U.S. General Accounting Office.

#### MATHEMATICAL SCIENCES

Robert F. Ling (Prof) directed a workshop, "Using Computers to Help Teach Statistics," at the University of New Hampshire, July 24-27.

## PLANT PEST REGULATORY SERVICE

Neil Ogg (Pesticide Coordinator) presented an afternoon workshop on "Pesticide Accident Recognition and Protection" at the National Environmental Health Association Annual Educational Conference in Snowmass, CQ, June 26.

#### POLITICAL SCIENCE

Horace W. Fleming (Assoc Prof) participated in a panel discussion of alternate sources of revenue for local governments in South Carolina at the S. C. City and County Management Association meeting July 21.

Martin Slann (Assoc Prof) has reviewed William B. Quandt, <u>Decade of Decisions</u>: American Policy Toward the Arab-Israeli Conflict, <u>1967-1976</u> in <u>Perspective</u>, Vol. 7 No. 5 (June, 1978), 85-86.

Prof. Slann presented a paper, "French-Israeli Relations: Friendship and National Interest," at the Academic Conference on the Impact of the Fifth Republic, Brockport, New York, June 9-12.

#### POULTRY SCIENCE

Papers presented by Poultry Science faculty and staff at the annual meeting of the Poultry Science Association held here July 17-21 included the following:

"Breaking (Tension) Strength of Broiler Intestines" by J. W. Dick (Asst Prof), K. K. Hale Jr. (Assoc Prof), S. L. Boulton (Grad Stu) and V. P. Cheatham (Grad Stu).

"Factors Affecting Shell Cracking, Peeling Ease and Tenderness of Hard Cooked Eggs" by Prof. Hale and K. A. Holleman (Prof).

"Effect of Feed Density and Calcium Particle Size on the Egg Characteristics of Leghorn Hens During Short Term Heat Stress" by W. E. Mulliken (Ag Assoc II) and D. P. Holder (Asst Prof).

"A Procedure for Peripheral Arterial Blood Flow Measurements in Mature Turkeys" by S. A. Fallaw (Grad Stu) and J. E. Jones (Prof).

"Lack of Interaction Between Fatty Acid Composition and Methionine or Lysine in Broiler Feeds" by C. L. Strong (Grad Stu) and Prof. Holder.

## PROFESSIONAL DEVELOPMENT

Ernest Berry (Assoc Prof, Tex) is chairperson for a three-day short course, "Technical Workshop on Shuttleless Looms," to be held Aug. 15-17 at Clemson University.

Warren W. Menke (Prof, IM) is the seminar leader for an Aug. 17-18 on-campus course, "How to Utilize the Computer to Improve Your Management Ability."

J. Michael McDonald (Asst Prof, IM) is chairing a course here, "Absenteeism," Aug. 17.

JZICKA	
911 Nc	Greensboro, N. C. 27420
Instructions by: Pho	ne Na.: Dote Sent to Binder
T.W.	9/ /80
ALL INSTRUCTIONS ON BINDING TICKE	T WILL BE FOLLOWED EXPLICITLY
LETTER SPINE EXACTLY AS FOLLOWS:	INSTRUCTIONS TO BINDER
Title:	Bind os is (with covers & ods
CLEMSON	Remave front cavers
NEWSLETTER	Remove back cavers Remave ods (frant & back)
	Remaye all ads (extro charge
EHLERMANN	Bind title page/contents in from
	Bind index in front
	Bind index in back
Vol.: 18	Hand sew if necessary (extro
	AAB 598 Cover Calar
	Letter in:gald;block;
Year AUG. 15, 1978-	white
AUG. 1, 1979	LIBRARY BOOKS:
	Decorated covers;plain covers;picture covers (extra charge)
To Irinantes	
Call No.: DEL	SUPER FLEX /
S.C. LOUCLAS	SUPER-FLEX (economy binding) Uni-
.C6n	& ods bound in. Cover color for
	periodicals only
Close margins	Books & Poperbocks — cloth colors rondom selected by binder; binder's
CIUS	choice of black or white lettering.
STANDARD	Paperbacks:Mount front cover;
	Bind in covers;Discard covers.
Special Instructions:	
8635	8 4
900	
Send two copies of binding slip with vol	
If item returned for correction becouse of must be returned with volume.	binder's error, original binding slip
BINDERY	COPY



August 15,

7

Edward S. Ols person for an Topics in Late tion," to be he

rpTica-

Thomas W. Zimmerer (Assoc Prof, IM) and Luther G. White (Asst Prof, IM) are leaders of a seminar, "Improving Managerial Skills of Textile Supervisors," to be held here Aug. 29-30.

Hassan M. Behery (Assoc Prof, Tex) is chairperson for a course, "Reduction of Fabric/Yarn Defects Through the Selection & Processing of Fibers," which will be held on campus Sept. 12-13.

Robert Rouse (Assoc Prof, Acct and Fin) will be the leader of a "CPA Review" course to be held at Furman University Friday evenings from 5 to 9 p.m. and all day Saturday for eight consecutive weekends beginning Sept. 8 and ending Oct. 29.

Maureen O'Brien (Instr, Econ) is chairing a course, "The New Supervisor," to be held Sept. 14-15.

Joseph M. Prinzinger (Asst Prof, Econ) is chairperson for a Sept. 13-14 on-campus course, "Practical Skills in Managing People."

## PUBLIC RELATIONS

Six staff members served on conference committees of the 1978 American Association of Agricultural College Editors Conference (AAACE), July 9-12 in Asheville, NC:

--Harold Rogers (Asst Dir Pub Ser Info), host state coordinator;

--Doris A. Timmerman (Asst Dir Pub Ser Pubs), chairman, awards and critique;

--Shirley G. Owens (Graph Mgr) and Anne A. Bellissimo (Assoc Exp Sta Ed), communications;

--Dot S. Yandle (Exp Sta Ed), arrangements; welyn R. Gibson (Graph Art), hospitality.

Melvin C. Long (Dir) was an invited participant in a panel discussion at the AAACE Conference, July 9-12 in Asheville, NC. His presentation was on "Consolidated News Service."

Anne Bellissimo presented a discussion on "A South Carolina Newspaper Survey" at the AAACE Conference, July 9-12 in Asheville, NC.

Melvin Long was an invited speaker at the College News Seminar of the Carolinas, Aug. 4, Asheville, NC. His presentation was on "Town versus Gown--'PR' Aspects of Public Relations Department Operations."

Ross Cornwell (Asst Dir) is co-author with John H. Austin (University of Maryland and former Hd, Environmental Systems Engineering) of the book An Instructional Delivery System for Manpower Management. The book, developed under a grant from the U.S. Environmental Protection Agency, is a planning and reference guide for state water quality control program directors and manpower planners in the 50 states.

Beulah R. Cheney (Univ Pubs Ed) and Ross Cornwell served as editorial and design consultants for publication of the book Learner's Guide for Water Quality Monitoring. The 258-page book is an instructional guide for a national two-year water quality monitoring curriculum developed under a U.S. Environmental Protection Agency grant.

Beulah Cheney served as program chairman for the Publications and Periodicals Division for the Southeastern District III Conference of the Council for the Advancement and Support of Education, in Atlanta, GA.

#### SEED CERTIFICATION

John O. Black Jr. (Hd and Lect, Agron and Soils) presented a report on "Evaluations of Seed Certifying Agency Standards and

Procedures in the Southern Region to Determine Compliance with Federal Seed Act Regulations" at the annual meeting of Southern Seed Certification Officials in Gulf Shores, AL, July 12. Mr. Black participated in the annual meeting of the Association of Official Seed Certifying Agencies (AOSCA) in Ottawa, Ontario, July 24-28. He was named to a 10-member committee of U.S. and Canadian AOSCA directors formed to plan the development and implementation of long range objectives and goals for the organization.

## ZOOLOGY

"The Effect of Photoperiod on the Deep Body Temperature of Domestic Turkeys and Its Relationship to the Diurnal Periodicity of Leucocytozoon smithi Gametocytes in the Peripheral Blood of Turkeys," co-authored by Thomas C. Gore (Grad Stu) and Gayle Pittman Noblet (Asst Prof) was published in Poultry Sci 57: 603-607.

Prof. Noblet authored an article, "Tetrachlorvinphos as an Ineffective Feed Additive in Control of Gastrointestinal Nematodes of Beef Cattle," which was published in Am. J. Vet. Res. 39: 1033-1036.

John P. Wourms (Assoc Prof) participated in a Symposium on the Determinants of Spatial Organizations. This, the 37th Annual Symposium of the Society for Developmental Biology, was held at the University of Wisconsin, Madison, June 14-16.

The sixth annual Southeastern Ecological Genetics meeting will be hosted by Clemson University's Zoology Department Sept. 23-24. Interested parties should contact Darrell G. Yardley.

MINUTES OF THE EDUCATIONAL COUNCIL MEETING, APRIL 3, 1978

See addendum.

MINUTES OF THE FACULTY SENATE MEETING, JUNE 20, 1978

See addendum.

# FACULTY SENATE ROSTER 1978-1979

(Senate phone - 656-2456)

	(Senate phone - 050-2450)			
NAME	ACADEMIC UNIT	CAMPUS ADDRESS	PHONE	TERM ENDS
AGRICULTURAL SCIENCES T. R. Adkins (Sec.) J. F. Dickey (V.Pres) C. E. Hood (R) D. B. Smith (P) A. R. Mazwr (W) S. G. Turnipseed (W) B. R. Smith (R) C. S. Thompson (A)	Entomology & Ec. Zoology Dairy Science Agri. Engineering Agri. Ec. & Rural Soc. Horticulture Entomology & Ec. Zoology Agronomy & Soils Agri. Ec. & Rural Soc.	B28 Long 124 P&AS 203 McAdams 285 Barre 168 P&AS Edisto Sta.284 277 P&AS 255 Barre	3111 3232 3250 3475 3403 -2203 3102 2396	1979 1979 1979 1979 1980 1980 1981
ARCHITECTURE C. L. Addison (A) J. L. Young (A)	Bldg. Sciences Arch. Studies	166 Lee 159 Lee	3081 3081	1979 1979
EDUCATION J. H. Walker (W) W. E. West* (P)	Elem. & Sec. Education Industrial Education	108B Godfrey 107 Freeman	3482 3447	1979 1980
ENGINEERING  J. L. Prince (W)  D. D. Edie* (A)  J. J. Komo (R)  W. Baron (W)  J. C. Hester (P)	Elec. & Computer Engr. Chem. Engr. Elec. & Computer Engr. Civil Engr. Mech. Engr.	20 Riggs 221 Earle 225 Riggs 212 Lowry 303A Riggs	3375 3056 3378 3002 3139	1979 1980 1980 1981 1981
FOREST & RECREATION RES L. D. Reamer (R) E. A. Merrell (P)	OURCES Forestry Rec. & Park Adm.	266B For.&Rec. 281 For.& Rec.		1979 1981
INDUSTRIAL MANAGEMENT A W. C. Whitten (A) G. H. Worm (R)	ND TEXTILE SCIENCES Economics Ind. Management	209B Sirrine 312B Sirrine	3497 3499	1979 1981
LIBERAL ARTS H. B. Bryant (A) W. F. Steirer (Pres.) H. W. Fleming (P) R. S. Lambert (W) E. M. Coulter (P) C. A. Grubb (A)	English History Pol. Science History Pol. Science History	608 Strode 222 Hardin 401 Strode 104A Hardin 403 Strode 203 Hardin	3041 3153 3246 3153 3235 3153	1979 1979 1980 1980 1981 1981
LIBRARY D. A. Fiste (P)	Catalog Department	Library	3027	1979
NURSING O. S. Hipps (A)	Nursing	438 Nursing	3072	1980
SCIENCES P. B. Burt* (W) R. E. Fennell * (R) H. K. McDowell J. E. Schindler (W) H. F. Senter (A) D. S. Snipes (R)	Physics & Astronomy Math. Sci. Chem. & Geology Zoology Math. Sci. Chem. & Geology	117 Kinard 0-222 Martin 114 Brackett 336 Long 0-304 Martin 210 Brackett	3417 3432 3089 3247 3433 3438	1980 1980 1980 1981 1981 1981

<sup>\*</sup>Comm. Chrm. KEY: Admissions and Scholarship (A); Policy (P); Research (R); and Welfare (W). Advisory Committee members are listed in script.

COMMITTEES AND COUNCILS OF THE UNIVERSITY 1978-79

Affirmative Action Committee. This
committee advises the affirmative
action officer on matters relating to
equal employment opportunity and the
affirmative action program.

# M. S. Willingham (A/A Specialist, Chairperson, ex officio)

D.	L. Ham (Acad Aff)	1979
R.	Thompson (Acad Aff)	1979
D.	B. Dillard (Bus & Fin)	1979
н.	D. Harby (Dev)	1979
С.	L. Addison (Acad Aff)	1980
W.	F. Steirer, Jr. (Acad Aff)	1980
0.	D. Nelson (Stu Aff)	1980
L.	E. Reid (Bus & Fin)	1980
R.	W. Snelsire (Acad Aff)	1981
Р.	D. Hawkins (Bus & Fin)	1981
N.	S. Williams (Stu Aff)	1981
Α.	R. Mazur (Fac Sen)	1979

- S. M. Willis (A/A Area Coord, ex officio)
- R. L. Thompson (A/A Area Coord, ex officio)
- E. N. Tyndall (A/A Officer, ex officio)
- F. Mauldin (A/A Specialist, Alternate Chp, ex officio)

Archives Committee. This committee advises the administration on all policies concerning the University archives.

#### (Chairperson to be elected)

В.	N.	Skardon (Engl)	1979
0.	Ers	senkal (Arch)	1980
R.	T.	Benson (Voc Educ)	1980
J.	W.	Hubbard (AgEcon/RurSoc)	1981

R.	s.	Lambert (Fac Sen)	1979
F.	M.	Lense (Undgrad Stu)	1979
М.	L.	Rowlands (Grad Stu)	1979
J.	W.	G. Gourlay (Dir of Library,	

ex officio)

Athletic Council. This council recommends all policy concerning intercollegiate athletics to the Vice President for Student Affairs.

# K. N. Vickery (Chairperson)

R.	C.	Harshman (Chem Engr)	1979
I.	C.	Briscoe (Elem/Sec Educ)	1979
J.	v.	Reel, Jr. (Secy, Hist)	1980
L.	W.	Gahan (RPA)	1980
J.	F.	Geldard (Math Sci)	1981
В.	J.	Skelton (Hort)	1981

- W. F. Steirer (Pres, Fac Sen) 1979
- R. Noblet (Immed Past Pres of Fac Sen) 1980
- B. L. Edge (Past Pres of Fac Sen) 1979
- C. H. Sawyer (Chp of Scholarships & Awards Committee)
- D. T. Moorhead (Pres, Alumni Assn)
- J. G. Bagnal (Immed Past Pres of Alumni Assn)
- F. R. Gressette (Pres of IPTAY)
- G. G. Poole, Jr. (Immed Past Pres of IPTAY)
- C. A. Aas (Pres of GSA)
- T. T. Lankford (Pres of Stu Sen)
- P. J. Grant (Pres, Block "C")

Audio-Visual Committee. This committee advises the Vice President for Development on the audio-visual needs and programs of the University

	W.	H. Owens, Jr. (Chairperson Pol Sci)	n, 1979
s.	W.	Thompson (Nurs)	1979
J.	Α.	Stockham (Arch)	1979
Т.	F.	Collins (Phys & Astron)	1980
W.	Α.	Shain (For)	1980
т.	Ε.	Burke (E & CE)	1980
D.	W.	Blair (Econ)	1981
R.	G.	Halfacre (Hort)	1981
R.	С.	Davenport (Voc Educ)	1981
Α.	C.	Groseclose (Undgrad Stu)	1979
s.	For	rsbery (Grad Stu)	1979
В.	R.	Smith (Fac Sen)	1979
W.	н.	Durham (Dir of Comm Cntr, ex officio)	

Bookstore Advisory Committee. This committee advises the manager of the Bookstore on the determination of the needs of the Bookstore, the formation of Bookstore policies and other such matters as may be referred to it by the manager of the Bookstore or the Dean of Students.

# (Chairperson to be elected)

L.	H. Blan	ton (Agri Educ)	1979
J.	D. Acke	r (Acct & Fin)	1980
В.	M. Cool	(For)	1981
к.	E. Port	(Undgrad Stu)	1979
J.	M. Ande	rson (Undgrad Stu)	1979
P.	Wludyka	(Grad Stu)	1979
J.	J. Komo	(Fac Sen)	1980

J. C. Cureton (Mgr of Bookstore, ex officio)

Campus Names Committee. The function of this committee is to recommend to the administration and the Board of Trustees appropriate names for buildings and streets.

H. H. Macaulay, Jr. (Chairperson)

B. M. Cool

H. N. Cooledge, Jr.

J. L. Edwards

J. H. Hobson

E. M. Lander, Jr.

S. G. Nicholas

E. S. Olson

T. L. Senn

Computer Advisory Committee. This committee advises the Dean of Graduate Studies and University Research on needs of the Computer Center.

	F.	R. Sias, Jr. (Chp, E & CE)	1980
G.	J.	Wells (AgEcon/RurSoc)	1979
Ε.	L.	Falk (Arch)	1979
J.	Α.	Hash (Agri Educ)	1979
G.	н.	Worm (Ind Mgmt)	1980
R.	W.	McLellan (RPA)	1980
С.	М.	Sieverdes (Socio)	1981
C.	R.	Dillon (Botany)	1981
М.	G.	Robinson (Nurs)	1981
К.	N.	Vickery (Stu Aff)	1981
J.	М.	Bennett (Bus & Fin)	1981
G.	М.	Moore (Dev)	1981
Α.	R.	Brooks (Undgrad Stu)	1979
D.	К.	Gupta (Grad Stu)	1979
C.	Ε.	Hood, Jr. (Fac Sen)	1979
C	т	Duckonfield (Dir of Comp	

C. J. Duckenfield (Dir of Comp Ctr, ex officio) Council of Academic Deans. This council makes recommendations on policy matters affecting the colleges to the President through the Vice President for Academic Affairs and Dean of the University.

- V. Hurst (Chp, V-Pres for Academic Affairs)
- L. P. Anderson (Agri Sci)
- H. E. McClure (Arch)
- H. F. Landrith (Educ)
- L. C. Wilcox (Engr)
- B. H. Box (FRR)
- W. D. Trevillian (IM&TS)
- H. M. Cox (Lib Arts)
- G. Labecki (Nurs)
- H. E. Vogel (Sci)
- C. B. Green (Undgrad Studies, ex officio)
- A. E. Schwartz (Grad Studies & Univ Res, ex officio)
- S. M. Willis (Univ Ext, ex officio)
- W. F. Steirer, Jr. (Pres, Fac Sen, ex officio)

Disciplinary Committee. This committee is vested by the Board of Trustees with the authority to take action in certain disciplinary matters that have not been delegated to the student body.

## (Chairperson to be elected)

T 7		G. 1 7 /D	
W.	F.	Steirer, Jr. (Pres, Fac Sen)	1979
		rac sell)	13/3
н.	К.	McDowell (Fac Sen)	1979
Т.	М.	McInnis, Jr. (Botany)	1979
Τ.	т.	Lankford (Pres, Stu Sen)	1979
М.	Μ.	Ozburn (Pres, Stu Bdy)	1979
S.	L.	Hodge (Undgrad Stu)	1979
Т.	G.	Hall (Grad Stu)	1979

Educational Council. This council recommends academic, research, and extension policy to the President.

- R. C. Edwards (Chairperson)
- V. Hurst (Acad Affairs)
- M. E. Barnette (Bus & Fin)
- W. T. Cox (Stu Affairs)
- J. B. McDevitt (Exec Affairs)
- S. G. Nicholas (Development)
- C. B. Green (Undgrad Studies)
- A. E. Schwartz (Grad Studies & Univ Res)
- S. M. Willis (Univ Ext)
- K. N. Vickery (Adm & Reg)
- J. W. G. Gourlay (Library)
- W. F. Steirer, Jr. (Fac Sen)
- L. P. Anderson (Agri Sci)
- H. E. McClure (Arch)
- H. F. Landrith (Educ)
- L. C. Wilcox (Engr)
- B. H. Box (FRR)
- W. D. Trevillian (IM&TS)
- H. M. Cox (Lib Arts)
- G. Labecki (Nurs)
- H. E. Vogel (Sci)
- M. C. Long (Public Rel, ex officio)
- E. N. Tyndall (Secretary, ex officio)

Energy Conservation Committee. This committee formulates ideas and acts as a clearinghouse for ideas from anyone in th University family about reducing energy consumption.

(Asst V-Pres Phys Plant, Chairperson)

J. A. Stanley (Phys Plant, Co-Chairperson

Energy Conservation Committee (	(Cont.)	R. E. Barfield, Jr. (Engl)	1979
J. M. Hanna (Phys Plant Engine	er)	R. M. Frye (RPA)	1979
D. W. Bradbury (Mech Engr)	Ť	G. K. Brown (Nurs)	1979
F. J. Keller (Physics)		E. A. Rupert (Agron & Soils)	1980
R. L. Cottle (Econ)		L. G. Craig (Arch)	1980
J. W. Young, Jr. (Res Halls)		G. B. Savitsky (Chem & Geol)	1980
J. R. Pope, Jr. (Athletics)		J. L. Gaddis (Mech Engr)	1981
J. C. Barnhill (Stu, dorm resid	lent)	R. H. Mabry (Econ)	1981
S. Brown (Stu, dorm resident)		V. B. Stanley (Elem/Sec Educ)	1981
, , , , , , , , , , , , , , , , , , , ,		K. C. Davis (Undgrad Stu)	1979
		P. J. Joy (Grad Stu)	1979
Extension Council. This counci		D. A. Fiste (Fac Sen)	1979
the Dean of the University External policies and regulations pe		H. M. Cox (Lib Arts, ex officio)	
to the total University extensi		H. E. McClure (Arch, ex officio)	
S. M. Willis (Chairperson, e	ex officio)		
H. E. Albert (Pol Sci)	1979		
J. J. Chodil (Nurs)	1979	Graduate Council. All policies a gulations affecting graduate cur	
R. P. Ashworth (Botany)	1979	and requirements leading to grad	uate
G. C. Skelley, Jr. (An Sci)	1980	credits, certification, and degree be approved by this council and	
H. W. Webb (Arch)	1980	ed to the Dean of the University	
D. H. Pate, Jr. (Ed Serv)	1980	A. E. Schwartz (Chp, ex offic	io)
F. C. Alley (Chem E)	1981	L. E. Nix (For)	1979
G. E. Sabin (For)	1981	R. J. Calhoun (Engl)	1979
C. S. Simpson, Jr. (Ind Mgmt)	1981	L. A. Dyck (Botany)	1979
H. W. Fleming, Jr. (Fac Sen)	1979	T. E. Skelton (Ent & Econ Zool)	1980
R. Smith (Pres, Ext Sen)	20,0	I. C. Briscoe (Elem/Sec Educ)	1980
F. Pardue (Pres, Ext Spec Assn)		J. P. Holschneider (Arch)	1980
L. Durham (Pres, Ext Home Econ		J. E. Clark (Civil Engr)	1981
G. Tate (Pres, Ext Cnty Agents)		E. E. Burch, Jr. (Ind Mgmt)	1981
	noon	G. A. Tanner (Nurs)	1981
		M. J. Ellerbrock (Grad Stu)	1979
Fine Arts Series Committee. Th		E. M. Pascalides (Grad Stu)	1979
committee plans, coordinates, a cizes the annual program of Unit		D. D. Edie (Fac Sen)	1979
concerts, films, lectures, play art exhibits.		D. D. Edge (rac bell)	

J. H. Butler (Chairperson)

art exhibits.

# Graduate Council Alternates

D.	D. Edie (Chem E)	1979
C.	W. Roberts (Text)	1979
Μ.	A. Kelly (Nurs)	1979
R.	E. Barfield, Jr. (Engl)	1980
R.	E. Schoenike (For)	1980
W.	E. Gettys (Phys & Astron)	1980
F.	Roth (Arch)	1981
N.	D. Camper (Plnt Path/Physio)	1981
s.	L. Buckner (Elem/Sec Educ)	1981
Α.	R. Mazur (Fac Sen)	1979

Honors Program Council. This council recommends policy, including curricula and admission standards, concerning the Honors Program to the Dean of Undergraduate Studies.

# C. H. Sawyer (Chairperson)

R.	W.	Snelsire (E & CE)	1979
Μ.	Α.	Nicholson (Nurs)	1979
Α.	Ε.	James (RPA)	1979
J.	Ε.	Schindler (Zool)	1980
R.	G.	Bursey (Fd Sci)	1980
J.	Bol	bbitt (Engl)	1980
J.	R.	Washburn (Arch)	1981
Α.	М.	Sibley (Acct & Fin)	1981
Ε.	F.	Olive (Elem/Sec Educ)	1981
s.	C.	Anderson (HPC Stu)	1979
0.	F.	Lovelace, Jr. (HPC Stu)	1979
R.	s.	Lambert (Fac Sen)	1979

C. B. Green (Undgrad Studies)

K. N. Vickery (Adm & Reg)

Laboratory Animal Welfare Committee.
This committee functions as the evaluation committee on the care and treatment of laboratory animals and advises the Dean of the University in regard to the animal and animal facility policies of the University.

# R. W. Henningson (Chairperson)

D.	E.	Turk (Fd Sci)	1979
F.	J.	Stutzenberger (Microbiol)	1980
Α.	F.	von Recum (Interdis Stu)	1981
Н.	Α.	Hock (Undgrad Stu)	1979
J.	Ε.	Anderson (Grad Stu)	1979

S. L. Moore (State Veterinarian)

Landscape and Site Development Committee. This committee formulates and recommends to the administration long-range goals for the landscape and site development of the University campus.

# J. C. Suber (Supt of Grounds, Chairperson)

(Asst V-Pres, Physical Plant)

D. J. Boyer (Supt of Planning & Engr)

R. D. Eflin (Campus Master Planner)

L.	W.	Gahan (RPA)	1979
То	be	appointed (Fac Sen)	1979
В.	C.	Grant, Jr. (Undgrad Stu)	1979

August 15, 1978

COMMITTEES AND COUNCILS (Cont.)

Library Committee. This committee advises the Director of the Library on the determination of needs of the library, the formation of library policies, and on such other matters as may be referred to it by the Director.

# (Chairperson to be elected)

	(0.	deripordon to be erected,	
н.	N.	Cooledge, Jr. (Arch)	1979
Α.	C.	Drews (Acct & Fin)	1979
P.	К.	Hill (Hist)	1979
Α.	W.	Baxter (Microbio)	1980
J.	V.	Hamby (Elem/Sec Educ)	1980
J.	С.	McCormac (Civil Engr)	1980
В.	F.	Campbell (Nurs)	1981
s.	s.	H. Rizvi (Fd Sci)	1981
М.	н.	Wynn (RPA)	1981
G.	G.	Haehnle (Undgrad Stu)	1979
То	be	appointed (Grad Stu)	1979
В.	R.	Smith (Fac Sen)	1979
J.	W.	G. Gourlay (Dir of Library	у

Management Information Systems Coordinating Board (MIS). This board will supervise the development of administrative data systems and determine the priority of systems to be programmed and implemented.

ex officio)

- R. C. Edwards (Chairperson)
- M. E. Barnette (Bus & Fin)
- A. E. Schwartz (Acad Aff)
- J. L. Strom (Dev)
- K. N. Vickery (Stu Aff)
- G. D. Alexander (Dir of Adm Prog Serv)
- C. J. Duckenfield (Dir of Comp Center)
- J. C. Peck (Dir of Info Systems)

Medical Technology Curriculum Committee. This committee will counsel and advise with undergraduate students enrolled in this curriculum and make recommendations to the Undergraduate Council about the curriculum.

- M. B. Bishop (Chairperson)
- H. K. McDowell (Chem & Geol)
- F. J. Stutzenberger (Microbiol)

Patent Committee. This committee makes recommendations to the President concerning all University patent matters in accord with Patent Policy in the Faculty Manual.

# J. B. McDevitt (Chairperson)

G.	E.	Miles (Agri Engr)	1979
Α.	Т.	Shearin (For)	1979
Т.	Н.	Garner (Agri Engr)	1981
D.	W.	Bradbury (Mech Engr)	1981
С.	В.	Bishop (Math Sci)	1981
L.	Nur	nnery (Undgrad Stu)	1979
Р.	Α.	Sperling (Grad Stu)	1979
J.	С.	Hester (Fac Sen)	1979

- M. E. Barnette (Bus & Fin, ex officio)
- T. D. Efland (Assoc Dean, IM&TS, ex officio)
- W. C. Godley (Dir of Agri Exp Sta, ex officio)
- S. G. Nicholas (V-Pres for Dev, ex officio)
- E. N. Tyndall (Sec, ex officio)

<u>Planning Council</u>. This council advises the V-Pres. for Development on plans and proposals pertaining to the development of programs for the enhancement of the academic and cultural life of the University community.

	C.	L. Lane (Chp, For)	1980
R.	G.	Halfacre (Hort)	1979
D.	L.	Collins (Arch)	1979
M.	Α.	King (Elem/Sec Educ)	1979
N.	R.	Bauld, Jr. (Mech Engr)	1980
R.	н.	Mabry (Econ)	1980
Р.	W.	Wannamaker (Lang)	1981
M.	Α.	Kelly (Nurs)	1981
J.	L:	von Rosenberg (Chem/Geol)	1981
Α.	D.	Hickman (Bus & Fin)	1981
W.	F.	Steirer (Pres, Fac Sen)	1979
M.	М.	Ozburn (Pres, Stu Bdy)	1979
Т.	т.	Lankford (Pres, Stu Sen)	1979
С.	Α.	Aas (Pres, GSA)	1979

Pre-Professional Health Curricula
Committee. This committee will counsel
and advise with undergraduate students
enrolled in the curricula and make reccommendations to the Undergraduate
Council concerning these curricula.

R. D. Eflin (Campus Master Planner, ex officio)

- F. A. Burtner (Sociology, Chp)
- F. W. Cooke (Interdis Studies)
- R. L. Hays (Zoology)
- J. H. Hobson (Chem & Geol)
- M. J. B. Paynter (Microbiology)
- P. A. Steiner (Physics & Astron)

Pre-Veterinary Medicine Curriculum

Committee. This committee will counsel
and advise with undergraduate students
enrolled in this curriculum and make
recommendations to the Undergraduate
Council regarding this curriculum.

- J. E. Jones (Poul Sci, Chp)
- T. R. Adkins, Jr. (Ent/Econ Zool)
- C. E. Boyd (State Veterinarian)
- J. F. Dickey (Dairy Sci)
- J. C. McConnell, Jr. (Animal Sci)
- G. P. Noblet (Zool)

Protection of Human Subjects Committee.
This committee reviews all University projects and activities that involve human subjects and ensures that the rights and welfare of subjects are adequately protected, that the risks to subjects are outweighed by potential benefits, and that the informed consent of subjects is obtained by methods that are adequate and appropriate.

- R. W. Henningson (Chairperson)
- F. W. Cooke (DIS)
- C. R. Freeze (Elem/Sec Educ)
- J. E. Hair (Stu Health Serv)
- L. G. Peppers (Socio)
- D. J. Senn (Psychology)
- R. L. Thompson (American Enka Co.)
- W. P. Williams, Jr. (Fd Sci)

Rare Possessions Committee. This committee evaluates all items proferred to the University as gifts, or otherwise, in order to determine whether they should be accepted as rare possessions. Once accepted, the committee ensures proper identification, placement, maintenance and security of these possessions.

J. S. Kline (Chairperson, Ext Home Eco

# Rare Possessions Committee (Cont.)

- H. N. Cooledge, Jr. (Hist & Vis Studies)
- M. A. Armistead (Library)
- J. C. Hubbard, Jr. (Text)
- E. A. Freeman (Music)

Recreation Advisory Committee. This committee receives and reviews suggestions and complaints regarding the use of physical recreation facilities and programs at the University and advises the Vice President for Student Affairs on a continuing basis.

G.	Ε.	Howard	(RPA)	1979
----	----	--------	-------	------

- G. E. Coakley (Stu Aff) 1979
- D. B. Smith (Agri/Econ Rur/Soc) 1980
- H. D. Harby (Dev) 1980

R. E. Ricketts (Bus & Fin)

- J. C. Hester (Mech Engr) 1981
- 1979
- R. J. Conrad (Undgrad Stu)
- A. C. Moye (Undgrad Stu) 1979
- J. E. Fowler (GSA) 1979
- J. B. McFadden (Athletics, ex officio)
- C. P. Kriese (Athletics, ex officio)
- B. E. Trent (YMCA, ex officio)

Safety and Fire Prevention Committee. This committee advises the President through the University Safety Coordinator and other appropriate officials on safety policies and programs.

D. L. Roberts (Agri Engr,

Chair	person)	) 1980

1981

- he F. C. Alley (Chem Engr) 1979
  - M. D. Egan (Arch) 1979
  - M. J. Drews (Text) 1981

- R. H. Hilderman (Biochem) 1981
- A. D. Timms (Campus Security) 1981
- J. M. Hanna (Phys Plant) 1981
- V. R. Harrell (Bus & Fin) 1981
- J. D. Brabham (Undgrad Stu) 1979
- L. A. Deloach (Grad Stu) 1979
- C. L. Addison (Fac Sen) 1979
- L. D. Reamer (Mgr of Clemson Forest, ex officio)
- W. E. Berry (Univ Safety Coord, ex officio)
- J. B. McFadden (Athl Dept, ex officio)
- J. E. Hair (Stu Health Serv, ex officio)

Schedule Committee. This committee develops the master schedule of courses taught at the University.

- K. N. Vickery (Chairperson, ex officio)
- H. D. Adams (History)
- R. P. Ashworth (Botany)
- L. H. Brown (Arch)
- B. M. Cool (Forestry)
- J. H. Couch (Engr Tech)
- C. C. Davis (Acct & Fin)
- B. W. Donovan (Aerospace Stu)
- C. R. Gordon (Undgrad Stu)
- J. C. Harden (Math Sci)
- R. C. Harshman (Chem Engr)
- J. A. Hash (Agri Educ)
- S. S. Hayasaka (Micro)
- L. L. Henry (Engl)
- J. H. Higgins (Nurs)
- R. H. Hilderman (Biochem)
- J. C. Hubbard (Text)
- W. G. Hudson (Mech Engr)
- P. R. Kelley (Military Sci)

# Schedule Committee (Cont.)

- H. G. Lefort (Ceramic Engr)
- J. T. Long (E & CE)
- W. R. Mattox (Adm & Reg)
- D. D. Moyle (Interdis Stu)
- R. F. Nowack (Civil Engr)
- T. J. Overcamp (ESE)
- J. R. Salley (Chem)
- C. R. Smith (Ind Mgmt)
- P. A. Steiner (Phys & Astron)
- G. R. von Tungeln (Res Inst)
- A. P. Wheeler (Zool)
- To be appointed (Grad Stu)

Scholarships & Awards Committee. This committee selects students for University scholarships and awards. It also has the responsibility for planning and coordinating the annual University Honors and Awards Day.

- C. H. Sawyer (Chairperson)
- W. W. Coffeen (Ceramic Engr) 1979
- K. S. LaFleur (Agron & Soils) 1979
- A. P. C. Marsinko (For) 1979
- 11. 1. 0. Halbinko (101) 17/7
- A. D. Brooks (Elem/Sec Educ) 1980
- M. H. Sanders (Ind Mgmt) 1980
- N. L. Book (Arch) 1980
- C. H. Woodell (Engl) 1981
- M. A. Nicholson (Nurs) 1981
- V. S. Griffin, Jr. (Chem/Geol) 1981

1979

J. W. Cutler (Phi Kappa Phi)

- B. J. Hatchell (Phi Eta Sigma) 1979
- C. A. Grubb (Fac Sen) 1979
- K. N. Vickery (Adm & Reg, ex officio)
- G. E. Coakley (Assoc Dean of Students ex officio)

- S. G. Delony (Assoc Dean of Students, ex officio)
- M. G. Carmichael (Dir of Fin Aid, ex officio)

Section 504 Self-Evaluation Steering Committee. The purpose of this committee is to evaluate current University policies and practices to ensure nondiscrimination on the basis of handicap.

- S. M. Willis (Univ Ext)
- W. F. Steirer, Jr. (Pres, Fac Sen)
- D. L. Roberts (Agri Engr)
- J. W. Pace (Asst Dean of Stu)
- R. L. Thompson (Personnel)
- J. R. Cox, II (Undgrad Stu)
- S. P. Park (Undgrad Stu)

Student Grievance Committee. The purpose of this committee is to hear and to attempt to resolve grievances brought by students against members of the faculty and staff.

A. Mathiasen, Jr. (Stu Aff)	1979
S. B. Smith, Jr. (Stu Aff)	1981
L. Clyburn (Undgrad Stu)	1979
G. K. Martin (Undgrad Stu)	1980
O. R. Lumpkin (Elem/Sec Educ)	1979
R. F. Nowack (Civil Engr)	1980
J. L. Stevenson (RPA)	1981
To be appointed (Grad Stu)	1980
J. C. Newton (Bus & Fin)	1980

COMMITTEES AND COUNCILS (Cont.)

Student Relations Committee. This committee's function is to hear academic grievances by students against faculty members and attempt to resolve those grievances.

	J. H. Walker (Chairperson,	
	Fac Sen)	1979
C.	A. Grubb (Fac Sen)	1980
М.	Gibson (Stu Sen)	1979
s.	W. Devanny (Stu Sen)	1980
J.	F. Dickey (V-Pres, Fac Sen, ex officio)	1979
S.	L. Wright (V-Pres, Stu Bdy, ex officio)	1979
s.	G. Delony (Assoc Dean of Stud	dents

Traffic and Parking Committee. This committee advises the Vice President for Executive Affairs on all matters concerning traffic and parking.

ex officio)

	J.	W. Pace (Chairperson, ex o	offici
В.	Р.	Watkins (Voc Educ)	1981
S.	E.	Hooper (Grad Stu)	1979
P.	В.	Burt (Fac Sen)	1979
D.	В.	Stafford (Civil Engr)	
J.	W.	Weeden (Chief of Security)	)
J.	L.	Strom (Dir, Plan & Corp Re	e1)
R.	D.	Eflin (Campus Master Plant	ner)
G.	L.	Jones (Athletics)	
То	be	appointed (Undgrad Stu)	1979
		appointed (Chp of Traffic unds Comm of Stu Sen)	& 1979
		appointed (Member of Traff unds Comm of Stu Sen)	fic & 1979

J. B. McDevitt (V-Pres for Exec Aff,

ex officio)

Undergraduate Council. All policies and regulations affecting undergraduate curricula and requirements leading to undergraduate credits and degrees shall be approved by this council and recommended to the Dean of the University

C. B	. Gree	n (Chp,	ex	officio)	
------	--------	---------	----	----------	--

W.	Baron (Civil Engr)	1979
R.	A. Conover, Jr. (RPA)	1979
J.	D. Sheriff (Acct & Fin)	1979
J.	M. Melton (Lang)	1980
Α.	M. Duvall (Nurs)	1980
G.	L. Powell (Biochem)	1980
D.	R. Sloan (Poul Sci)	1981
L.	H. Brown (Arch)	1981
J.	H. Rodgers (Agri Educ)	1981
D.	M. Harris (Undgrad Stu)	1979
К.	E. Darr (Undgrad Stu)	1979
0.	S. Hipps (Fac Sen)	1979

# Undergraduate Council Alternates

K. N. Vickery (Adm & Reg, ex officio)

R. G. Halfacre (Hort)	1979
J. L. Young (Arch)	1979
A. D. Brooks (Elem/Sec Educ)	1979
B. L. Sill (Civil Engr)	1980
G. E. Howard (RPA)	1980
R. H. Mabry (Econ)	1980
F. L. Day (Engl)	1981
H. T. Cotter (Nurs)	1981
H. F. Senter (Math Sci)	1981
H. W. Fleming, Jr. (Fac Sen)	1979

University Research Council. This council advises the administration on all policies, procedures, and regulations affecting sponsored and unsponsored research on the campus.

# A. E. Schwartz (Chairperson)

J.	V.	Reel, Jr. (Hist)	1979
0.	S.	Hipps (Nurs)	1979
Р.	Lal	oosky (For)	1979
J.	L.	Prince, III (E & CE)	1980
J.	C.	Acton (Fd Sci)	1980
R.	н.	Barker (Text)	1980
G.	C.	Means, Jr. (Arch)	1981
J.	F.	Geldard (Chem & Geol)	1981
В.	v.	Burkett, Jr. (Ind Educ)	1981
Α.	L.	McLellan (Undgrad Stu)	1979
C.	s.	Heriot (Grad Stu)	1979
То	be	appointed (Grad Stu)	1979
R.	Ε.	Fennell (Fac Sen)	1979

Vending Machine Committee. This committee will be responsible for reviewing requests for allocation of funds from the vending machine operations clearing account and making recommendations to the Vice President for Business and Finance and the President.

- J. T. Roberts (Chairperson)
- W. T. Cox (V-Pres for Stu Aff)
- V. Hurst (V-Pres for Acad Aff)
- M. M. Ozburn (Pres of Stu Body) 1979
- W. F. Steirer (Pres, Fac Sen) 1979
- C. A. Aas (Pres, GSA) 1979
- J. C. Newton (Dir of Aux Enterprises)

# NEW FACULTY AND STAFF, 1978-79

The following members of the faculty and staff joined the University between August 15, 1977, and August 15, 1978.

# College of Agricultural Sciences

Barnes, Michael A., Assistant Professor, Dairy Science; B.S., M.S., Ph.D., University of Connecticut; 200 Lancelot Drive

<u>Birrenkott</u>, Glenn P., Jr., Assistant Professor, Poultry Science; B.S., M.S., Ph.D., University of Wisconsin; 2-D Palmetto Boulevard

Brown, Lawrence G., Entomologist III, Plant Pest Regulatory Service; B.S., Georgia Southwestern; M.S., Auburn University; Pembrook Village, Apartment K-7, Summerville 29483

Brown, Thomas M., Assistant Professor, Entomology and Economic Zoology; B.S., Adrian College; M.S., Ph.D., Michigan State University; 213 Wesley Street

<u>Collier</u>, John A., Assistant Professor, Agricultural Engineering; A.S., Middle Georgia College; B.A.E., Georgia Institute of Technology; M.S.A.E., University of Georgia; 206 Magnolia Terrace, Pendleton 29670

Coston, Donald C., Assistant Professor, Horticulture; B.S., N.C. State University; M.S., Ph.D., Michigan State University; 109 Newman Hall

<u>Dickerson</u>, Ottie J., Professor and Head, Plant Pathology and Physiology; B.S.A., M.S., University of Arkansas; Ph.D., University of Wisconsin

<u>Dodd</u>, Roy B., Instructor, Agricultural Engineering; B.S.A.E., M.S., University of Georgia; Route 2, Box 42, Seneca 29678

<u>Drye</u>, Charles E., Assistant Professor, Plant Pathology and Physiology; B.S., Lenoir Rhyne College; M.A., Appalachian State University; Ph.D., Clemson University; Edisto Experiment Station, P. O. Box 247, Blackville 29817

Ellis, Norman D., Chemist I, Agricultural Chemical Services; B.S., College of Charleston; 110-C Cochran Road

Fendley, Timothy T., Assistant Professor, Entomology and Economic Zoology; B.S.F., M.S.F., University of Georgia; Ph.D., Utah State University; Route 2, Dogwood Heights, Pendleton 29670

Foltz, Jeffrey W., Assistant Professor, Entomology and Economic Zoology; B.S., Ohio State University; M.S., University of Wisconsin-Milwaukee

Gilliam, Samuel G., Environmentalist I, Plant Pest Regulatory Service; E.S., Clemson University; Route 3, Abbeville 29620

Gilreath, M. Elizabeth, Visiting Instructor, Entomology and Economic Zoology; B.C., M.S., Clemson University; 318 Pendleton Road

College of Agricultural Sciences (Continued)

Gorsuch, Clyde S., Assistant Professor, Entomology and Economic Zoology; B.S., University of Wisconsin, Oshkosh; M.S., Ph.D., University of Wisconsin, Madison; 106 Carteret Court

Grooms, Robert R., Environmentalist I, Plant Pest Regulatory Service; B.S., Clemson University; 437 Rotherwood Drive, Charleston 29407

Helmreich, Dennis P., Visiting Instructor, Agricultural Economics and Rural Sociology B.S., M.S., University of Georgia; 1401 Church Street, P. O. Box 152, Beaufort 29902

Henry, Mark S., Associate Professor, Agricultural Economics and Rural Sociology; A.B., Baker University; Ph.D., Kansas State University; 106 Riggs Drive

<u>Hubbell</u>, Jeffrey J., Veterinarian II, Histopathologist, Livestock-Poultry Health Department; B.S., D.V.M., Colorado State University; 22 Hibernia St., Columbia 29204

<u>Ice</u>, James R., Assistant Professor, Horticulture; B.S., M.S., Ohio State University; Ph.D., N. C. State University; 109 Newman Hall

Kaiser, Eddie H., Assistant Professor, Agricultural Economics and Rural Sociology; B.S., University of Georgia; Ph.D., Iowa State University; Route 2, Box 465, Seneca 29678

<u>Kittrell</u>, Benjamin U., Associate Professor, Agronomy and Soils; B.S., M.Ed., Ph.D., N. C. State University; 831 Wedgefield, Florence 29501

Krausz, Joseph P., Assistant Professor, Plant Pathology and Physiology; B.A., State University of New York at New Paltz; M.S., Ph.D., Cornell University; 401 Greenway Drive, Florence 29501

Long, Evangeline E., Environmentalist I, Plant Pest Regulatory Service; B.S., Clemsor University; 806 Seville Apartments, Spartanburg 29302

Loomis, Edward L., Assistant Professor, Horticulture, B.A., M.S., Ph.D., Washington State University; Sandhill Experiment Station, Box 528, Elgin 29045

Lyson, Thomas A., Assistant Professor Agricultural Economics and Rural Sociology; B., M.A., West Virginia University; Ph.D., Michigan State University; 404 Rock Creek Road

Manley, Donald G., Assistant Professor, Entomology and Economic Zoology; B.A., University of California; M.A., California State University, Long Beach; Ph.D., University of Arizona; Pee Dee Experiment Station, Box 271, Florence 29501

Martin, James H., Professor and Head, Dairy Science; B.S., University of Tennessee; M.S., Ph.D., Ohio State University; Ashley Estates

Martin, Robert D., Agricultural Science Associate III, Dairy Science; B.S., Clemson University; Route 2, Box 290, Anderson 29621

McLaughlin, Michael R., Visiting Assistant Professor, Plant Pathology and Physiology B.S., M.S., Iowa State University; Ph.D., University of Illinois; 21-H Barre Street

# College of Agricultural Sciences (Continued)

Miller, Stephen E., Assistant Professor, Agricultural Economics and Rural Sociology; B.S., N. C. State University; Ph.D., Virginia Polytechnic Institute and State University; Route 5, Box 443-M, Seneca 29678

Murdock, Edward C., Instructor, Agronomy and Soils; B.S., M.S., Clemson University; 111 Wesleyan Drive, Central 29630

Nyankori, James C. O., Assistant Professor, Agricultural Economics and Rural Sociology; B.Sc., University of East Africa; M.S., Ohio State University; Ph.D., University of Illinois

<u>Pomeroy</u>, Robert S., Visiting Instructor, Agricultural Economics and Rural Sociology; B.A., Johnson State College; M.A., Clemson University; 258 Barre Hall

Rutledge, John A., Jr., Visiting Instructor, Agricultural Economics and Rural Sociology; B.S., M.Ed., N. C. State University

Shuler, Marcia D., Staff Development and Training Specialist, Cooperative Extension Service; B.S., Winthrop College; 104 Wrenway, Anderson 29621

Spray, Richard A., Associate Professor, Agricultural Engineering; B.S., M.S., West Virginia University; Ph.D., University of Missouri; 302 Monaco Circle

<u>Taylor</u>, Mary B., Assistant Professor, Horticulture; B.A., M.L.A., N. C. State University; 162 P&AS Building

<u>Williamson</u>, Robert E. Associate Professor, Agricultural Engineering; B.S., M.S., Clemson University; Ph.D., Mississippi State University; 5-B Lee Street

Wingard, Richard L., Jr., Environmentalist I, Plant Pest Regulatory Service; B.S., Clemson University; Pee Dee Experiment Station, P. O. Box 271, Florence 29501

## College of Architecture

<u>Doruk</u>, Toeman, Visiting Professor of Architecture; Dipl.Arch., Ph.D., Technical Univ. of Istanbul

Ottolenghi, Marinella, Alumni Visiting Professor of Planning Studies; B.S., University of Rome, Italy; M.A., University of Pennsylvania; Ph.D., University of Roma, Italy

<u>Voelker</u>, Evelyn C., Associate Professor of Art and Architectural History; B.S., Marymount College; M.A., Catholic University; Ph.D., Syracuse University

## College of Education

Green, Robert P., Jr., Visiting Assistant Professor of Education; B.A., University of the South; M.A., Ed.D., University of Virginia

Lykes, John W., Visiting Assistant Professor of Industrial Education; B.S., South Carolina State College; M.S.Ed., North Carolina A&T State University; Route 4, Box 440-A, Greenville 29605

College of Education (Continued)

<u>Richardson</u>, John C., Visiting Associate Professor of Education; B.S., M.A., Western Kentucky University; Ed.D., University of Kentucky

Rumsey, Edwin F., Colonel, U.S. Air Force; Professor and Head, Aerospace Studies; B.S., United States Military Academy; M.P.S., Auburn University

<u>Sulentic</u>, Milo N., Visiting Assistant Professor of Industrial Education; B.A., M.A.Ed University of Northern Iowa; Ph.D., University of Minnesota; 41-A Daniel Drive

Vernon, Michael H., Captain, U.S. Army; Assistant Professor of Military Science; B.A., Florida Southern College; M.S., Clemson University; Route 3, Box 81-C, Central 29630

# College of Engineering

<u>Cauley</u>, Lanier S., Visiting Assistant Professor of Mechanical Engineering; B.S., M.S. Virginia Polytechnic Institute & State University; Ph.D., Clemson University; 118 Clarendon Drive

Elzerman, Alan W., Assistant Professor of Environmental Systems Engineering; B.A., Williams College; Ph.D., University of Wisconsin, Madison

Fisher, John S., Associate Professor of Civil Engineering; B.S., University of Floric M.S., University of Miami; Ph.D., Massachusetts Institute of Technology; 121 Lewis Ro

Hindman, James D., Project Administrator for the Office of Operator Training, Enviror mental Systems Engineering; B.S., Clemson University

Hutton, David V., Associate Professor of Engineering Technology; B.I.E., Georgia Tech M.S., Ph.D., Virginia Tech.

<u>Liburdy</u>, James A., Assistant Professor of Mechanical Engineering; B.S., Cornell University; M.S., Stanford University; Ph.D., Pennsylvania State University

O'Brien, Edward M., Visiting Instructor in Engineering; B.S., Colorado State University; Rt. 3, Box 445, Central 29630

<u>Pearce</u>, Britt K., Associate Professor of Mechanical Engineering; B.S., Clemson University; M.S., Ph.D., Georgia Institute of Technology

Pitts, Donald R., Professor of Mechanical Engineering; B.M.E., Auburn University; M.: Ph.D., Georgia Institute of Technology

Rice, Richard W., Assistant Professor of Chemical Engineering; B.S., Clemson University; M.S., Ph.D., Yale University; Apt. 147, Isaqueena Village, Rt. 3, Central 2

Thompson, Raymond G., Assistant Professor of Materials Engineering; B.S., M.S., University of Alabama in Birmingham, Rt. 2, Box 515, Bayshore, Seneca 29678

# College of Engineering (Continued)

von Recum, Andreas F., Professor of Bioengineering; B.S., University of Giessen; DVM, University of West Berlin; Dr. Med. Vet (Ph.D.), University of West Berlin; Ph.D., Vet. Surg., Colorado State; 118 Valley View Drive

# College of Forest and Recreation Resources

Box, Benton H., Dean, College of Forest and Recreation Resources and Professor of Forestry; B.S., M.F., Louisiana State University; D.F., Duke University; 107 Carteret Court

Cody, Jack B., Associate Professor of Forestry; B.S., M.F., University of Michigan; 3823 Pebble Road, Florence 29501

<u>Downing</u>, Robert L., Adjunct Associate Professor of Forest and Recreation Resources; B.S., Texas A&M; M.S., Oklahoma A&M; 114 Lewis Road

<u>Everhart</u>, William C., Alumni Visiting Professor of Recreation and Park Administration; B.A., Gettysburg College; M.A., Columbia University; M.A., Pennsylvania State University; 205 Brookwood Drive

<u>Haymond</u>, Jacqueline L., Instructor in Forestry; B.S., Erskine College; M.S., Clemson University; 123 Mountain View Lane

<u>Saunders</u>, Paul R., Visiting Instructor in Recreation and Park Administration; B.S., M.S., Purdue University; 11 Meadow Lane, Central 29630

## College of Industrial Management and Textile Science

Arp, Earl W., Jr., Associate Professor of Industrial Management; B.Ch.E., Georgia Institute of Technology; M.S.E.E., University of North Carolina; M.B.A., University of North Carolina

<u>Bismack</u>, Thaddeus R., Associate Professor of Accounting & Finance; B.A., Central Michigan University; M.B.A., University of Michigan

Cottle, Rex L., Head, Department of Economics and Associate Professor of Economics; B.S., Weber State College; Ph.D., Texas A&M University

<u>Dowie</u>, Jon W., Assistant Professor of Accounting; B.S., M.B.A., Murray State University

<u>Gulledge</u>, Thomas R., Jr., Part-time Lecturer in Industrial Management; B.S., University of South Carolina; M.A., Clemson University

McElreath, Robert B., Jr., Associate Professor of Accounting and Finance; B.S., Georgia Institute of Technology; M.B.A., Ph.D., Georgia State University

McKnew, Mark A., Assistant Professor of Industrial Management; B.S., M.A., University of California, Los Angeles; Ph.D., Massachusetts Institute of Technology

College of Industrial Management and Textile Science (Continued)

Patterson, James W., Assistant Professor of Industrial Management; B.S., M.A., University of Alabama; Ph.D., University of Arkansas

<u>Uselton</u>, Peggy W., Instructor of Industrial Management; B.A., Texas University at Austin; M.S., Texas Tech University

# College of Liberal Arts

<u>Baldwin</u>, Fred K., Visiting Instructor in English; B.A., M.Ed., Clemson University; Apartment 14, Townhouse Plaza

Becker, Laura L., Visiting Instructor in History; A.B., M.A., Brown University; Route 2, Chantilly Lane, Anderson 29621

Carrillo, Loretta, Visiting Instructor in English, (Part-time); B.A., St. Mary's of Texas; M.A., Michigan State University; 404 Rock Creek Road

<u>Dawes</u>, A. Stephen, Visiting Assistant Professor of Psychology; B.A., Clemson University; M.S., Ph.D., University of Georgia

Hoffman, John G., Visiting Assistant Professor of History; B.A., M.A., University of California at Davis; Ph.D., University of Wisconsin at Madison

Inman, Sue L., Visiting Instructor in English; B.A., Agnes Scott College; M.A., Clemson University; 411 Henderson Road, Greenville 29607

<u>Larson</u>, Richard F., Head of Department and Professor of Sociology; B.A., Seattle University; M.A., University of Washington; Ph.D., University of Notre Dame; Route 3, Box 469-B, Central 29630

Martin, Jane B., Visiting Instructor in English; B.A., M.A., Clemson University; 195 Woodridge Drive

Matthews, Victor H., Visiting Assistant Professor of History; B.A., Southwest Missouri State University; M.A., Ph.D., Brandeis University

<u>Petrowsky</u>, Marc L., Visiting Assistant Professor of Sociology; B.A., Southwestern Oklahoma State University; M.A., Ph.D., University of Florida

Sparks, Elisa K., Instructor in English; B.A., Bryn Mawr College

Swanson, Nancy V., Visiting Instructor in English; B.A., University of North Carolina at Chapel Hill; M.A., Clemson University; 101 Whippoorwill Drive, Seneca 29678

# College of Nursing

Barham, Barbara C., Visiting Instructor in Nursing; B.S.N., Barry College; M.S., Rutgers-The State University

Ha, Sung Hi, Instructor in Nursing; B.S.N., M.S.N., Medical College of Georgia

# College of Nursing (Continued)

<u>Jeanes</u>, Kathryn R., Visiting Instructor in Nursing; B.S.N., Emory University; M.S., Boston University

Kline, Priscilla M., Assistant Professor of Nursing; B.S.N., University of Illinois; M.S.N., University of Illinois-Medical Center

<u>Privette</u>, Arlene B., Instructor in Nursing; B.S.N., University of South Carolina; M.S.N., Clemson University

Ramsey, Priscilla W., Visiting Instructor in Nursing; B.S.N., M.S.N., Clemson University

Welch, Annie S., Instructor in Nursing; B.S.N., University of South Carolina; M.S.N., Clemson University

<u>Wickliffe</u>, Louise W., Instructor in Nursing; B.S.N., University of South Carolina; M.S.N., Medical College of Georgia

# College of Sciences

Bhattacharyya, Jnanabrata, Visiting Instructor in Chemistry; B.S.C., M.S., Ph.D., Calcutta University, India

<u>Flower</u>, Phillip J., Assistant Professor of Physics and Astronomy; B.S., University of Toledo; Ph.D., University of Washington

Gawne, Constance E., Visiting Assistant Professor of Geology; B.S., University of Illinois; Ph.D., Columbia University

<u>Grossman</u>, Harold C., Assistant Professor of Computer Science; B.S., University of Cincinnati; M.S., New Mexico State University; Ph.D., Michigan State University

<u>Kline</u>, Ellis L., Assistant Professor of Microbiology; B.S., Greenville College in Greenville, Illinois; M.S., Northern Illinois University; Ph.D., University of California at Davis

<u>LaPrade</u>, Marie D., Visiting Instructor in Chemistry; B.S., University of Michigan; M.S., University of Vermont; Ph.D., Massachusetts Institute of Technology

<u>Lawson</u>, John W., Associate Professor of Microbiology; B.S., Seton Hall University; M.S., Ph.D., University of North Carolina

<u>Leggett</u>, Ernest W., Jr., Assistant Professor of Computer Science; B.S., Ohio State University; M.S., University of Illinois; Ph.D., Ohio State University

Long, Calvin T., Adjunct Professor of Mathematical Sciences; Ph.D., University of Oregon

College of Sciences (Continued)

Reiter, Harold B., Visiting Associate Professor of Mathematical Sciences; B.S., Louisiana State University; M.S., Ph.D., Clemson University

Ruppert, Edward E., Assistant Professor of Zoology; B.A., Hartwick College; Ph.D., University of North Carolina

<u>Seidman</u>, Kurt, Visiting Instructor in Chemistry; B.S., Washington and Lee University; M.S., University of South Carolina; Ph.D., Colorado State University

<u>Taylor</u>, Robert J., Associate Professor of Zoology; A.B., Stanford University; M.A., Ph.D., University of California

Graduate Studies and University Research

Division of Administrative Programming Services:

Ivester, R. Terry, Systems Development Manager; M.S., Georgia Institute of Technology

Computer Center:

Bengtson, Susan E., Systems Analyst; B.S., University of Hartford; M.S., Virginia Polytechnic Institute and State University

Blalock, James C., Jr., Systems Programmer I

Bullard, Cindy B., Data Coordinator I

Bullard, David B., Research Associate; B.S., M.S., Clemson University

<u>Duckenfield</u>, Christopher J., Director and Research Associate; B.A., M.A., Oxford University; Ph.D., University of Connecticut

Eason, Herbert C., III, Systems Programmer II; B.A., Clemson University

<u>Hall</u>, Janet M., Systems Analyst II; AAS, Asheville-Buncombe Technical Institute; B.S., Western Carolina University

Jackson, Pamela A., Clerk Typist II

Jones, Robert M., Systems Programmer I; B.S., Western Carolina University

<u>Lewis</u>, Byron, Manager, Academic Computing Support; B.S., University of Florida; M.S., University of Connecticut; Ph.D., Virginia Polytechnic Institute and State University

Mann, S. Denise, Tape Librarian II

Owens, Camilla D., Computer Operator II

Piazza, Sandra J., Scientific Programmer II

Computer Center (Continued)

Polen, Mary M., Secretary II

Robinson, Chandler C., Key Peripheral Operator II

Scott, Gary R., Computer Specialist

Seel, Karn N., Computer Operator I

Webb, Dorothy F., Key & Peripheral Operator II; AA, St. Mary's; B.S., Clemson University

# Division of Information Systems Development:

Davis, Elizabeth, Systems Analyst I; B.S., Clemson University

Kumar, Ashok, Systems Analyst I; B.S., M.S., Patna University, India; M.S., University of Liverpool

<u>Latiolais</u>, Earl J., Systems Consultant; B.S., B.A., M.S., Ph.D., University of Southwestern Louisiana

Ponder, Chris A., Systems Analyst I; B.S., East Tennessee State University

Ponder, June R., Systems Analyst I; B.S., East Tennessee State University

Talley, Wanda S., Computer Programmer I; B.S., University of Hartford

### The Robert Muldrow Cooper Library

Kelland, John L., Science Reference Librarian; M.L.S., Queens College, City University of New York; Ph.D. in Biology, Princeton

McIver, Minna H., Acquisitions Librarian; B.A., Furman University; M.Ln., Emory University

#### Office for Development

#### Communications Center:

Lewis, David H., Photographer I; 400-A Walnut Street, Walhalla 29691

Townsend, Robert T., Radio-TV Editor; P. O. Box 4161, Greenville 29608

#### Public Relations:

Addis, Ronald, Editor; B.A., M.A., Clemson University

Bowen, Wallace, Jr., Education Editor; B.A., Presbyterian College; M.A., Clemson University

Hite, Duncan, Pee Dee Area News Editor; B.A., University of North Carolina-Chapel Hill

# Office for Student Affairs

Behrman, Heidi S., Residence Hall Supervisor, Student Affairs; Tennessee Technological University

NEW FACULTY AND STAFF (Cont.)

Office for Student Affairs (Continued)

Burgen, Nancy B., Residence Hall Supervisor, Student Affairs; RDH, Ohio State University

<u>Julian</u>, Jane E., Residence Hall Supervisor, Student Affairs; B.S., Clemson University

Lord, Jenny H., Residence Hall Supervisor, Student Affairs; Winthrop College

Reddick, Lucile C., Psychometrist, University Counseling Center; B.S., Mary Baldwin College; M.Ed., University of Virginia

Reedy, Charles F., Jr., Athletic Coach - Dorm Counselor; B.S., Appalachian State University

<u>Ulmer</u>, James S., Staff Physician, Redfern Health Center; B.S., Clemson University; M.D., Medical University of South Carolina

# Calendar of Campus Events

### AUGUST 1978

- 17 -- Faculty and staff orientation, P&AS Auditorium, 8 a.m.
- 18 -- End Co-Op Work Period No. 17.
- 18 -- Individual College Orientation.
- 18-20 -- Resident Assistant Workshop.
  - 20 -- All residence halls open at 10 a.m.
  - 21 -- Begin Co-Op Work Period No. 18.
  - 21 -- General faculty and staff meeting, Tillman Hall Auditorium, 10:30 a.m.
  - 23 -- Registration, All Students.
  - 23 -- American Dream Dance Scene Disco. Sponsored by Student Union, Union Plaza, 8 p.m. Open to students, faculty, staff and guests, no admission charge.
- 23-24 -- Workshop: "Computer Programming in BASIC Language Workshop." For more information, contact Continuing Engineering Education, 656-3308.
  - 24 -- President and Mrs. Edwards "At Home" to faculty and staff, President's Home, 8-9:30 p.m.
  - 24 -- Outdoor Movie: "The General." Sponsored by Student Union, Union Plaza, 9 p.m. Open to students, faculty, staff and guests, no admission charge.
  - 25 -- Classes begin on regular schedule.
  - 25 -- Outdoor Concert: Stony Creek String Band. Sponsored by Student Union, location to be announced, 4:30-7:30 p.m. Open to students, faculty, staff and guests, no admission charge.
- 25,26 -- Live Entertainment in Edgar's: The Lightwood Band. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
  - 26 -- Tubing Down the Chattooga River. Sponsored by Student Union, details and sign up at Union Information Desk. Open to students, faculty, staff and guests.
  - 27 -- Trip to Six Flags Over Georgia. Sponsored by Student Union, details and sign up at Union Information Desk.
- 28-30 -- Art Exhibit: "Ron Art." Craft demonstration, exhibit and sale.

  Sponsored by Student Union, Union Gallery, 10 a.m.-4 p.m. Open to the

public, no admission charge.

- 31-9/15 -- Art Exhibit: Kathy Triplett, Ceramic Murals and Drawings. Sponsored by Student Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
  - 28 -- Live Entertainment in Edgar's: Tom Parks, comedian. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, no admission charge.
  - 29 -- Caricature Drawings by Steve Gibson. Sponsored by Student Union, loggia, 10 a.m.-4 p.m. Open to students, faculty and staff, no admission charge.
  - 30,31 -- Graduate Advisors' Workshop. An opportunity for faculty to familiarize themselves with Graduate School policies and procedures. Sponsored by the Graduate School, 200 Olin Hall, 1:30 p.m. Open to individual major advisors, departmental coordinators of graduate applications and admissions, and any interested faculty or staff member.

### SEPTEMBER 1978

- 1,2 -- Live Entertainment in Edgar's: Southernaire Band. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
  - 2 -- JV Football: Newberry, here, 5 p.m.
  - 3 -- Soccer: Pfieffer (tentative), here, 2 p.m.
  - 4 -- Concert: The National Band of New Zealand and Maori Dancers. Sponsored by Clemson University Concert Series, Littlejohn Coliseum, 8 p.m. Open to the public, admission by season ticket, student use card, or individual tickets on sale at Gate 5.
  - 4 -- Placement Orientation for Industrial Management and Textile Science Seniors. Sponsored by Placement Office, 301 Sirrine Hall, 5 p.m.
  - 4 -- French Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 4-13 -- Fraternity Rush Registration. Harcombe and Schilletter Dining Halls, 10 a.m.-1 p.m. and 4-6 p.m. Open to all enrolled male students.
  - 5 -- Placement Orientation for Forest and Recreation Resources Seniors.

    Sponsored by the Placement Office, 132 Forest and Recreation Resources
    Building, 3:30 p.m.
  - 6 -- Lecture: Charley Pell. Coach Pell will speak on the role of athletics at Clemson. Sponsored by Speakers Bureau, Tillman Auditorium, 8 p.m. Open to the public, no admission charge.
  - 6 -- English Hour Lecture: "Lamia: Three Characters in Search of a Poem" by Dr. Richard Underwood. Sponsored by English Department, Strode Tower

# Calendar of Campus Events (continued)

- Lounge, 8 p.m. Open to the public, no admission charge.
- 6 -- Placement Orientation for Engineering Seniors. Sponsored by Placement Office, 100 Lowry Hall, 5 p.m.
- 6-7 -- Workshop: "PROJECT Network Scheduling." For more information, contact Continuing Engineering Education, 656-3308.
  - 7 -- Mime Artist and Clown: Buffo. Sponsored by Student Union, Union Ball-room, 8 p.m. Call 656-2461 for more information.
  - 7 -- Placement Orientation for Architecture and Building Construction Seniors. Sponsored by the Placement Office, 200 Lee Hall, 3 p.m.
- 8-9 -- Live Entertainment in Edgar's: Kier Irmiter. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, no admission charge.
  - 9 -- Trip to Biltmore House. Sponsored by Student Union, details and sign up at Union Information Desk.
  - 10 -- Soccer: Georgia State (tentative), here, 2 p.m.
  - 11 -- Lecture: "Fertilizer Nitrogen Production" by Dr. I. M. Wofford, Kaiser Agricultural Chemicals, Savannah, GA. Sponsored by Agronomy and Soils Department, A-203 P&AS Bldg., 9:05 a.m. Open to the public, no admission charge.
- 11-13 -- Workshop: "Microprocessors Workshop." For more information, contact Continuing Engineering Education, 656-3308.
- 11-15 -- Room Change Period. Students desiring to change rooms should submit an application to the Housing Office, Mell Hall, 8 a.m.-4:30 p.m.
  - 12 -- Placement Orientation for Science Seniors. Sponsored by Placement Office, 101 Kinard, 5 p.m.
- 13-18 -- Fraternity Formal Rush. (13) Rush Convocation, Tillman Hall Auditorium, 6:30 p.m., and Open House, Fraternity Quadrangle, 7-9 p.m.; (14) Open House, Fraternity Quadrangle, 7-9 p.m.; (15) Invitational Parties; (16) Invitational Parties; (17) Sign Preference Cards, IFC Room, Fraternity Quadrangle, 1-4 p.m.; (18) Distribution of Bids, 100 Hardin Hall, 5-6 p.m., and Acceptance of Bids, Fraternity Quadrangle, 7 p.m.
  - 14 -- Placement Orientation for Liberal Arts Seniors. Sponsored by Placement Office, Daniel Hall Auditorium, 4:30 p.m.
- 15,16 -- Live Entertainment in Edgar's. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
  - 16 -- Football: The Citadel, here, 1 p.m.
- 17-30 -- Art Exhibit: Allison Hancock, "Historic Ft. Rutledge." Sponsored by Student Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.

- 18 -- Spanish Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 21 -- Lecture: "Reality Shock--Make It Work for You" by Dr. Marlene Kramer, Professor of Nursing, University of California San Francisco. Sponsored by University Fine Arts Committee and presented by College of Nursing.

  Daniel Auditorium, 3-4:30 p.m., open to the public, no admission charge.
- 22,23 -- Live Entertainment in Edgar's. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
  - 23 -- Trip to Georgia Football Game at Athens. Sponsored by Student Union, details and sign up at Union Information Desk.
  - 24 -- Soccer: Belmont Abbey (tentative), here, 2 p.m.
- 25-12/4 -- First Semester Fraternity Open Rush.
  - 27 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.
  - 29 -- Comedy: "The Comedy Store," three comedians from California's famous "Comedy Store." Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required.
  - 30 -- Football: Villanova (IPTAY Day), here, 1 p.m.
  - 30 -- Live Entertainment in Edgar's. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.

### OCTOBER 1978

- 1 -- Soccer: N.C. State (tentative), here, 2 p.m.
- 1-13 -- Art Exhibit: Lynn Rhodes, Watercolor. Sponsored by Student Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
- 2-7 -- Musical: Godspell. Presented by Clemson Players, Daniel Hall Auditorium, 8 p.m. except 3:30 p.m. matinee on Thursday. Open to the public, no admission charge.
  - 2 -- German Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
  - 4 -- English Hour Reading: A memorial reading from the work of the late Professor Thomas E. Douglass. Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
- 4,5 -- Live Entertainment in Edgar's: Oconee. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50c admission charge.

- 6 -- Soccer: Clemson Invitational (tentative), here, 2-4 p.m. Cleveland State vs. South Florida and Qunicy vs. Clemson.
- 7 -- Football: Virginia Tech (Homecoming), here, 1 p.m.
- 7 -- Bob Hope Show. Sponsored by Student Union, Littlejohn Coliseum, 8 p.m. Open to the public, ticket prices to be announced.
- 8 -- Soccer: Clemson Invitational (tentative), here, 1-3 p.m. Quincy vs. South Florida and Cleveland State vs. Clemson.
- 9 -- Lecture: "Basic Chemical Materials Supply and Logistics" by Robert B. Johnson, President of BCM Inc., Memphis, TN. Sponsored by Agronomy and Soils Department, A-203 P&AS Bldg., 9:05 a.m. Open to the public, no admission charge.
- 12 -- Ghost Hunters: The Warrens. Sponsored by Student Union, Tillman Hall Auditorium, 8 p.m. Open to students, faculty, staff and guests, admission price to be announced.
- 13 -- Live Entertainment in Edgar's: Calliope. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
- 14 -- Trip to Virginia Football Game. Sponsored by Student Union, details and sign up at Union Information Desk.
- 16 -- JV Football: Furman, here, 2 p.m.
- 16-20 -- Art Exhibit: "Student Arts and Crafts." Sponsored by Student Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
  - 16 -- French Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
  - 17 -- Concert: Edith Card, Appalachian Folk Music. Sponsored by Music Department Chamber Music Series, Daniel Hall Auditorium, 8 p.m. Open to the public, no admission charge.
  - 18 -- Lecture: Kelly Montieth, comedian and political satirist. Sponsored by Speakers Bureau, Tillman Hall Auditorium, 8 p.m., reception immediately following. Open to the public, no admission charge.
  - 20 -- Live Entertainment in Edgar's. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
  - 21 -- Football: Duke (Hall of Fame), here, 1 p.m.
  - 21 -- Chicken Barbeque for Clemson-Duke Game. Sponsored by Alpha Tau Alpha and Society for the Advancement of Agricultural Education. Across street from Jervey Athletic Center, 10:30 a.m.-12:30 p.m. Open to the public, \$2.50 per plate.

- 22 -- Soccer: University of North Carolina (tentative), here, 2 p.m.
- 25 -- Lecture: "International Fertilizer Development" by Dr. W. D. Bishop, Director, Agro-Economic Division, International Fertilizer Development Center, Florence, AL. Sponsored by Agronomy and Soils Department, A-203 P&AS Bldg., 9:05 a.m. Open to the public, no admission charge.
- 25 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.
- 27 -- Halloween All-Nighter: Games, contests, prizes. Sponsored by Student Union, Union Building, all night. Open to students, faculty and staff, no admission charge.
- 27,28 -- Live Entertainment in Edgar's: The Archer Road Band. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
  - 28 -- Trip to Gatlinburg. Sponsored by Student Union, details and sign up at Union Information Desk.
  - 29 -- Soccer: The Citadel (tentative), here, 2 p.m.
  - 30 -- JV Football: Georgia, here, 1:30 p.m.
- 30-31 -- Atlanta Contemporary Dance Residency (tentative). Sponsored by Student Union, performance at Tillman, workshops at Fike. Details at Union Information Desk.
  - 31 -- Lecture: Dr. Leonard Wolf, nation's foremost expert on Dracula and other monsters and author of <a href="The Annotated Dracula">The Annotated Dracula</a>. Sponsored by Speakers Bureau, Tillman Hall Auditorium, 8 p.m., reception immediately following. Open to the public, no admission charge.
  - 31 -- Soccer: Erskine (tentative), here, 3 p.m.
  - 31 -- Spanish Play. Sponsored by Language Department, presented by Spanish students, Daniel Hall Auditorium, 8 p.m. Open to the public, no admission charge.

### NOVEMBER 1978

- 1 -- English Hour Lecture: Dr. Frederick W. Shilstone. Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
- 3 -- Concert: University of Georgia Orchestra with Jane Palmer, piano soloist. Sponsored by Music Department and Central Wesleyan College, Tillman Hall Auditorium, 8 p.m. Open to the public, no admission charge.
- 3 -- Soccer: Virginia (tentative), here, 3 p.m.

- 3,4 -- Live Entertainment in Edgar's. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required.
  - 4 -- Engineer-In-Training Examination. Part I of the written examination required for professional engineering registration. Sponsored by College of Engineering, 226 Riggs Hall, 7:30 a.m.-5 p.m.
  - 5 -- Soccer: Maryland (tentative), here, 2 p.m.
- 6-17 -- Art Exhibit: Glenn Abbott, Weathered Wood Weavings. Sponsored by Student Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
  - 6 -- Speech Night. Finals of public speaking contest for English 301 students. Sponsored by Calhoun Forensic Society and English Department, Daniel Hall Auditorium, 7 p.m. Open to the public, no admission charge.
  - 7 -- Classes suspended for Elections Day.
  - 7 -- November Nonsense. Sponsored by Student Union, Bowman Field, noon-6 p.m. Open to students, faculty, staff and guests, no admission charge.
  - 8 -- Concert: "The King of the Clarinet," Peanuts Hucko and His Jazz Five.
    Sponsored by the Clemson University Concert Series, Littlejohn Coliseum,
    8 p.m. Open to the public, admission by season ticket, student use card,
    or individual tickets on sale at Gate 5.
  - 9 -- Clay Day. Sponsored by Student Union, loggia, noon-4 p.m. Open to students, faculty, staff and guests, no admission charge.
- 10,11 -- Live Entertainment in Edgar's: Dan Tinen, harpsichordist and pianist.

  Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University
  I.D. required, 50¢ admission charge.
  - 11 -- Football: North Carolina (Parents' Day), here, 1 p.m.
- 13-18 -- Drama: An original work by a new playwright. Sponsored by Clemson Players, Daniel Hall Auditorium, 8 p.m. except 3:30 p.m. matinee on Thursday. Open to the public, no admission charge.
  - 13 -- Spanish Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
  - 15 -- Lecture: The Amazing Kreskin. Kreskin exhibits his powers of ESP.

    Sponsored by Speakers Bureau, Tillman Hall Auditorium, 8 p.m., reception following show. Open to the public, no admission charge.
  - 15 -- Deadline to apply for undergraduate make-up scholarships for the 1978-79 academic year.
- 17,18 -- Live Entertainment in Edgar's. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
  - 18 -- Trip to Maryland Football Game. Sponsored by Student Union, details and

- sign up at Union Information Desk.
- 18 -- Children's Literature Symposium. Sponsored by English Department, Daniel Hall Auditorium and Strode Tower, 8:30 a.m. until mid-afternoon. Open to adults working with children and children's literature, \$5 registration fee.
- 20-12/2 -- Art Exhibit: "Cincinnati Candle Works," candle making demonstration.

  Sponsored by Student Union, Union Gallery, 10 a.m.-4:30 p.m. each day.

  Open to the public, no admission charge.
  - 20 -- Celebration '78. Finals of the Intramural Debate Tournament. Sponsored by Clemson Forensic Union, Daniel Hall Auditorium, 7 p.m. Open to the public, no admission charge.
  - 20 -- Lecture: "Fertilizer Technology Past, Present and Future" by Dr. G. G. Williams, Director of Agricultural Development National Fertilizer Development Center TVA, Muscle Shoals, AL. Sponsored by Agronomy and Soils Department, A-203 P&AS Bldg., 9:05 a.m. Open to the public, no admission charge.
  - 21 -- Concert: Martha Hamilton, flute, and Lillian Harder, piano. Sponsored by Music Department Chamber Music Series, Daniel Hall Auditorium, 8 p.m. Open to the public, no admission charge.
  - 22 -- Thanksgiving holidays begin after last class.
  - 24 -- Basketball: Catholic (Men), here, time to be announced.
  - 25 -- Football: South Carolina, here, 1 p.m.
  - 27 -- Classes Resume.
  - 27 -- Basketball: University of Georgia (Women), here, time to be announced.
  - 27 -- Basketball: Furman (Men), here, time to be announced.
  - 29 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.
  - 29 -- English Hour Lecture: "Burton's Use of Emblems in 'The Anatomy of Melancholy'," by Dr. John L. Idol, Jr. Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
  - 30 -- Basketball: University of Tennessee (Women), here, time to be announced.
  - 30 -- Concert: University Chorus Christmas Concert. Sponsored by Music Department, Tillman Hall Auditorium, 8 p.m. Open to the public, no admission charge.

### DECEMBER 1978

1,2 -- Basketball: IPTAY Invitational (Men), here. Manhattan, Kent State, Brown.

- 1,2 -- Live Entertainment in Edgar's. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
  - 2 -- Declamation Contest. High school students recite poetry in a foreign language for prizes. Sponsored by Language Department, 8 a.m.-3 p.m. Open to high school students and teachers.
  - 2 -- Shopping Trip to Lenox Square in Atlanta. Sponsored by Student Union, details and sign up at Union Information Desk.
  - 4 -- Russian Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 5,6 -- Applied Music Student Recital. Sponsored by Music Department, Daniel Hall Auditorium, (5) 7:30 p.m., (6) 4 p.m. Open to the public, no admission charge.
- 8-9 -- Live Entertainment in Edgar's. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
  - 9 -- Basketball: Francis Marion College (Women), here, time to be announced.
  - 9 -- Basketball: The Citadel (Men), here, time to be announced.
  - 11 -- Examinations Begin.
- 12-13 -- Conference: "Fifth Annual Dairymen's Conference." Sponsored by Dairy Science Department, P&AS Auditorium, (12) 1-5 p.m., (13) 8-11:30 a.m. Open to all interested individuals, registration fee will be charged.
  - 16 -- Basketball: USC Spartanburg (Women), here, time to be announced.
  - 16 -- Basketball: Western Carolina (Men), here, time to be announced.
  - 20 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.
  - 21 -- Mid-Year Graduation, Littlejohn Coliseum, 11 a.m.
  - 21 -- Army and Air Force Commissioning Exercises. Sponsored by Aerospace Studies and Military Science Departments, location and time to be announced. Open to the public, no admission charge.
  - 22 -- All residence halls close at 8 a.m.
  - 22 -- End Co-Op Work Period No. 18.

### JANUARY 1979

- 7 -- All residence halls open at 10 a.m.
- 8 -- Begin Co-Op Work Period No. 19.

- 9 -- Registration, All Students.
- 10,11 -- Basketball: Clemson Lady Tiger Invitational, here.
  - 11 -- Classes begin on regular schedule.
  - 13 -- Basketball: University of Maryland (Women), here, time to be announced.
  - 13 -- Basketball: Wake Forest (Men), here, time to be announced.
- 15-4/23 -- Second Semester Fraternity Open Rush.
  - 16 -- Concert: Sarah Harvie, soprano. Sponsored by Department of Music Chamber Music Series, Daniel Hall Auditorium, 8 p.m. Open to the public, no admission charge.
  - 17 -- Basketball: Wake Forest (Women), here, time to be announced.
  - 17 -- Basketball: Maryland (Men), here, time to be announced.
  - 17-18 -- Seminar: "Farm Credit Seminar." Sponsored by College of Agricultural Sciences, Clemson House, begins noon Jan. 17 and ends noon Jan. 18.

    Open to all persons interested in agricultural financing either directly or indirectly.
    - 18 -- Basketball: N.C. State (Women), here, time to be announced.
    - 19 -- Concert: Budapest Symphony Orchestra conducted by Gyorgy Lehal.

      Sponsored by Clemson University Concert Series, Littlejohn Coliseum,

      8 p.m. Open to the public, admission by season ticket, student use
      card, or individual tickets on sale at Gate 5.
    - 22 -- Spanish Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
    - 24 -- English Hour Reading: A poetry reading by Dr. Robert W. Hill. Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
    - 27 -- Basketball: University of North Carolina (Women), here, time to be announced.
    - 27 -- Basketball: North Carolina (Men), here, time to be announced.
  - 29-2/2 -- Room Change Period. Students desiring to change rooms should submit an application to the Housing Office in Mell Hall between 8 a.m.-4:30 p.m.
    - 30 -- Basketball: South Carolina State (Women), here, time to be announced.
    - 30 -- Basketball: N.C. State (Men), here, time to be announced.
    - 31 -- French Play. Sponsored by Language Department, Daniel Auditorium, 8 p.m. Open to the public, no admission charge.

27 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.

### FEBRUARY 1979

- 1 -- Deadline to apply for all undergraduate scholarships for the 1979-80 academic year.
- 1 -- Basketball: Winthrop (Women), here, time to be announced.
- 1 -- Basketball: Colgate (Men), here, time to be announced.
- 3 -- Basketball: University of South Carolina (Women), here, time to be announced.
- 3 -- Basketball: South Carolina (Men), here, time to be announced.
- 5 -- Basketball: Duke (Women), here, time to be announced.
- 5 -- French Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 6 -- Concert: "An Evening of Musical Madness--The Intimate P.D.Q. Bach." Sponsored by Clemson University Concert Series, Littlejohn Coliseum, 8 p.m. Open to the public, admission by season ticket, student use card, or individual tickets on sale at Gate 5.
- 12 -- Russian Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 14 -- Basketball: Erskine College (Women), here, time to be announced.
- 14 -- Basketball: Virginia (Men), here, time to be announced.
- 15 -- English Hour Lecture: Best graduate English paper of 1978. Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
- 19-24 -- Drama: Restoration Comedy. Sponsored by Clemson Players, Daniel Hall Auditorium, 8 p.m. except 3:30 p.m. matinee on Thursday. Open to the public, no admission charge.
  - 21 -- Basketball: College of Charleston (Women), here, time to be announced.
  - 21 -- Basketball: Duke (Men), here, time to be announced.
  - 24 -- Basketball: Claflin (Women), here, time to be announced.
  - 24 -- Basketball: Buffalo State (Men), here, time to be announced.
- 26-3/16 -- Room Reservation Period. All continuing students desiring to reserve a room in residence halls for the 1979-80 school year should submit an application on their designated day.

- 26 -- Trustees Medal. Finals of the annual competition for the Trustees Medal. Sponsored by Calhoun Forensic Society and English Department, Daniel Hall Auditorium, 7 p.m. Open to the public, no admission charge.
- 26 -- Spanish Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 27 -- Concert: Leonard Bernstein's operetta "Candide." Sponsored by Department of Music Chamber Music Series, Daniel Hall Auditorium, 8 p.m. Oper to the public, no admission charge.
- 27 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.
- 28 -- Baseball: Georgia, here, time to be announced.

### **MARCH 1979**

- 5 -- German Play. Sponsored by Language Department, Daniel Auditorium, 8 p.m. Open to the public, no admission charge.
- 6,7 -- Baseball: East Carolina, here, time to be announced.
  - 8 -- Baseball: Western Carolina, here, time to be announced.
- 9-10 -- Dionysia '79. Drama competition in French, German, Russian and Spanish by students from universities and high schools in the southeastern states. Sponsored by Language Department.
  - 10 -- Baseball: Appalachian, here, time to be announced.
- 11-13 -- Baseball: Lewis University, here. (11) Doubleheader, 1:30 p.m. (12,13) time to be announced.
  - 11 -- Eaton-Freeman Piano Competition. Sponsored by Music Department, Daniel Hall Auditorium, 3 p.m. Open to the public, no admission charge.
  - 12 -- French Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 14,15 -- Baseball: Duke University, here, time to be announced.
  - 14 -- Concert: Southwest German Chamber Orchestra with Michael Ponti, piano soloist. Sponsored by Clemson University Concert Series, Littlejohn Coliseum, 8 p.m. Open to the public, admission by season ticket, student use card, or individual tickets on sale at Gate 5.
  - 15 -- English Hour Lecture: "Androgyny: The Complexities of Human Sex-Role Stereotyping" by Dr. Charles L. Montgomery, Jr. Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
  - 16 -- Spring holidays begin after last class.

- 26 -- Classes Resume.
- 27,28 -- Baseball: North Carolina, here, time to be announced.
  - 27 -- Concert: Jane Palmer, piano recital. Sponsored by Department of Music Chamber Music Series, Daniel Hall Auditorium, 8 p.m. Open to the public, no admission charge.
  - 28 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.
  - 31 -- Baseball: N.C. State, here, time to be announced.

### APRIL 1979

- 2,3 -- Baseball: High Point College, here, time to be announced.
  - 3 -- International Debates: Platform debate between teams from Clemson and New Zealand. Sponsored by Calhoun Forensic Society and the Clemson Forensic Union. Daniel Hall Auditorium, 7 p.m. Open to the public, no admission charge.
- 4,5 -- Baseball: Howard University, here, time to be announced.
  - 7 -- Livestock Judging: "Future Farmers of America State Contest." Co-sponsored by Agricultural Education and Animal Science Departments, brick barn across S.C. 76 from Tri-County TEC, 11:45 a.m.-3:30 p.m. Open to the public, no admission charge.
  - 7 -- Engineer-In-Training Examination. Part I of the written examination required for professional engineering registration. Sponsored by College of Engineering, 226 Riggs Hall, 7:30 a.m.-5 p.m.
- 9-14 -- Drama: To be announced. Sponsored by Clemson Players, Daniel Hall Auditorium, 8 p.m. except 3:30 p.m. matinee on Thursday. Open to the public, no admission charge.
  - 9 -- German Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
  - 10 -- Concert: Clemson University Concert Band Tour Concert. Sponsored by Music Department, Tillman Hall Auditorium, 8 p.m., no admission charge.
  - 11 -- Honors and Awards Day. Classes suspended at noon.
  - 11 -- Air Force and Army ROTC Honors and Awards Ceremonies. Sponsored by Aerospace Studies and Military Science Departments, Daniel Hall, 4 p.m. Open to the public, no admission charge.
  - 11 -- English Hour Reading: A reading of student verse and fiction. Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.

- 12 -- Concert: University Chorus Tour Concert. Sponsored by Music Department, Tillman Hall Auditorium, 8 p.m. Open to the public, no admission charge.
- 14,15 -- Baseball: South Carolina, here, time to be announced.
- 16-21 -- Greek Week. Competition among fraternity chapters in athletic and other events. (19) Fraternity Sing, Tillman Hall Auditorium, 6 p.m., open to the public, no admission charge. (21) Greek Games.
  - 18 -- Baseball: Georgia Tech, here, time to be announced.
- 21,22 -- Baseball: Georgia Southern, here, time to be announced.
- 24,25 -- Applied Music Student Recital. Sponsored by Music Department, Daniel Hall Auditorium, (24) 7:30 p.m., (25) 4 p.m. Open to the public, no admission charge.
  - 25 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.
  - 26 -- Concert: "A Salute to President Robert C. Edwards" by University Chorus, Clemson University Concert Band, and Lillian Harder, piano soloist.

    Sponsored by Music Department, location to be announced, 8 p.m. Open to the public, no admission charge.
  - 30 -- Examinations Begin.

### MAY 1979

- 11 -- End Co-Op Work Period No. 19.
- 11 -- Commencement, Littlejohn Coliseum, 11 a.m.
- 11 -- Air Force and Army Commissioning Exercises. Sponsored by Aerospace Studies and Military Science Departments, location and time to be announced. Open to the public, no admission charge.
- 12 -- All residence halls close at 8 a.m.
- 14 -- Begin Co-Op Work Period No. 20.
- 20 -- Residence halls open at 10 a.m. for first session summer school.
- 21 -- Registration, first session summer school.
- 22 -- Classes begin, first session summer school.
- 30 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.

### JUNE 1979

- 1 -- Deadline to apply for University loans and Work-Study employment for the 1979-80 academic year.
- 5-8 -- State Convention: "Fifty-Second Annual Convention of the S.C. Association of Future Farmers of America." Sponsored by Agricultural Education Department, Daniel Hall Auditorium, begins 8 a.m. June 5 and ends 1 p.m. June 8. Open to the public, no admission charge. Expected attendance 400 plus.
- 27-28 -- Examinations, first session summer school.

### JULY 1979

- 6 -- Registration, second session summer school.
- 7 -- Classes begin, second session summer school.
- 21 -- Classes Meet.

### AUGUST 1979

- 4 -- Classes Meet.
- 8-9 -- Examinations, second session summer school.
- 11 -- Graduation, Littlejohn Coliseum, 11 a.m.





# PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

# ADDENDUM TO THE AUGUST 15, 1978 CLEMSON UNIVERSITY NEWSLETTER

Minutes of the Educational Council Meeting, April 3, 1978

Minutes of the Faculty Senate Meeting, June 20, 1978 Clemson University
Clemson, South Carolina

# MINUTES

of the meeting of

THE EDUCATIONAL COUNCIL

April 3, 1978

Present: Robert C. Edwards, presiding

Ben W. Anderson
Luther P. Anderson
Melvin E. Barnette
John H. Butler
Walter T. Cox
J. L. Edwards
J. W. Gordon Gourlay
Claude B. Green
Victor Hurst
Geraldine Labecki
Harold F. Landrith

Harlan E. McClure
Joseph B. McDevitt
W. H. Davis McGregor
Stanley G. Nicholas
Raymond Noblet
A. E. Schwartz
W. F. Steirer, Jr.
Wallace D. Trevillian
Henry E. Vogel
S. M. Willis
E. N. Tyndall, Secretary

# 1. <u>Minutes</u>

The minutes of the meeting of March 6, 1978, were approved as submitted.

# Academic Matters by Colleges:

Melvin C. Long

Statement and Recommendation: The Dean of the University recommended the following:

### A. COLLEGE OF AGRICULTURAL SCIENCES

# (1) New Undergraduate Course:

WB 491 Special Problems in Wildlife Biology and Fisheries Sciences

# (2) New Graduate Course:

FdSc 803 Food Fermentations

2 cr (2,0

1-3 cr (0,3)

- B. COLLEGE OF EDUCATION
- (1) New Undergraduate Course:

Ed 477 Characteristics of Children Who Are Gifted 3 cr (3,0)

(2) New Graduate Course:

Ed 677 Characteristics of Children Who are Gifted 3 cr (3,0)

- C. COLLEGE OF FOREST AND RECREATION RESOURCES
- (1) Approval for the following courses to be graded on a Pass-Fail basis effective May 1979. Pass means that a student would earn a grade of "C" or higher.

RPA 206 Leisure Programs II 1 cr (0,3)

RPA 207 Leisure Programs III 1 cr (0,3)

RPA 405 Field Training in Recreation 8 cr (0,24)

- D. COLLEGE OF INDUSTRIAL MANAGEMENT AND TEXTILE SCIENCE
- (1) Undergraduate Change:

Econ 499 Senior Seminar in Economics (Change in number) 1-3 cr (1-3,0)

E. COLLEGE OF LIBERAL ARTS

(1) Graduate Course:

Psych 690 Special Topics in Clinical Psychology (Change in description and title) 3 cr (3,0)

- F. COLLEGE OF NURSING
- (1) Undergraduate Course Deletion:

Nurs 433 Transactional Analysis and Nursing 4 cr (2,6)

### G. COLLEGE OF SCIENCES

# (1) New Graduate Courses:

Ch 830 Fundamentals of Physical Chemistry 3 cr (3,0)

Phys 711 Origins of Physical Sciences 3 cr (3,0)

Action: Approved.

# 3. Clemson University Calendar 1979-1980

Statement and Recommendation: The Dean of the University recommended approval of the Clemson University Calendar 1979-1980 (Attachment 1).

Action: Approved with minor adjustments as may be necessary.

# 4. Withdrawal from Class Policy for Undergraduates

Statement and Recommendation: The Dean of the University recommended approval of the following policy:

"That the first seven weeks of a semester constitute a free drop period. Courses dropped during this period are not recorded on the student's permanent record. That a student enrolled in a class after the first seven weeks of classes shall have final grades recorded unless the student withdraws from the University or can demonstrate to the Dean of Undergraduate or Graduate Studies confirmable extenuating circumstances why the student should be allowed to withdraw from that course."

Action: Referred to the Dean of Undergraduate Students and the Dean of Admissions and Registration for further study.

# 5. University-wide Preliminary Reports

Statement and Recommendation: The Dean of the University recommended that the preliminary reports be discontinued.

Action: Referred back to the Council of Academic Deans for further study.

# 6. Law School Admission Test (LSAT)

Statement and Recommendation: The Dean of the University recommended that the Law School Admission Test (LSAT) be offered on the University campus to students on a regular basis.

Action: Approved. Steps to implement this action should be taken as soon as possible.

y. M. Iyndall E. N. Tyndall, Secretary

# CLEMSON UNIVERSITY CALENDAR 1979-1980

Fall Semest	er	
August 20-	-21	Orientation, new students
August	22	Registration, all students
August	23	Late registration
August	24	Lat. registration fee applies
August	24	Classes begin regular schedule
August	30	Last day for registration
August	30	Last day to add a subject
September	13	Last day to order diploma for midyear graduation
September	20	Last day to drop a subject without record
October	15	Preliminary reports due
October	31	Last day to drop a subject or withdraw from the University without receiving final grades
November 12-	-16	Preregistration
November	21	Thanksgiving holidays begin after last class
November	26	Classes resume
December	10	Examinations begin
December	20	Midyear graduation

# Spring Semester

January 7	Orientation, new students
January 8	Registration, all students
January 9	Late registration
January 10	Late registration fee applies
January 10	Classes begin regular schedule
January 16	Last day for registration
January 16	Last day to add a subject
January 30	Last day to order diploma for May graduation
February 6	Last day to drop a subject without record
March 3	Preliminary reports due
March 14	Last day to drop a subject or withdraw from the University without receiving final grades
March 14	Spring holidays begin after last class
March 24	Classes resume
April 9	Honors and Awards Day; classes suspended at 12 noon
April 14-18	Preregistration
April 28	Examinations begin
May 9	Commencement

# SUMMER SESSION 1980

# First Session

May 19 Registration

May 20 Classes begin

June 25-26 Examinations

# Second Session

June 30 Orientation, new students

July 1 Registration

July 2 Classes begin

July 4 Classes suspended

July 12 Classes meet

July 26 Classes meet

August 6-7 Examinations

August 9 Graduation

### MINUTES OF THE FACULTY SENATE

June 20, 1978

The Senate Chamber

# 1. Call to Order

The meeting was called to order by President Steirer at 3:31 p.m. Senator Fennell moved that the normal order of business be suspended in order to permit the taking up of Special Reports. The motion was seconded and unanimously approved.

# 2. Special Reports

President Steirer noted that the Senate had extended an invitation to Dean Willis and Colonel Tyndall to speak to the Senate concerning the impact on the University and its personnel of Section 504 of the Rehabilitation Act of 1973. These gentlemen were present and President Steirer turned the floor over to them. Colonel Tyndall presented a brief history of the development of Section 504 and the early efforts of the university to comply. Dean Willis also made brief comments. Senators asked questions regarding the implementation of this law, and the speakers attempted to answer. This interchange continued for 50 minutes. The speakers were thanked for their presentations.

# 3. Approval of Minutes

The minutes of the meeting of May 9, 1978 were approved without change.

# 4. Committee Reports

a. Admissions and Scholarship Committee - Senator Edie, Chairman, reported as follows:

The Admissions and Scholarship Committee met on June 5 and worked on a first draft of a faculty questionnaire concerning final exams. This questionnaire should be ready for distribution at college faculty meetings on August 21 and the results will be used only for information. Also, the committee is trying to compile lists of courses which the various departments define as a 'major' in their program. This work is a continuation of last year's faculty senate effort to establish the

graduation requirement of a minimum GPR in the student's major.

The committee also discussed departmental policies on student advising.

It was felt that new faculty should receive some sort of departmental orientation covering student advising and, when faculty are evaluated, student advising duties should have status as least equal to committee assignments.

- b. Policy Committee The Chairman was absent and no one else was prepared to report. President Steirer reported that he understood that the work is proceeding well on revising the Constitution, and that it may be ready to submit to the Senate in July.
- c. Research Committee Senator Fennell, Chairman, reported as follows:

The Research Committee met on June 13 with Dean Schwartz. Discussion centered on the following topics: copyright policy, State Classification System, graduate student support, State support of University Research, indirect costs of research, and tenure policy.

- d. Welfare Committee No report.
- e. Ad Hoc Committees No report. Senator Burt, Chairman of the Ad Hoc Committee on Faculty Compensation noted that the Committee will meet on Tuesday, June 27.
- f. University Councils and Committees No reports.

# 5. President Report

- 1. On behalf of the Faculty Senate, I sent a card to Senator Lambert expressing our sympathy in the death of his daughter, Dottie, on June 1.
- 2. A new senator from the College of Sciences, H. Keith McDowell, has been elected to replace John Jacobus. Also, Senator Ron Dillon will begin new duties on June 23 as Acting Head of the Botany Department. James E. Schindler will replace him while he is on the required leave of absence from the Senate. Senator Dillon had been appointed to serve on the Affirmative Action and Student Relations Committees. He will be replaced by Bob Mazur (Affirmative Action) and Alan Grubb (Student Relations).

3. The Council of Academic Deans met on May 15. They unanimously disapproved four items from Student Senate Resolution No. R-77-78-74 which the Undergraduate Council had accepted. I might add that in each case the Faculty Senate at the April meeting had indicated an unwillingness to accept these proposals. The four are Items G, K, L, and O (please refer to the April minutes for details).

The final draft governing the various Professional Master's Degrees was submitted to the Council and a new format was approved to serve as the guideline for the dual agreements concerning undergraduate transfer to Clemson University with other institutions.

4. The Copyright Policy as revised by the Faculty Senate and submitted in March (FS-78-3-5) will provide the basis for a new draft that will be written by Admiral McDevitt and Ben Anderson. At a meeting on June 12 of these individuals with Dean Hurst and myself, no fundamental objections were raised. The changes will make the distinction between the copyrightable products of work-for-hire and copyrightable work produced in other academic situations sharper and more explicit and will place a ceiling on the amounts of money in the proposed fund for copyright assistance. As a result of this policy the University seems ready to provide more aid for the subvention and subsidization of publications than previously true.

The next step for the Copyright Policy will be review by the Cabinet. I will get an opportunity to look at the McDevitt-Anderson draft and make further comments before it goes to the Cabinet. I am greatly encouraged that the Faculty Senate's version has been so well-received.

- 5. FS 78-4-2 concerned the Additional Group Life Insurance Option for Nine Month Faculty. Ron Herrin has explained to me that the Prudential Insurance Company will make this option possible if <u>all</u> nine month faculty who are participating in the plan accept it. He believes it is the Faculty Senate's responsibility to persuade the faculty participants to accept the proposed option. I will ask the Welfare Committee to assume this responsibility.
- The disposition of other resolutions is as follows: (a) FS 77-3-11 Performing Arts Center. Plans have been drawn up and a site picked but the Center is only 11th out of 13 projects on the priority list in the Second Three-Year Phase (1978-1982). (b) FS 77-9-1 Payroll Deductions for Contribution to Alumni and University Foundations. Two questions have been raised. Can the computer do it? Vice-President Barnette is looking at this; if the answer is yes, the second question will be confronted. That is -- whether establishing precedents for types of payroll deductions other than the ones now permitted, IRS, FICA, South Carolina Retirement, South Carolina income tax, and insurance premiums, would be a good idea. (c) FS 78-2-2 Affirmative Action Committee. The charge to the Committee is interpreted by Colonel Tyndall, the Affirmative Action Officer, as not requiring that the Committee be consulted in such matters as the recent Library situation. Dean Hurst has no control over the Affirmative Action Committee. If the Senate wishes, it can rewrite the charge to accomplish what we want -- an active, involved committee that takes Faculty opinion

- seriously. (d) FS 78-2-3 Plus and Minus Final Grades. This is in the Undergraduate Council at present. (e) FS 78-2-4 Athletic Ticket Priorities. The Athletic Council is working on this. (f) FS 78-2-5 IPTAY Support of Academic Excellence. IPTAY would have to change its charter to accommodate this. There is no indication that they will. (g) FS 78-4-3 Conditions of Summer Employment of Academic Year Faculty. Dean Hurst is studying it.
- 7. FS 78-4-1 directed me to meet with faculty leaders of other state colleges and universities. I think it worth noting that only USC has a faculty senate. Winthrop has a defunct organization but I am trying to contact certain individuals.
- 8. Dean Hurst has asked the Faculty Senate to recommend a new University Marshall to him. With the Senate's approval I would like to appoint a committee of Vice-President Dickey (chairman) and Senators Lambert and Young to make that recommendation for the three year term beginning July 1, 1978.
- 9. The Faculty Club drive to match the \$5000 grant from the Alumni Council has netted \$2500. I suggest that those faculty members who are interested in this project begin to sell it to the Faculty. Indications now are that \$1500 more will be enough for renovations to begin on the proposed site.
- 10. I have continued to meet with individual Faculty Senators. Only six remain to be contacted. Not only do I know the individual Senators better but what their concerns and expectations are and how they propose to have the Senate and its officers deal with those concerns.
- 11. One thing that I have learned is how the Senators from Agriculture are representing their Faculty. They believe that they should represent their Faculty to their Dean as well as in the Faculty Senate. As a result they meet periodically with Dean Anderson and take up a varied agenda in those meetings as well as having a Senator at each department heads' meeting both to gain information and to advocate the faculty point of view. Any Senator from Agriculture can tell you more about what they are doing.
  - I would simply like to applaud their efforts and suggest that other college delegations might like to introduce similar procedures.
- 12. A number of departments (14) have accepted my invitation to talk with me about the presidential selection process. I have learned a great deal. The invitation remains in effect and I hope that many departments will take advantage of it.
- 13. Last fall the decision was made that the Faculty Senate President would represent the Extension staff on the presidential screening and selection committees. This means that on June 27 I will spend the day in Columbia talking with the leaders of the Extension Senate and the Extension Associations. I have also talked with the pesticide regulatory staff and will talk with the livestock regulatory staff in Columbia, both at the request of Dean Anderson.

14. On July 1, Benjamin Anderson will become University Counsel replacing Admiral Joseph McDevitt who will remain Vice-President for Executive Affairs. Ben Anderson will be the individual to consult on legal questions within the University.

# 6. Old Business

- a. Constitution Policy Committee had no report. Vice-President Dickey had attended a meeting of the subcommittee on the Constitution and said that he was very pleased with the work to date.
- b. Other Old Business None.

# 7. New Business

- a. FS-78-6-1 Resolution on Ad Hoc Committee on Inter-Collegiate Athletics; its adoption was moved and seconded. After brief comments, and with two abstentions, the motion was carried unanimously. A copy of the resolution is attached.
- b. Other New Business None.

# 8. Adjournment

The meeting adjourned at 4:50 p.m.

Respectfully submitted,

William C. Whitten, Jr.

Acting Secretary

### Members absent:

- T. R. Adkins (substitute present)
- C. E. Hood (substitute present)
- C. S. Thompson (substitute present)
- J. L Young
- W. E. West

- W. Baron
- J. C. Hester (substitute present)
- H. W. Fleming (substitute present)
- R. S. Lambert (substitute present)

### FS-78-6-1

Be it resolved that the Ad Hoc Committee on Inter-Collegiate Athletics be re-established for 1978-79 for the purpose of continuing Faculty Senate efforts to improve Faculty imput into athletic affairs through enhanced and clarified operational guidelines for the University Athletic Council.





CLEMSON UNIVERSITY LIBRARY SEP 1 1978

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSIT

CLEMSON

Vol. 18 No. 2

September 1, 1978



PICA INCREASES SCHOLARSHIP FUND -- Mark Garner, center, of Myrtle Beach, new president of the PICA Foundation, and James A. Smith Jr., left, of Anderson, president of the Printing Industry of the Carolinas (PICA), present checks totaling nearly \$32,000 to Clemson University President Robert C. Edwards. The sum includes \$10,000 which is earmarked for the permanent endowment of the Edgar H. Snider Memorial Scholarship Fund, established by the Carolinas' printing industry to help deserving students prepare for careers in the graphic arts industry. This brings the Snider scholarship endowment to \$60,000. Also presented was a \$21,754 check to fund an on-going curriculm development project in Clemson's industrial education department.

# CLEMSON AWARDS 480 DEGREES TO SUMMER GRADUATES

Clemson University President Robert C. Edwards told a summer graduation class of about 480 Aug. 12 that education in America is successful if it fosters "the value system which has made this nation the hope of the world."

He said, "There is no such thing as a value-free education."

Edwards said from a person's first day in kindergarten through college "the school shares with the home and with society the responsibility for introducing him to the system of values he will accept and live by."

He asked the graduates three questions to test their convictions about American values:

"Do we value our freedom so highly that

we would sacrifice our material wellbeing and even life itself to preserve it?

"Is there an intellectual and moral sickness in our society which has caused a loss of faith in those habits of thought and behavior which are responsible for our greatest achievements?

"Do we have the self-discipline and the will power to survive as a people and a nation?"

Edwards concluded: "It is our hope and our belief that each of you has long since made the commitment to a system of values in your personal life which reflects the best and highest ideals of a free and responsible people."

Four graduates received second lieutenant commissions (two Army and two Air Force) in ROTC ceremonies held during commencement.

Including graduation ceremonies in December and May, Clemson awarded about 2,400 degrees during the 1977-78 academic year.

### PHI DELTA THETA WINS AWARD

Clemson's chapter of Phi Delta Theta social fraternity was honored at the organization's 62nd Biennial Convention at French Lick Springs, Indiana, this summer as a Gold Star Chapter.

The Gold Star Award is symbolic of outstanding excellence in scholarship, finances, community service participation, pledge education programs, cooperation with the general headquarters in reporting and overall chapter operations.

## PROPOSALS FOR FACULTY RESEARCH COMMITTEE GRANTS BEING ACCEPTED

Proposals for Faculty Research Committee grants should be in the Office of University Research (107 E-Martin Hall) not later than November 1, 1978.

Application forms may be obtained from

the Office of University Research. Only proposals using the Faculty Research Committee application form will be considered by the committee.

The committee makes awards to new faculty members initiating research, to faculty members initiating research in a new area, and to faculty members in areas where other sources of support are inadequate or nonexistent.

### AGRICULTURAL ENGINEERING

Frank H. Hedden (Dir. Housing Institute) and W. Harold Allen (Assoc Prof) are active in the development of the two solar research houses located at the LaMaster Dairy Center. The houses, which feature attic collectors and rock heat storage, are cooperative projects which involve the USDA Rural Housing Research Unit, the South Carolina Agricultural Experiment Station and the Appalachian Regional Commission. Designs are by the Rural Housing Research Unit. Completion is expected later this year.

T. Virgil Wilson (Prof) and Richard O. Hegg (Assoc Prof) participated in a symposium at Auburn University on "Management Practices to Reduce Non-Point Pollution Discharge for Major Southern Crops on Coastal Plain and Delta Soils."

### AGRONOMY & SOILS

- B. J. Gossett (Prof) has received the following grants to support weed control research: Velsicol Chemical Corp., \$2,000; Monsanto Ag. Products, \$550; Gulf Oil Chemical Co., \$1,000; Mobil Chemical Co., \$2,500; Rohm & Hass Co., \$1,750; Uniroyal Chemical Co., \$500; Eli Lilly & Co., \$850; CIBA-Geigy Corp., \$1,500.
- J. R. Woodruff (Prof) has received a \$750 grant from U. S. Borax & Chemical Corp. to evaluate the micronutrient status of soils and plant response to added micronutrients.
- U. S. Jones (Prof) has received a \$5,000 grant from Royster Company to support

research on nutrient supply in Coastal Plain soils as related to corn and soybean needs.

- V. L. Quisenberry (Assoc Prof) has received a \$500 grant from Chevron Chemical Co. to support research on the comparison of soil properties under conventional and no-tillage systems in soybeans.
- H. D. Skipper (Assoc Prof) has received a \$6,500 grant from Hercules, Inc. to support a study of the interaction of herbicides with microbial systems.
- J. H. Palmer (Assoc Prof) has received the following grants to support Clemson's Extension on-farm test demonstration program in weed control for soybeans: CIBA-Geigy, \$500; Chevron, \$500; Stauffer, \$250; BASF Wyandotte, \$200; Monsanto, \$300; Uniroyal, \$300; Dow Chemical Co., \$500; and Chemagro-Mobay, \$100.

The South Carolina Soybean Board has provided a \$6,500 grant for the departments of Agronomy, Plant Pathology, Entomology, Agricultural Engineering, and Agricultural Economics to support the on-farm test demonstration program for soybeans.

### BUILDING SCIENCE

M. David Egan (Assoc Prof) presented a three-hour lecture on concepts in building fire safety at the Building Fire Safety Seminar held at the Georgia Center for Continuing Education, Athens, GA, July 26. This seminar was sponsored by the University of Georgia Institute of Government and Georgia Safety Fire Commissioner's Office.

### CHEMICAL ENGINEERING

William F. Beckwith (Assoc Prof) presented a paper co-authored with John N. Beard Jr. (Assoc Prof) and R. L. Gross (Grad Stu) at the First International Symposium on Drying held at McGill University in Montreal, Canada, Aug. 3-5. The paper was entitled "The Optimization"

of Textile Tenter Frame Dryer Operation."

J. M. Haile (Asst Prof) has been awarded a \$67,000 NSF grant to study molecular liquids by computer simulation. The objective of the study is exploration of the dependence of static, dynamic and structural properties on the intermolecular forces present in liquids composed of nonspherical molecules.

### CHEMISTRY AND GEOLOGY

Joe F. Allen (Prof) is co-author with Richard B. Glazer and Theodore J. Skaar (Ulster County Community College, NY) and John H. Austin (Univ of Maryland) of the book Learner's Guide for Water Quality Monitoring. The 258-page book is an instructional guide for a national two-year water quality monitoring curriculum developed under a U. S. Environmental Protection Agency grant.

Keith McDowell (Assoc Prof) attended the American Conference on Theoretical Chemistry held in Boulder, CO, June 25-30.

R. A. Abramovitch (Prof and Hd) has been awarded a \$4,000 grant from Merck and Company to initiate research in the synthesis and properties of novel sultams.

Prof. Abramovitch has been awarded a National Science Foundation grant to support the project "Chemistry of Nitrenes and Isoelectronic Intermediates." The grant, which is effective Sept. 1, 1978, will be for a three-year period and has a total value of \$112,800. This is a continuation of work that Prof. Abramovitch and his group have been carrying out for a number of years.

### **ENGLISH**

Joan Bobbitt (Asst Prof) published an article, "Unnatural Order in the Poetry of James Dickey," in <u>Concerning Poetry</u>, 11 (Spring 1978), 39-44.

C. O. Caskey (Assoc Prof) conducted a seminar on technical writing for the Wofford Writing Project held at Wofford College July 17.

Sterling Eisiminger (Asst Prof) reviewed two books for the Green River Review, 9 (Spring 1978): The Mind Reader by Richard Wilbur (pp. 59-62) and New Southern Poets, edited by Guy Owen and Mary C. Williams (pp. 62-65). Prof. Eisiminger's "Good Diction: Some Exercises and an Anecdote" was included in Writings About Writing, edited by James A. Wilhide (Columbia: S. C. Dept. of Ed., 1978).

The South Carolina Review, edited by members of the English faculty, received a \$1,500 grant from the National Endowment for the Arts for 1978-79, the second year in a row the publication has received a grant.

### ENTOMOLOGY & ECONOMIC ZOOLOGY

J. C. Morse (Assoc Prof) presented a paper, "A Characterization of the Aquatic Insects of Upper Three Runs Creek and Its Tributaries," at a Savannah River National Environmental Research Park workshop held at the Savannah River Plant near Aiken, May 22 and 23.

Prof. Morse, J. W. Chapin, P. H. Carlson, T. R. White, and D. D. Herlong (Grad Res Assts) participated in a special workshop sponsored by the N. C. Department of Natural Resources and Community Development in Raleigh, May 23-24. The purpose of the sessions was to assign a consensus standard environmental quality index value to each of the identifiable kinds of aquatic macroinvertebrates known from the two Carolinas. These index values will be used in future assessments of surface water quality in the Carolinas.

G. R. Carner (Prof) presented a paper at the annual meeting of the Southeastern Electron Microscopy Society meeting held in Augusta, GA, May 24-27.

Arnold G. Eversole (Assoc Prof), Peter J. Eldridge (S. C. Wildlife & Marine Resources Dept), and Jack M. Whetstone (former Grad Asst) attended and participated in the 70th SINA-NSA joint annual meeting held in New Orleans, LA, June 18-22.

- T. R. Adkins (Prof) attended and participated in the NEC-26 Biting Fly Workshop at Colebrook, NH, June 18-25. Prof. Adkins attended the Livestock Insects Work Conference in Laramie, WY, and delivered a paper on "Efficacy of Low Volume Applications of Dursban Against the Horn Fly and Face Fly," July 11-13.
- S. B. Hays (Prof and Hd) attended and participated in the Regional RPAR Data Gaps Research Meeting held in Atlanta, GA, July 6-7. At this meeting Prof. Hays was elected to the Executive Committee.
- Prof. Eversole presented a paper, "Marking Clams and Predators of Clams with Rubidium," at the 44th annual meeting of the American Malacological Union in Wilmington, NC, July 16-22.
- G. R. Carner (Prof), Prof. Adkins, Heyward Douglass (Vstg Instr), and JoAn Hudson (Res Tech, Phy & Astr) assisted in the production of the article, "What's Bugging You?" published in <u>South Carolina</u> <u>Wildlife</u>, July-August 1978 by Bob Campbell.

Prof. Carner attended and presented a paper at the annual meeting of the Society for Invertebrate Pathology in Athens, GA, Aug. 21-23.

Prof. Eversole attended and participated in the 29th annual AIBS meeting (Ecological Society of America) at the University of Georgia in Athens, Aug. 21-22.

A paper, "Effects of Host Age, Route of Infection, and Quantity of Inoculum on the Susceptibility of Heliothis virescens, Spodoptera eridania, and S. frugiperda to Beauvaria bassiana," by Wayne A. Gardner (former Vstg Instr) and Raymond Noblet (Assoc Prof) was published in the Journal of the Georgia Entomological Society 13:214-22.

A paper, "The Effect of Maturation on Food Preference Behavior in Bobwhite Quail," by R. J. Kendall (former Grad Res Asst), D. L. Robinette (Assoc Prof), and Prof. Noblet was published as a S. C. Agricultural Experiment Station Technical Bulletin No. 1066.

### FOOD SCIENCE

James C. Acton (Assoc Prof) is co-author with L. Wendell Haymon (Microlife Technics, Sarasota, FL) of a chapter, "Flavors from Lipids by Microbiological Action," which appears in Lipids As A Source of Flavor, American Chemical Society Symposium Series, No. 75, March 1978.

Joseph J. Jen (Assoc Prof) attended the 38th annual meeting of the Institute of Food Technologists, June 4-8, in Dallas, TX, and served as the co-chairman of the technical session "Biochemistry of Plants." Prof. Jen's graduate students presented two papers, "Phytosterol Biosynthesis in Ripening Tomatoes" and "Peroxidase and Polyphenol Oxidase Activities in Developing Peaches."

Prof. Jen presided over the annual meeting of the Association of Chinese Food Scientists and Technologists in America, June 5 in Dallas, TX.

Prof. Jen attended the 7th Modern Science and Technology Seminar held in Taiwan, Republic of China, June 2-July 21. In addition to serving as the chairman of the Food Processing Session, he presented two lectures, "Postharvest Physiology of Fruit and Vegetables" and "Osmovac-Dehydration Process."

### **FORESTRY**

G. E. Sabin (Assoc Prof) participated as a session moderator at the National Workshop on Forest Engineering and Harvesting Aug. 8-11 at Corvallis, OR.

The following papers were recently published in the Proceedings of the Soil

Moisture-Site Productivity Symposium held at Myrtle Beach, Nov. 1-3, 1977.

- G. E. Wood (Assoc Prof, Belle W. Baruch Forest Science Institute), "Wildlife Habitat Enhancement."
- J. S. Fralish (Assoc Prof, Southern Illinois Univ), S. M. Jones (Research Forester), R. K. O'Dell (Grad Stu, Southern Illinois Univ), and J. L.

Chambers (Asst Prof, Louisiana State Univ), "The Effects of Soil Moisture on Site Productivity and Forest Composition in the Shawnee Hills of Southern Illinois."

- T. M. Williams (Asst Prof, Belle W. Baruch Forest Science Institute), "Response of Shallow Water Tables to Rainfall."
- C. A. Gresham (Asst Prof, Belle W. Baruch Forest Science Institute) and T. M. Williams, "Water Table Depth and Growth of Young Loblolly Pine."

### HISTORY AND VISUAL STUDIES

Tom Dimond (Coordinator of Educational Media and Exhibits) had a one-man exhibition of paintings, drawings and prints at the Asheville Art Museum, Asheville, NC, July 11-Aug. 13.

#### HORTICULTURE

The following papers were presented at the Southern Nurserymen's Association Research Conference meeting held at the Atlanta Hilton, July 29-31:

- J. P. Fulmer (Assoc Prof), "Effect of Glyphosate on Selected Tree Species."
- E. V. Jones (Asst Prof), "The Interaction of Lime and Four Media on the Growth of Nematanthus wetstienii."
- D. F. Wagner (Assoc Prof), "Late Summer Pruning of Azaleas and its Effect on Plant Quality."

### INDUSTRIAL EDUCATION

Alfred F. Newton (Prof and Hd) presented a paper, "Determining Readability of Instructional Materials," at the Trade and Industrial Education Professional Development Program held here July 31-Aug. 2.

### FACULTY PROMOTIONS ANNOUNCED FOR 1978-79

Fifty-nine members of the teaching and research faculties were promoted in rank for the year 1978-79. Twenty-nine associate professors became professors; twenty-eight assistant professors became associate professors, and two instructors became assistant professors.

#### COLLEGE OF AGRICULTURAL SCIENCES

Promoted to Professor:
Ortus W. Barnette, Jr.
Peter M. Burrows
Gerald R. Carner
Harold M. Harris, Jr.
Michel W. Jutras
Max I. Loyd
John S. Lytle
Earlene A. Rupert
Eldon I. Zehr

Promoted to Associate Professor: William H. Allen
George E. Carter, Jr.
Arnold G. Eversole
Bruce F. Jenny
John C. Morse
Charles V. Privette
Virgil L. Quisenberry, Jr.
D. Lamar Robinette
Russell W. Sutton

### COLLEGE OF ARCHITECTURE

Promoted to Professor: Ireland G. Regnier

Promoted to Associate Professor: Gordon W. Patterson Olgun Ersenkal

### COLLEGE OF EDUCATION

Promoted to Professor: Paul C. Caley Robert J. Mercer William E. West

Promoted to Associate Professor: Lillian B. Hart

#### COLLEGE OF ENGINEERING

Promoted to Professor: William F. Beckwith William W. Coffeen Francis W. Cooke Joseph L. Gaddis

Promoted to Associate Professor: Thomas J. Overcamp Edward W. Page III Joon B. Park Benjamin L. Sill

### COLLEGE OF FOREST & RECREATION RESOURC

Promoted to Professor: George D. Kessler

Promoted to Associate Professor: Guy E. Sabin Buford E. Trent

COLLEGE OF INDUSTRIAL MANAGEMENT AND TEXTILE SCIENCE

Promoted to Professor: E. Earl Burch Richard B. McKenzie Thomas W. Zimmerer

Promoted to Associate Professor: Dudley W. Blair Carl W. Gooding Robert W. Rouse

### COLLEGE OF LIBERAL ARTS

Promoted to Professor: Charles W. Dunn Gaston J. Fernandez Patricia K. Hill

Promoted to Associate Professor: Leonard Berger George W. Koon

### FACULTY PROMOTIONS ANNOUNCED FOR 1978-79 (Cont'd)

#### COLLEGE OF NURSING

Promoted to Assistant Professor:

Susan A. Nicholson

COLLEGE OF SCIENCES

Promoted to Professor: Joe F. Allen W. Robert Boland Burt V. Bronk George M. Haselton Carlton W. Ulbrich Promoted to Associate Professor:

Thomas F. Collins
John E. Fairey III
John A. Gilreath
Doris R. Helms
H. Keith McDowell

Promoted to Assistant Professor:

Mary Ann Allan

### ADDITIONAL NEW FACULTY AND STAFF, 1978-79

### College of Agricultural Sciences

Fortnum, Bruce A., Assistant Professor of Plant Pathology and Physiology; B.A., LaSalle College; M.S., University of Delaware

Morr, Charles V., The Herbert R. Stender Professor of Food Science; B.S., M.S., Ph.D., Ohio State University

<u>Wiggins</u>, Emily S., Extension Family Life Specialist, Assistant Professor of Home Economics; B.S., M.A.T., Winthrop College; Route 3, Box 71, Central 29630

### College of Engineering

McCravy, John R., Jr., Associate Professor of Engineering Graphics; B.S., U.S. Naval Academy; M. of Engineering, University of South Carolina

### College of Industrial Management and Textile Science

<u>Christie</u>, Deidra, Visiting Instructor in Economics; B.A., Huntingdon College; M.A., Ball State University

Fellers, Gary P., Visiting Instructor in Industrial Management; B.S., Clemson University; M.S., Institute of Textile Technology; M.B.A., Florida Institute of Technology

Hipp, Earl C., Jr., Assistant Professor of Industrial Management; M.B.A., and J.D., University of South Carolina

James, Peggy L., Lecturer in Industrial Management; B.S., Clemson University

### ADDITIONAL NEW FACULTY AND STAFF, 1978-79 (Continued)

<u>Jarvis</u>, Christine, Assistant Professor of Textiles; B.S., University of North Carolina; Ph.D., Massachusetts Institute of Technology

 $\underline{\text{Marshall}}$ , S. Brooks, Lecturer in Industrial Management; B.A., Furman University;  $\underline{\text{M.B.A.}}$ , University of Oregon

O'Brien, Michael B., Visiting Assistant Professor of Economics; B.S., Pembroke State University

### College of Liberal Arts

Edwards, Donald L., Visiting Instructor in English; B.A., Lenoir-Rhyne College; M.A., University of Tennessee

Johnson, Deborah D., Visiting Instructor in English; B.A., St. Olaf College; M.A., University of Minnesota; Route 1, Box 278-J, Six Mile 29682

Mandel, Miriam B., Visiting Instructor in English; B.A., University of New York; M.A., Ohio State University; 229 Riggs Drive

Romeiser, John B., Visiting Assistant Professor of French and Italian; B.A., Colgate University; M.A., and Ph.D., Vanderbilt University

### College of Sciences

Ruppert, Mariette U., Instructor in Zoology (Biology Program); B.S., M.S., Tufts University

Speziale, Barbara J., Instructor in Botany (Biology Program); B.A., State University of New York at Binghamton (Harper College); M.S., University of Minnesota

## MINUTES OF THE COUNCIL OF ACADEMIC DEANS MEETING, JULY 10, 1978

The Council of Academic Deans met July 10, 1978, in 108 Strode Tower. Dean Hurst called the meeting to order at 9 a.m. with the following persons present: Dr. Chapman (for Dean Anderson), Dean McClure, Dean Landrith, Dean Wilcox, Dean Box, Dean Efland (for Dean Trevillian), Dean Cox, Dr. Chodil (for Dean Labecki), Dean Vogel, Dean Green, Dean Schwartz, Dean Willis, and Dean Brown. Also attending briefly were Mr. Hickman and Dean Vickery.

Mr. Hickman, budget director for the Office of Business and Finance, addressed

the deans relative to his efforts to improve communications between the Business Office and the Academic Affairs area. He discussed various current and future projects and stressed the willingness of his staff to work with the deans and their staffs in developing new approaches for improving operating procedures—both for the internal improvement of Clemson University and to strengthen Clemson's position within the state. The deans were appreciative of Mr. Hickman's taking the time to discuss these matters and they, in turn, offered suggestions and recommendations for attaining these goals.

Dean Vickery addressed the subject of preliminary grade reports that are

currently being mailed out to students prior to the end of the first semester. There was discussion relative to the discontinuance of these reports or to limiting the reporting of only those students with unsatisfactory grades. A statement will be prepared and distributed to the deans prior to the next meeting of the deans.

Dean Vickery next discussed the "With-drawal from Class Policy for Undergraduates." After much discussion among the deans, Dean Hurst asked Deans Vickery and Green to confer on the matter prior to the next deans' meeting.

Dean Hurst reminded the deans that their retirees must vacate offices and labs within 30 days of their retirement.

One graduate course, Psych 623--Theories of Personality, was recommended and approved.

Dean Hurst inquired as to the type of response the deans and their department heads had received from the "Evaluation of Academic Administrators," question-naires that were developed by the Faculty Senate and distributed to all faculty last December. The responses were varied. Where department heads had made a special effort to solicit replies the faculty participation was fairly good. For the most part, however, the faculty chose not

to participate.

Dean Schwartz, after brief remarks relative to computer facilities at Clemson University, referred to an article in a recent issue of EDUCOM Bulletin. He asked the deans to give some thought to the development of long-range plans for the utilization and coordination of minicomputers on our campus. He indicated that if there was sufficient interest, he would wish to appoint an ad hoc committee to advise in the acquisition and utilization of minicomputers. The subject will be on the agenda for the next deans' meeting.

Dean Brown distributed the new graduate catalogs and also, "A Guideline for Student Employment," which is to provide assistance to the departments in the necessary administrative work associated with the employment of graduate assistants. These will be distributed to the departments which will be making these appointments for August. Any questions should be referred to Dean Brown, Dean Willis, or Mr. Marvin Bennett of the Business Office.

The meeting was adjourned at 11:45 a.m.

Respectfully submitted
Annette H. Kesler

### Calendar of Campus Events

- 1-2 -- Live Entertainment in Edgar's: "Southernaire Band." Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
- 1-15 -- Art Exhibition: Ceramic Murals and Drawings by Kathy Triplett. Sponsored by Student Union, Union Gallery, 8 a.m. 5 p.m. Monday Saturday, noon 5 p.m. Sunday. Open to the public, no admission charge.
  - 2 -- JV Football: Newberry, here, 5 p.m.
  - 3 -- Soccer: Pfieffer, here, 2 p.m.

- 4 -- Concert: The National Band of New Zealand and Maori Dancers. Sponsored by Clemson University Concert Series, Littlejohn Coliseum, 8 p.m. Admission by season ticket, Student Use Card, or individual tickets on sale at Gate 5.
- 4-13 -- Fraternity Rush Registration. Harcombe and Schilletter Dining Halls, 10 a.m.-1 p.m. and 4 - 6 p.m. Open to all enrolled male students.
  - 4 -- Placement Orientation for Industrial Management and Textile Science Seniors. Sponsored by Placement Office, 301 Sirrine Hall, 5 p.m. Open to all seniors who want help getting a job after graduation.
  - 5 -- Placement Orientation for Forest and Recreation Resources Seniors. Sponsored by Placement Office, 132 F&RR Building, 3:30 p.m. Open to all seniors who want help getting a job after graduation.
- 5-14 -- Art Exhibition: "National Sculpture 1978." Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m. 4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
  - 6 -- Lecture: Charley Pell. Coach Pell will speak on the role of athletics at Clemson. Sponsored by Speakers Bureau, Tillman Auditorium, 8 p.m. Open to the public, no admission charge.
  - 6 -- English Hour Lecture: "Lamia: Three Characters in Search of a Poem" by Dr. Richard Underwood. Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
  - 6 -- Placement Orientation for Engineering Seniors. Sponsored by Placement Office, 100 Lowry Hall, 5 p.m. Open to all seniors who want help getting a job after graduation.
- 6-7 -- Workshop: "PROJECT Network Scheduling." For more information, call Continuing Engineering Education, 656-3308.
  - 7 -- Mime Artist and Clown: Buffo. Sponsored by Student Union, Union Ballroom, 8 p.m., other details to be announced.
  - 7 -- Placement Orientation for Architecture and Building Construction Seniors.

    Sponsored by Placement Office, 200 Lee Hall, 3 p.m. Open to all seniors who want help getting a job after graduation.
- 8-9 -- Live Entertainment in Edgar's: Kier Irmiter. Sponsored by Student Union, Edgar's, 9 p.m. Proof of age and University I.D. required, no admission charge.
  - 9 -- Trip to Biltmore House. Sponsored by Student Union, details and sign up at Union Information Desk.
  - 10 -- Soccer: Georgia State, here, 2 p.m.
  - 11 -- Lecture: "Fertilizer Nitrogen Production," by Dr. I. M. Wofford, Kaiser Agricultural Chemicals, Savannah, GA. Sponsored by Agronomy and Soils Department, A-203 P&AS Building, 9:05 a.m. Open to the public, no admission charge.

- 11-13 -- Workshop: 'Microprocessors Workshop." For more information, contact Continuing Engineering Education, 656-3308.
- 1-15 -- Room Change Period. Students desiring to change rooms should submit an application to the Housing Office in Mell Hall between 8 a.m. and 4:30 p.m.
  - 11 -- French Film. Sponsored by Department of Languages, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 12-13 -- Seminar: "Reduction of Fabric/Yarn Defects Through the Selection and Processing of Fibers." For more information, contact Office of Professional Development, 656-2200.
  - 12 -- Placement Orientation for Science Seniors. Sponsored by Placement Office, 101 Kinard, 5 p.m. Open to all seniors who want help getting a job after graduation.
  - 3-18 -- Fraternity Formal Rush. (13) Rush Convocation, Tillman Auditorium, 6:30 p.m., and Open House, Fraternity Quadrangle, 7-9 p.m. (14) Open House, Fraternity Quadrangle, 7-9 p.m. (15) Invitational Parties. (16) Invitational Parties. (17) Sign Preference Cards, IFC Room, Fraternity Quadrangle, 1-4 p.m. (18) Distribution of Bids, 100 Hardin Hall, 5-6 p.m., and Acceptance of Bids, Fraternity Quadrangle, 7 p.m.
    - 14 -- Placement Orientation for Liberal Arts Seniors. Sponsored by Placement Office, Daniel Auditorium, 4:30 p.m. Open to all seniors who want help getting a job after graduation.

### PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY



Vol. 18 No. 3

September 15, 1978

CLEMSON UN THE THE SOUTH CAROLINE ROLL

SFF L. . N

### TRACTORS COST MONEY: INDUSTRY HELPS OUT

Agricultural teaching and research is costly, and Bud Webb says much of it is carried on with a little help from friends.

Webb heads the Agricultural Engineering Department at Clemson University. His faculty members use expensive tools in their student labs -- \$20,000 tractors, \$50,000 combines and the like. Research needs are even more demanding.

"Without the generosity of industry, my department would be hard put to meet its needs," Webb says.

"In the past two years, friends in industry have given or loaned us equipment and supplies amounting to over \$120,000. That's a real help.

You can't tell a student how a machine works without showing him -- and a researcher can't design a new harvester on paper alone."

Help often comes through former Clemson students now working in agribusiness. They know the department's needs and offer assistance. Or sometimes a company is particularly interested in a research project under way at Clemson's S.C. Experiment Station and will offer help to speed it along.

Regardless of how the help comes, Webb says it is deeply appreciated.

Gifts and loans have come to the department from International Harvester, New Holland, John Deere, Reinke Manufacturing Company, Dicky-John Company and the J. Herman Power Company, local dealer for White Farm Equipment.

Other donors include Carter and Crawley, Inc. of Greenville; Ciba Geigy and Elanco, chemical companies; Rayne Plane Company of Rayne, LA; the Tappan Air Conditioning Division; Durand-Wayland, Inc., of LaGrange, GA; Watchdog, Inc., of Seattle, Washington; Moog, Inc. of East Lansing, MI; and Triangle Chemical Company.

A three-part gift of equipment used in a Clemson research project at Bowman, SC, came from the M. M. Johns Company of Farmville, VA, Nelson Irrigation Company and the Heinzman Engineering Company.

# PROPOSALS FOR FACULTY RESEARCH COMMITTEE GRANT APPLICATIONS BEING ACCEPTED

Proposals for Faculty Research Committee grants should be in the Office of University Research (107 E-Martin Hall) not later than Nov. 1, 1978. Application forms may be secured in the Office of University Research. Only proposals using the Faculty Research Committee application form will be considered by the committee.

The committee makes awards to new faculty members initiating research, to faculty members initiating research in a new area, and to faculty members in areas where other sources of support are inadequate or nonexistent.

### ACCOUNTING AND FINANCE

Jim Kimbell (Assoc Prof) completed requirements for Doctor of Business Administration at Louisiana Tech University.

### AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

The following faculty and graduate students presented papers at the national meetings of the American Agricultural Economics Association/Canadian Agricultural Economics Association at VPI and SU, Blacksburg, VA, Aug. 6-9:

- B. L. Dillman (Assoc Prof), "Preservation of Prime Agricultural Land: State and Local Perspectives, Community Values and Policy Implementation."
- J. C. Hite (Prof) and Gloria B. Tinubu (former Grad Res Asst), "Heirs Property and Rural Development: An Exploratory Empirical Assessment."
- M. I. Loyd (Prof), "Tobacco Policy Alternatives."
- S. E. Miller (Asst Prof) and D. Kenyon (VPI & SU), "Casual Relationships Between Live Hog Cash and Futures Prices."
- B. H. Robinson (Prof), "The Cost-Price Squeeze: How Did We Get Here Where Are We Going?" at a Symposium on the Problems and Management Strategies for Beginning and Established Farms.
- C. S. Thompson (Assoc Prof), "Intercommodity Effects of Government Programs."

### AGRICULTURAL ENGINEERING

Jerry R. Lambert (Prof) and D. C. Reicosky (USDA-Minn.) have published a paper, "Field Measured and Simulated Corn Leaf Water Potential," in the March-April 1978 issue of the Soil Science Society of America Journal.

John A. Collier (Asst Prof), Thomas H. Garner (Prof), Byron K. Webb (Prof) and Jerry B. Davis (Asst Prof) published an article, "Herbicide Placement Effects on Cotton and Soybean Seedlings," in the March-April 1978 issue of the Transactions of the American Society of Agricultural Engineers.

### CHEMICAL ENGINEERING

W. F. Beckwith (Prof) presented a seminar on "A Scheme to Assist in the Evaluation of the Performance of a Tenter Frame Dryer" at the Institute of Paper Chemistry at Appleton, WI, Aug. 7.

### CHEMISTRY AND GEOLOGY

R. A. Abramovitch (Prof and Hd) gave an invited lecture at the Gordon Conference on heterocyclic compounds in New Hampton, NH, July 12. The topic of his talk was "New Rearrangements Involving Heteroaromatic N-Oxide Derivatives."

Prof. Abramovitch spent 23 days at the Pedagogical University in Czestochowa, Poland, in connection with the cooperative research programs sponsored by the National Science Foundation. In addition to discussing research progress with graduate students and writing papers, he gave a lecture, "Pyridinium Ylides - Synthetic Applications."

Dorota A. Abramovitch (Grad Stu), also a cooperating scientist in the NSF program, gave a short course on dry column chromatography and a lecture, "The Direct Side Chain Amination of Heteroaromatic N-Oxides," in Czestochowa.

Villard S. Griffin Jr. (Prof) has recently authored the monograph, "Geology of the Calhoun Creek, Calhoun Falls and Portions of the Chennault and Verdery Quadrangles, South Carolina," which was published by the SC Geological Survey as MS-23, 47p. and six map plates. This work was supported by two N.S.F. grants to Clemson.

### CIVIL ENGINEERING

Billy L. Edge (Prof) attended the ASCE Specialty Conference on Water Resources in Blacksburg, VA, at VPI & SU Aug. 5 and presented a paper, "Coastal Zone Management: Technological Implications for Civil Engineers."

Parviz F. Rad (Assoc Prof) attended the first international Masonry Conference

sponsored by the North American Masonry Society held at the University of Colorado, Boulder, CO. Prof. Rad presented two papers, "Inherent Properties of Bricks" and "An Impact Technique to Determine Strength of Bricks," at this conference.

Russell H. Brown (Assoc Prof) attended the North American Masonry Conference in Boulder, CO, Aug. 14-16 where he chaired a technical session and presented a paper, "Effect of Mortar on Water Permeance of Masonry." The paper was also published in the conference Proceedings.

### **ECONOMICS**

Ralph D. Elliott (Assoc Prof and Dir of Professional Development) has had a paper, "An Analysis of the Marginal Products at the One and Two-Semester Introductory Economics Course," accepted for publication in The Journal of Economic Education. The paper is co-authored by Ed Ireland and Teresa Cannon.

Bruce Yandle (Prof) has published an article, "The Emerging Market in Air Emissions," in <u>Regulation</u> July/August 1978, pp. 21-29, which was the subject of an interview on "All Things Considered," broadcast by National Public Radio Aug. 1.

Prof. Yandle has also published "Long-Term Availability of Natural Resources: Discussion," a paper in <u>Alternatives for Growth</u>, Harvey McMains and Lyle Wilcox, editors, National Bureau of Economic Research, 1978, pp. 85-96.

### ENTOMOLOGY AND ECONOMIC ZOOLOGY

Sidney B. Hays (Prof & Hd) has been named to the Governing Board of the Entomological Society of America. He has published about 30 professional papers and has served as president of both the state and southeastern branches of the national entomological society.

### EXTENSION SERVICE

Three agents with the Clemson University Cooperative Extension Service were among those cited for outstanding honors at the national meeting of the County Agents' Association at Idaho State University in Pocatello, ID.

Lexington County extension leader Raymond L. Boozer and Piedmont area livestock agent B. Wayne Sherer were named recipients of Distinguished Service Awards, presented for outstanding service and distinguished careers in extension work. A Youth Achievement Award was conferred on Chesterfield County agent James Sweeney for superior work with Clemson Extension 4-H programs.

### HISTORY

Joseph L. Arbena (Assoc Prof) has published "Algunos aspectos de la politica exterior del quinquenio," <u>Boletin de Historia y Antiguedades</u>, Vol. LXV, No. 720 (1978). The journal is published by the Colombian Academy of History, Bogota.

Charles H. Lippy (Asst Prof) reviewed Religion, Awakening and Revolution by Martin E. Martz in Religious Studies Review, 4 (July 1978), 207.

### HORTICULTURE

M. LeRon Robbins (Assoc Prof) was moderator of a session on Vegetable Culture at the 75th anniversary meeting of the American Society for Herticultural Science held in Boston.

Prof. Robbins' review of <a href="The Nightshades">The Nightshades</a> and <a href="Health">Health</a> was published in Volume 18
<a href="The Nightshades">(1)</a> of Horticultural Research.

### INTERDISCIPLINARY STUDIES

Francis W. Cooke (Assoc Prof & Hd) held an appointment for seven weeks this summer as visiting professor of bioengineering in the Department of Surgery of Stanford University School of Medicine. While at Stanford, Prof. Cooke participated in both the teaching and research program of the Division of Orthopedics.

### LANGUAGES

Gaston J. Fernandez (Prof, Spanish) has edited <u>Rescoldo</u> a collection of poems by the Cuban poet Arturo Doreste, published by Publicaciones del Municipio de Sagua en el Exilio, Miami, 1978.

Prof. Fernandez has published "Presencia Del Negro En Los <u>Versos Sencillos</u> De Marti" in <u>Homenaje A Lydia Cabrera</u> published by Ediciones Universal, Miami, 1978.

Prof. Fernandez presented a paper, "El director, ¿ debe ser un pater familias?" at the Symposium on Programs Abroad sponsored by the American Association of Teachers of Spanish and Portuguese held in Madrid, Spain, June 26-30.

### LIVESTOCK-POULTRY HEALTH DIVISION

Gus Vaninetti has been appointed associate director of Clemson University's Livestock-Poultry Health Division with responsibility for supervising the South Carolina Meat and Poultry Inspection Department.

The Washington State native joined the division in 1969 as a meat inspection supervisor in Florence and in 1972 was promoted to assistant chief of the department at Clemson's Sandhill Station near Columbia.

A graduate of Washington State University with a degree in veterinary medicine, Dr. Vaninetti has been in private practice, was with the USDA in Mexico on the footand-mouth disease eradication program, and employed for a time as a federal meat inspector in Tacoma. He also served with the U.S. Army from 1948-69.

### MATHEMATICAL SCIENCES

J. V. Brawley (Prof) with R. O. Gamble

(Winthrop College) published a paper, "Involutory Matrices over Finite Cummutative Rings." The research was supported in part by an ONR Contract. The paper appears in Linear Algebra and Its Applications 21, 175-188 (1978).

The 1974 paper in Mathematics Magazine of A. Sobczyk (S.M. Martin Prof.) about symmetry properties of cubes is cited by Martin Gardner in his "Mathematical Games" section of the current (Sept. 1978) issue of Scientific American.

John K. Luedeman (Assoc Prof) was an invited participant at a Conference on Semigroup theory at Tulane University, New Orleans, in honor of Al Clifford, Sept. 1-3.

Prof. Luedeman gave an invited address to the faculty and students of Loyola University in New Orleans. His talk was entitled "Models and Mimics or Guess What's Coming to Dinner."

Prof. Luedeman, F. R. McMorris (Vstg Assoc Prof) and Soon-Kiong Kim (Univ Central de Venezuela) published a paper, "Semigroups for Which Every Totally Irreducible S-System is Injective," in Commentationes Mathematicae Universitatis Carolinae Vol. 19 (1), 1978.

### MUSIC

Edith B. Card (Asst Prof) presented several programs of Appalachian Music during summer vacation, including one in Natchez Trace State Park in Tennessee, two at the KOA Campground in Cresswell, OI three at Yosemite National Park, CA, and one at the University of Oregon at Eugene, OR, while attending a Music Education Workshop there. She also presented a similar program for the Clemson Sertoma Club Aug. 8.

### NURSING

Lori Vaughan (Instr), Cynthia Belcher (Asst Prof) and Scott Engwall (St. Petersburgh, FL) have published a booklet, "Parent-Child Information

Booklet About Open Heart Surgery."

Ms. Vaughan and Mr. Engwall have also published a brochure, "Information About the Intensive Care Unit."

Kathleen E. O'Rourke (Instr) has been selected as an Outstanding Young Woman of American for 1978.

### PROFESSIONAL DEVELOPMENT

E. Earl Burch (Assoc Prof, IM) is chairperson for a two-day seminar, "Effective Production Planning and Control and Inventory Management," to be held on campus Sept. 18-19.

Thomas Zimmerer (Assoc Prof, IM) is chairing "Effective Performance Appraisal and Review" at the Holiday Inn Sept. 18-19.

Hendrikus E. J. Van Bulck (Asst Prof, IM) is chairperson for a two-day course, "Increasing Purchasing's Effectiveness," to be held here Sept. 20-21.

J. Michael McDonald (Asst Prof, IM) is chairing a seminar, "Effective Time Management by the Secretary," to be held here Sept. 25.

Prof. McDonald will be the leader of a course, "Effective Time Management for Today's Secretary (Sec II)," here Sept. 26.

Prof. McDonald is chairperson for a seminar, "Effective Time Management for the Executive," to be held on campus Sept. 27.

Edward S. Olson (Prof of Textiles) is chairing "Foam Applications for Dyeing, Printing and Finishing" here Oct. 3-4.

Jean Woodruff (Instr, IM) will be chairing "Women in Management" at the Clemson Holiday Inn Oct. 4.

Instr. Woodruff will be chairperson for a seminar, "Assertiveness Training," to be held here Oct. 5.

Instr. Woodruff is chairperson for a course, "Powerful Speech," to be held at the Clemson Holiday Inn Oct. 6.

Russell Shannon (Prof of Economics) will be the moderator for the "Electric Utilities Economics Seminar" to be held at the Clemson Holiday Inn Oct. 8-10.

Carleton W. Roberts (Prof, Tex) and E. I. Stearns (retired Hd, Tex) will co-chair a seminar, "Selected Topics in Polymers for Textiles," to be held here Oct. 10-11.

Instr. Woodruff will chair a course, "Letter and Report Writing Workshop," to be held at the Clemson Holiday Inn Oct. 12-13.

### REDFERN HEALTH CENTER

Dr. Robert H. Burley, clincial director of physical medicine and staff physician at Redfern Health Center, has recently been elected by the Board of Trustees of the Medical University of South Carolina to serve as a member of the Board of Visitors during the year 1978. To have been chosen to serve in this capacity is quite an honor to Dr. Burley and Clemson University.

### **TEXTILES**

Hassan Behery (Assoc Prof) will present a paper, "Neps in Cotton Processing," at the Textile Quality Control Meeting, Sept. 14-15.

### VOCATIONAL EDUCATION MEDIA CENTER

Arthur K. Jensen (Dir) has been elected president of the Association of Educational Communication and Technology for South Carolina. As such, he represented South Carolina at the Educational Media Leadership Conference at Lake Okoboji, IA, Aug. 14-19.

Robert J. Mercer (Assoc Prof) was selected to serve on a committee for the National Center for Research in Vocational Education to develop procedures for the conversion of Department of Defense curriculum for civilian use.

### ZOOLOGY

The following papers have recently been published by E. E. Ruppert (Asst Prof):

- ·1978a. "The Reproductive System of Gastrotrichs. II. Insemination in Macrodasys, a Unique Mode of Sperm Transfer in Metazoa." Zoomorphologie 89: 207-221.
- ·1978b. "The Reproductive System of Gastrotrichs. III. Genital Organs of Thaumastodermatinae Subfam. n. and Diplodasyinae Subfam. n. with Discussion of Reproduction in Macrodasyida." Zool. Scr. F: 93-114.
- '1978c. "A Review of Metamorphosis of Turbellarian Larvae." In, <u>Settlement and Metamorphosis of Invertebrate Larvae</u>, Chia, F. S. and M. E. Rice, eds. Elsevier Holland.
- \*E. W. Hogue 1978. "Gastrotricha." In, An Annotated Checklist of the Biota of the Coastal Zone of South Carolina. R. Gingmark, ed. U. So. Carolina Dr., Columbia, SC pp. 98-99.
- 'Rieger, R. M. and E. E. Ruppert. 1978. Resin Embedments of Quantitative Meiofauna Samples for Ecological and Structural Studies Description and Application." Mar. Biol. 46:223-235.

Sidney A. Gauthreaux Jr. (Prof) attended the 13th meeting of Bird Strike Committee Europe in Bern, Switzerland, June 1-4, and participated in the working groups on patterns of bird movements and radar surveillance of bird migration. The Committee is composed of representatives from the European countries, Canada, and the United States and deals with many aspects of the bird/aircraft collision problem in civilian and military aviation. Following this meeting, Prof. Gauthreaux attended the 17th International Ornithological Congress in West Berlin, Germany, where he presented a paper, "The Influence of Global Climatological Factors on the Evolution of Bird

Migratory Pathways," as part of a symposium he organized with Dr. Gerhardt Zink of West Germany on "Patterns of Bird Migration."

Prof. Gauthreaux recently published a paper, "The Ecological Significance of Behavioral Dominance" in Volume 3 of Perspectives in Ethology.

Prof. Gauthreaux was recently elected member-at-large in the Animal Behavior Society and will serve on the Executive Committee of that organization for three years. In addition, he was named as public responsibilities officer for the Society at its annual meeting in Seattle, WA, June 19-23.

Prof. Gauthreaux was elected to the Council of the Wilson Ornithological Society at its annual meeing in West Virginia.

# MINUTES OF THE FACULTY SENATE MEETING, JULY 18, 1978

### 1. Call to Order

In the absence of President Steirer, the meeting was called to order by Vice President Dickey at 3:35 p.m. Vice President Dickey announced that President Steirer's mother-in-law had passed away recently, and that he has sent a sympathy card in the name of the Senate.

### 2. Approval of Minutes

The minutes of the June meeting were approved after three minor corrections.

### 3. Committee Reports

a. Admissions and Scholarship Committee - Senator Edie, chairman, reported as follow

The Admissions and Scholarship Committee met at 10:30 a.m. on Monday, July 10. The faculty questionnaire on final exam policy was finalized and will be distributed during the next week. Committee members are also contacting individual department heads to obtain statements defining the major courses in various

programs.

It was noted that starting with the spring 1980 graduation, students will have to obtain a 3.4 GPR for graduation with honor, a 3.7 GPR for graduation with high honor and a 3.9 GPR for graduation with highest honor.

The Admissions and Scholarship Committee has agreed to monitor the academic impact of the implementation of Section 504 of the Rehabilitation Act of 1973. Should any faculty have comments or problems created by the implementation of this program, please encourage them to contact a committee member.

Professor Corrine Sawyer is invited to the next admissions and scholarship committee to discuss Clemson's honors program. The next committee meeting will be August 1 at 3:30 p.m. in the library class room.

b. Policy Committee: Senator West, chairman, reported as follows: The policy committee recommends approval of the Revision of The Constitution of the Faculty of Clemson University as circulated by T. McInnis. The committee recognizes that a meeting with Dean Hurst prior to the submission of this revision of the Faculty Senate is needed, and recommends that this meeting be scheduled as soon as possible.

The policy committee also reviewed a proposed resolution dealing with the faculty evaluation procedures at the July 6 meeting. It is the committee recommendation that the resolution be accepted, but that it may be best addressed through your discussion of the problem with Dean Hurst prior to Senate action.

The policy committee chairman is collecting supporting information relative to item #6 of your June President's Report (FS-78-2-2) and will circulate to the policy committee for study prior to an August 1 meeting.

At this time a discussion ensued on the definition of a quorum at the general faculty meetings. Senator Burt announced that he was introducing a Constitutional Amendment, Bylaws, Article 1, Section 2. Quorum, signed by five faculty members (See Attachment A).

- c. Research Committee Senator Fennell, chairman, had no report.
- d. Welfare Committee Senator Burt, chairman, reported that the Welfare Committee has had two meetings. Faculty salary-compensation and the rejected FS-78-4-3 were topics of discussion.

A discussion ensued on FS-78-4-2 concerning nine-month faculty being able to obtain Group Life Insurance coverage based on their salary converted to a 12-month equivalent. It was the consensus of the Senate that the ninemonth faculty should be polled to determine if they wish to have this additional coverage. It was pointed out that a majority vote in favor would mean that all who are participating would have to take the coverage based on 12/9 of their salary. They would still be eligible for the low option and the one-half of 12/9 salary option. It also was pointed out that this was a requirement of the insurance company, because of the possibility of adverse selection if it were on a strict voluntary basis. Secretary Adkins was asked to convey the Senate's feelings to Ron Herrin. (NOTE: Secretary Adkins reports that the poll will be conducted after August 15 when nine-month faculty return to the campus.)

- e. Ad Hoc Committees no reports.
- f. <u>University Councils and Committees</u> no reports.
- 4. President's Report
  - 1. The Screening Committee is now complete.

Board of Trustees W. Gordon McCabe,
Chairman
D. Leslie Tindal,
Vice-Chairman
Paul W. McAlister,
ex officio

Faculty Hugh H. Macauley

William F. Steirer, Jr.

Students

Michael M. Ozburn T. Todd Lankford

Staff

Melvin E. Barnette Melanie Willingham

Alumni

Dave T. Moorhead

University Foundation George H. Aull

The actual screening of candidates will begin in September. Meetings to determine procedures will be held in August.

- 2. The Ad Hoc Committee on Athletics has been appointed with your approval. Senator Hester will serve as chairman. Members will be Senators Thompson and West and non-senators Steve Melsheimer and Rich Saunders.
- 3. FS 78-4-3 concerning summer employment for nine-month faculty has been rejected by Dean Hurst. His reasons are:
- a. that the pay scale is now an equitable one;
- b. that formal contractual obligations would actually work to the disadvantage of faculty members;
- c. that there seems to be no way to make a leave policy for summer employment both practical and equitable;
- d. that many of the items are already in force.
- 4. The faculty members of 25 departments have described the qualities they are looking for in the new president of Clemson University. I have thus reached approximately half of the departments. I am looking forward to listening to the other half.
- 5. I will be away July 24th through July 29th and August 1st through 13th. Contact Vice-President Dickey if you need the Faculty Senate to be informed or become involved.

The following motion concerning Item 3 was made by Senator Baron: It is requested that President Steirer report in

more detail why FS-78-4-3 was rejected. The motion received a second and was passed unanimously.

- 5. Old Business none
- 6. New Business -
- a. FS-78-7-1 Resolution on Faculty Evaluation Process was postponed.
- b. Other New Business

Senator Worm moved that the Presidential Screening Committee members be invited to meet with the faculty senators for the purpose of discussing their view and the faculty's interests concerning the next President of Clemson University. The motion received a second and was passed unanimously.

Senator Worm moved that the Senate ask President Steirer to prepare and submit to the Senate a summary of his findings on the concerns of the faculty towards the next President of Clemson University. The motion recieved a second and was passed unanimously.

### 7. Adjournment

The meeting adjourned at 4:05 p.m.

Respectfully submitted,

T. R. Adkins, Jr. Secretary

Members absent:

- C. E. Hood (V. Carmack, substituting)
- D. B. Smith
- J. C. Hester (S. S. Melsheimer, substitut:
- L. D. Reamer (G. E. Sabin, substituting)
- E. A. Merrell
- W. C. Whitten
- H. B. Bryant (B. N. Skardon, substituting
- W. F. Steirer
- E. M. Coulter
- O. S. Hipps
- J. E. Schindler (J. B. Waide, substitutin)
- D. S. Snipes

### ATTACHMENT A

Bylaws

Article 1, Section 2. Quorum

Replace Section 2. "A Quorum for any meeting of the faculty shall be that

number of members deemed necessary by the presiding officer to transact any business."

By Section 2. Quorum. A quorum for any meeting of the faculty shall be one more than fifty per cent of the members of the faculty.

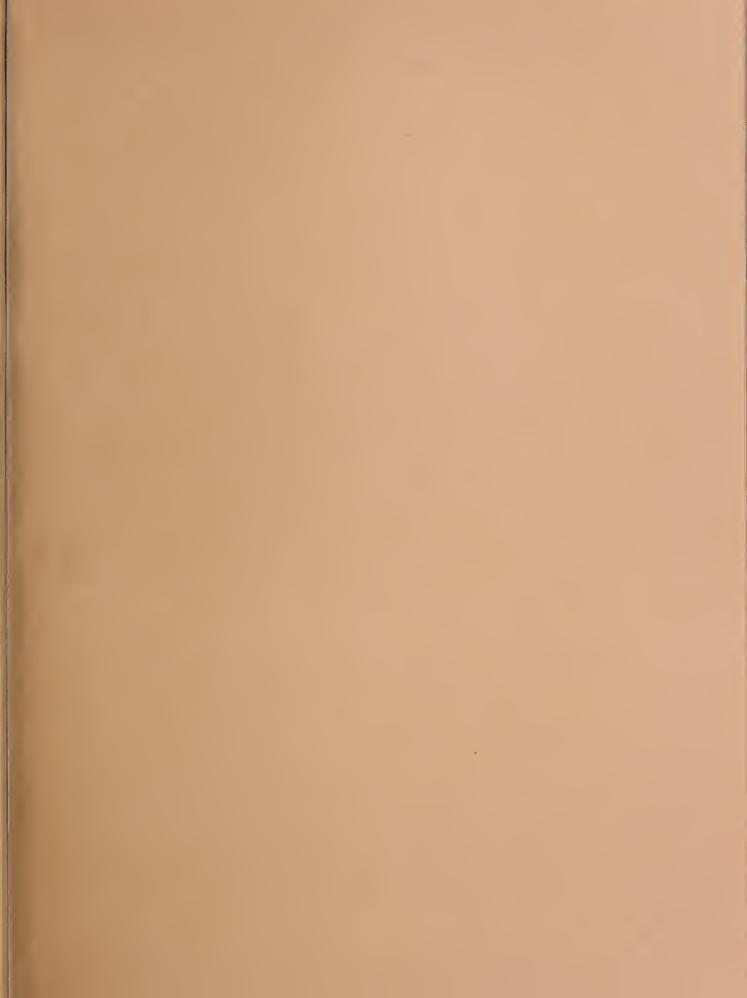
### Calendar of Campus Events

- 15-16 -- Live Entertainment in Edgar's. Sponsored by University Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
- 15-10/1 -- Art Exhibition: "National Sculpture 1978." Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
  - 16 -- Football: The Citadel, here, 1 p.m.
  - 16 -- Workshop: "Nursing Care of the Aged" by Veronica Rempusheski, R.N., M.S., Instructor, Clemson University College of Nursing. Sponsored by College of Nursing, Continuing Education. Enrollment limited to licensed practical nurses, preregistration required. Call 656-3079 for more information.
  - 17-30 -- Art Exhibition: "Historic Ft. Rutledge" by Allison Hancock. Sponsored by University Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
    - 18 -- Spanish Film (tentative). Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
  - 18-19 -- Seminar: "Effective Performance Appraisal and Review." Emphasizes the place of the performance review in the regular personnel and management process. Sponsored by Office of Professional Development, call 656-2200 for more information.
  - 19,21, -- Seminar: "SPEAKEASY" Parts I-IV. Sponsored by Academic Computing Support 26,28 of the Computer Center, M-105 Martin Hall, 3:30 p.m. (19) Part I, (21) Part II, (26) Part III, (28) Part IV. Open to all interested persons, no charge. For more information, call 656-3466.
    - 21 -- Lecture: "Reality Shock Make It Work for You" by Dr. Marlene Kramer, Professor of Nursing, University of California San Francisco. Sponsored by University Fine Arts Committee and presented by College of Nursing, Daniel Hall Auditorium, 3-4:30 p.m. Reception immediately following in Room 100, College of Nursing Building. Open to the public, no admission charge.
    - 22-23 -- Live Entertainment in Edgar's. Sponsored by University Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
      - 23 -- Trip to Georgia Football Game at Athens. Sponsored by University Union.

### CALENDAR OF CAMPUS EVENTS (Cont.)

Details and sign up at Union Information Desk.

- 24 -- Soccer: Belmont Abbey, here, 2 p.m.
- 25-12/4 -- First Semester Fraternity Open Rush.
  - 25 -- Seminar: "Effective Time Management by the Secretary." Provides proven techniques to improve effectiveness and productivity. Sponsored by Office of Professional Development, call 656-2200 for more information.
  - 26 -- Seminar: "Effective Time Management for Today's Secretary" (Sec. II). For secretaries who have already had the introductory time management course. Sponsored by Office of Professional Development, call 656-2200 for more information.
  - 27 -- Seminar: "Effective Time Management by the Executive." Discusses dividing activities into categories, organizing the day for top productivity, using assistants' time more effectively, and forming a time-conscious team. Sponsored by Office of Professional Development, call 656-2200 for more information.
  - 27 -- Workshop: "Human Relations and Communication for Office Personnel."
    Opportunity for staff members to enhance and/or modify their behaviors
    in the direction of better communication, mutual respect, and an increased
    awareness of consumer problems. Sponsored by Counseling Center, 200
    Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.
  - 29 -- Live Entertainment in Edgar's: "The Comedy Store." Three comedians from California's famous "Comedy Store." Sponsored by University Union, Edgar's, 9 p.m. Proof of age and University I.D. required, \$1 admission charge.
  - 30 -- Football: Villanova (IPTAY Day), here, 1 p.m.
  - 30 -- Live Entertainment in Edgar's. Sponsored by University Union, Edgar's, 9 p.m. Proof of age and University I. D. required, 50¢ admission charge.



### PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

Vol. 18 No. 4

October 1, 1978



### PHYSICAL PLANT DIRECTOR NAMED

Walter D. Stone Jr. of Travelers Rest has been named director of the Clemson University Physical Plant Division effective Oct. 16.

Stone has been director of engineering at Greenville General Hospital for the past year. Prior to that position he was director of the physical plant at Union College, Schenectady, NY, for three years.

His Clemson appointment was announced Sept. 15 by Melvin E. Barnette, vice president for business and finance. He said Stone was chosen from a field of 169 applicants.

Stone, a 48-year-old native of LaGrange, GA, has a bachelor's degree in civil engineering from The Citadel (1952), and a master's degree in mechanical engineering from Texas A&M University (1966).

Prior to his civilian work experience of recent years, Stone served 20 years as a commissioned officer in the Army Corps of Engineers, achieving the rank of lieutenant colonel. His assignments included two years as director of facility engineering at Fort Myer, VA, a year in Vietnam as deputy district engineer in the southern engineer district and one year as senior assistant professor of military science at Pennsylvania State University.

At Clemson, Stone will direct the total physical plant operation, which employs about 470 persons and has an annual budget approaching \$10 million.

### LONGEVITY SALARY INCREASE PROGRAM NOW IN EFFECT

Under a Longevity Salary Increase Program approved this year by the S.C. General Assembly, some Clemson employees who have missed out on two consecutive merit raises because they're at the top of their pay grades will begin taking home bigger paychecks.

According to Barnee Price of the Clemson Personnel Division, eligible employees whose annual review dates fall on or after July 1, 1978, are affected by the program.

"The effective date of implementation for the first longevity increase will start with the pay period beginning August 18, 1978, but no increase will be made retroactively back to July 1," Price says. "The Personnel Division will determine who is eligible and we'll inform the affected employees through normal channels when the monthly performance review printouts are distributed to the departments."

Employees are eligible for the new benefit:

- --If their positions are classified under the state classification and compensation plan.
- --If their salary is at least at the maximum of their salary grade.
- --If their salary has not been increased during the previous 24 months for any reason other than across-the-board cost of living increases.

The Personnel Office emphasizes that employees are not eligible if during the previous two years they have gotten a salary increase for merit, grade reallocation, reclassification, promotion or special salary approval.

Ray Thompson, director of personnel at the University, says: "We are delighted to announce the details of this program as it applies to Clemson, and we're certainly most grateful to the members of the General Assembly for devising this method of rewarding the dedication and hard work of many Clemson and other state employees who are no longer able to benefit from the merit pay system."

Under state regulations the five percent increase will be based on the employee's present salary, and the employee must have been in continuous state service for at least two years. Under current provisions an employee may receive only four longevity increases during his time of state service.

The new salary adjustment program also contains formulas for determining pay rates if a "longevity" employee is promoted, reclassified, demoted or receives a grade reallocation.

Details about the entire Longevity Salary Increase Program have been prepared for insertion into each department's University Personnel Manual. Questions about the new policy and procedures may also be directed to Barnee Price (telephone extension 2426) in the Personnel Office.

### LEAVE POLICIES CHANGED BY STATE

Clemson is now operating under new leave policies related to maternity and to death in an employee's immediate family. The policies, which were effective beginning July 1, 1978, and which apply to all state agencies in South Carolina, were set by the State Budget and Control Board.

If there is a death in the immediate family, an employee may now request up to two days of administrative leave with pay. Previously, annual leave had to be taken. Immediate family is defined as "the spouse, grandparents, parents, brothers, sisters, children and

grandchildren of either the employee or
the spouse."

The key provisions of the new policy for leave for pregnancy and maternity are:

--The date when sick leave for pregnancy will begin shall be at the request of the employee based on the advice of a physician. Without exception the date will be determined "on the basis of professional medical opinion that the employee is physically incapable of performing normal duties or that continuing to perform normal duties would be hazardous to the health of the employee."

--For any extended period of disability resulting from maternity, an employee may apply for leave without pay for not longer than 180 days, including any sick leave the employee takes. The employee must submit a written request, along with a physician's certificate or other documentation describing and giving the anticipated dates of the disability. Those dates can be changed by the physician, but the University may require additional documentation from the physician or medical opinion from other physicians.

Ray L. Thompson, personnel director at Clemson, said: "The spirit and intent in administering this new state policy will allow employees as much time as possible without jeopardizing the accomplishment of normal duties of their positions."

Thompson pointed out additional guidelines for the new policies:

--Generally, an employee must use up all sick leave before leave without pay will be approved for maternity-related disability. Exceptions must be requested in writing in advance and will require administration approval. The employee may choose to use annual leave before going on leave without pay, provided the arrangement is approved by the supervisor.

--If leave for maternity is granted, an employee will be reinstated to the same position or one of comparable grade for which the employee is qualified. --"Other acceptable documentation" than a physician's certificate for sick leave during pregnancy or for maternity will be considered only upon written request through regular administration channels.

"The implementation of these policy changes will undoubtedly raise some questions, and we want to assist all departments in ironing out any problems that crop up," Thompson said. "Please get in touch with Dick Simmons in the Personnel Office (telephone extension 2426) for any help you need in establishing these leave periods."

### STENDER PROFESSOR NAMED

The first Herbert R. Stender Professor of Agricultural Sciences has been named at Clemson. He is Charles V. Morr, a food scientist who comes to Clemson from Texas Tech University where he was professor and head of the Department of Food Nutrition and Food Technology.

The Stender endowed professorship was established last year with a \$102,000 gift from Mrs. Elizabeth Stender Fears and her husband, Donald G. Fears of Charleston, to honor Mrs. Fears' father.

Stender, a Charleston native, was a 1914 Clemson graduate who founded Carolina Shipping Co. in 1927 and served as its chairman. He was also a chairman of the Charleston Commission of Public Works.

The gift from Mr. and Mrs. Fears was invested to provide an annual income to supplement the salary of a distinguished professor to teach and do research in food science.

Morr, whose research interest is food proteins and nutrition, holds three degrees from Ohio State University. He earned his Ph.D. degree there in 1959 and has also taught at the University of Minnesota and served as director of protein research for the Ralston Purina Co.

He is a member of the editorial boards of the <u>Journal of Food Science</u> and the <u>Journal of Dairy Science</u>. He will travel to Amsterdam next month to present an invited paper at an international meeting on vegetable food proteins.

In addition to teaching two courses this semester, Morr is outfitting a laboratory to continue his research into soybean and other vegetable proteins.

He says he came to Clemson because he enjoys working directly with students in classroom and research situations more than the administrative duties he had as a department head at Texas Tech.

### FRESHMAN CLASS BIGGER AND BRIGHTER

Enrollment figures released Sept. 21 by the University show this year's freshman class is the biggest and brightest in the school's history.

A record 2,020 new freshmen are enrolled at Clemson this fall, bringing with them an average Scholastic Aptitude Test score of 1000, the highest of any state-supported school in South Carolina.

Admissions director Richard Mattox called the class "the brightest and best-prepared in the history of Clemson University."

Forty percent of the freshmen ranked in the top 10 percent of their high school classes, and 95 percent placed in the top half.

About 330 freshmen, more than 15 percent of the entire class, earned 1,543 hours of college credit through the national Advanced Placement (AP) Program sponsored by College Board. Another 500 have advanced standing through departmental exams given at Clemson, high scores on SAT achievement tests, and college courses taken before a student has actually enrolled.

Clemson freshmen continued to widen the gap between their SAT scores and the national norm. In 1974 the difference was 51 points. This year the class scored 103 points better than the national

SAT average of 897.

They also topped the South Carolina average of 787 by more than 200 points, Mattox said. "These SAT scores, class rank statistics and the fact that 15 percent of the freshmen participated in the College Board AP program, indicate clearly that Clemson is attracting many of the very top high school seniors in South Carolina."

At a time when freshmen enrollments and SAT scores are dropping elsewhere around the country, Mattox said the rise in both at Clemson is significant and the trend is expected to continue.

Clemson President Robert C. Edwards reported to the school's Board of Trustees at its fall meeting that the University has already received about 4,000 preliminary applications for admission in fall 1979.

More than 440 high school seniors have already been sent letters of conditional acceptance and another 1,160 have been urged on the basis of their scores to complete the application process.

Edwards said these 1,600 students have average SAT scores of almost 1100. "There is no question about the quality of students that will be coming to Clemson next year," he added.

The enrollment statistics recently released by Clemson also confirmed several other trends at the University.

Clemson's residence halls are filled to overflowing for the fifth straight year. More than 230 male students started out the semester in temporary housing and another 463 students are on a waiting list for dormitory space.

Once again the business-related and engineering curriculums enrolled the largest number of students -- almost 2,000 each -- and led the way in total numbers with dramatic increases in the percentage of women students.

Enrollment of female students has increased 1,180 percent in the College of Engineering and 763 percent in Industrial Management and Textile Science over the past six years.

One of the fastest growing fields of study at Clemson is agriculture, however. Enrollment in the College of Agricultural Sciences has gone up 89 percent since fall 1972.

Clemson's actual on-campus student population this fall is 10,471. An additional 1,007 students are enrolled in a variety of special graduate institutes off campus and in the Clemson-Furman University Master of Business Administration Degree program.

Undergraduate enrollment is a record 8,925 -- 62 percent men and 38 percent women. Graduate students number 1,546.

The College of Engineering, with 1,964 undergraduate students, is the largest academic unit on campus, followed by Industrial Management and Textile Science with 1,933, Sciences with 1,021, Education with 933, Liberal Arts with 825, Agricultural Sciences with 804, Forest and Recreation Resources with 569, Nursing with 463 and Architecture with 349.

### DEAD TREES TO BE CUT

The removal of several dead or dying trees on campus has been authorized by the Administration Cabinet.

Near the center of campus an elm at the Outdoor Theater and a diseased willow near the library reflecting pool will be removed.

Two large oaks behind Sikes Hall which were struck by lightning have already been felled.

The Physical Plant will also remove a dead pine on the Clemson House hill and a large oak at the president's home.

The Cabinet action came after specialists indicated none of the trees could be

saved, in keeping with the University's policy of maintaining the natural environment of the campus as much as is reasonable and possible.

### RHODES SCHOLARSHIP APPLICATIONS AVAILABLE

Any Clemson student, man or woman, is eligible to apply for a Rhodes Scholarship, tenable at the University of Oxford, provided certain conditions are met. These conditions are that the applicant must: (1) Be a citizen of the United States and unmarried. A Rhodes Scholarship is forfeited by marriage after election or during a Scholar's first year of residence. Subject to certain conditions, the Rhodes Trustees may continue the payment of the Scholarship if a Scholar marries after the first year at Oxford; (2) By the 1st of October of the year of application have passed the eighteenth and not have passed the twenty-fourth birthday. (Scholars elected in December 1978 will enter Oxford in October 1979. Candidates will be eligible who were born on or after October 1, 1954, and before October 1, 1960.); (3) Have achieved academic standing sufficiently advanced to assure completion of a bachelor's degree before October 1979.

Applications should be made to the secretary of the appropriate State Committee as early as possible in October, and in no case should applications be sent later than October 31, 1978.

Information about Oxford University, Rhodes Scholarships, and application blanks can be secured from Dean Claud B. Green in the Office of Undergraduate Studies, E-102 Martin Hall. Dean Green is the institutional representative at Clemson University for the Rhodes Scholarships.

### FACULTY RESEARCH COMMITTEE GRANT APPLICATIONS BEING ACCEPTED

Proposals for Faculty Research Committee

grants should be in the Office of University Research (107 E-Martin Hall) not later than November 1, 1978. Application forms may be secured in the Office of University Research. Only proposals using the Faculty Research Committee application form will be considered by the committee.

The committee makes awards to new faculty members initiating research, to faculty members initiating research in a new area, and to faculty members in areas where other sources of support are inadequate or nonexistent.

### AGRICULTURAL ENGINEERING

Darrell L. Roberts (Assoc Prof) was an invited speaker at the South Carolina Occupational Safety Conference held in Columbia Sept. 13-14. Prof. Roberts spoke on "The Agricultural Safety System."

Dan Wolf (Vstg Prof) has joined the Agricultural Engineering Department for one year. He will be working with Thomas H. Garner (Prof) on an evaluation of tillage energy conservation interactions in row crop production. Prof. Wolf is on leave from Technion-Israel Institute of Technology in Haifa and is joned in Clemson by his wife, Mariam, and their four children.

### ARCHITECTURAL STUDIES

Richard Norman (Assoc Prof) was selected as a representative by the AIA Research Corporation for the Summer Seismic Institute for Architectural Faculty sponsored by the AIA Research Corporation under a grant from the National Science Foundation. This summer institute was held August 20-25 at Stanford University, Palo Alto, CA.

### AGRONOMY AND SOILS

J. H. Palmer (Assoc Prof) attended the American Soybean Association Annual Meeting in Chicago, IL, Aug. 13-15. Prof. Palmer was a panelist on the Soybean Digest's National Soybean Roundtable along with several research and extension personnel from other universities.

Prof. Palmer has received a \$2,000 grant from Monsanto Chemical Co. to evaluate the yield enhancement potential of several experimental plant growth regulators for soybeans.

#### BOTANY

Effective Aug. 15, 1978, R. P. Ashworth (Prof) has assumed the chairmanship of the Advisory Committee on Science Teaching. This committee supervises graduate students pursing a Master of Education degree with a major in natural sciences. Specified graduate courses in physics and astronomy, chemistry, geology, botany, microbiology and zoology are available for the completion of this program.

Robert E. Ballard (Asst Prof) and Robert W. Cruden (Univ of Iowa) published a paper, "C-Glycosylflavones and Xauthones in Leaves of Rigidella, Sessilanthera, and Fosteria," in Biochemical Systematics and Ecology Vol. 6, No. 2, 1978.

### CHEMISTRY

R. A. Abramovitch (Prof & Hd) attended the fall meeting (Sept. 12-14) of the American Chemical Society in Miami, FL. He chaired the Wednesday afternoon session of the Ylide Symposium and presented an invited lecture at the Thursday morning session. The topic of the lecture was "Pyridinium Aryl Sulfonylmethylides: Synthesis and Synthetic Utility."

### DAIRY SCIENCE

G. D. O'Dell (Prof) and F. E. Pardue (Prof) participated in the College Dairy Feed Conference Board Meeting Aug. 15-16 in Syracuse, NY.

B. F. Jenny (Assoc Prof) and Prof. O'Dell

have received a \$5,000 Grant-in-Aid from E. I. DuPont de Nemours and Co. in support of work to determine the effectiveness of methionine hydroxy analogue as a partial replacement for protein in dairy rations.

### **ENGLISH**

David Tillinghast (Asst Prof) spoke May 10 to the Anderson Writers' Guild on "Determining the Center of Balance in Free Verse Form" and read selections from his own poetry. He also served as judge for <a href="#fiesta">Fiesta</a> Magazine's annual poetry contest last spring.

The April 1978 issue of the South Carolina Review, edited by faculty in the Department of English, has been selected as one of the Oct. 1978 titles of the Small Press Book Club.

Louis Henry (Assoc Prof) catalogued the Robert Muldrow Cooper Library manuscript holdings for the second edition of American Literary Manuscripts: A Checklist of the Holdings in Academic, Historical, and Public Libraries, Museums, and Authors' Homes in the United States (Univ of Ga Press), edited by J. Albert Robbins and sponsored by the American Literature Section of the Modern Language Association. The Clemson library holds letters and manuscripts by 31 writers.

### HISTORY

Richard M. Golden (Asst Prof) reviewed William James Roosen, The Age of Louis XIV: The Rise of Modern Diplomacy, in The Historian XL (August, 1978), 743-44.

### HISTORY AND VISUAL STUDIES

Ireland Regnier (Assoc Prof) taught a three-week session of painting at Penland School and was visiting scholar for an additional three-week session this past summer.

### HOME ECONOMICS

Veronica Carmack (Assoc Prof) has been elected chairman of the newly organized SC Home Economics Roundtable. SCHER is composed of home economics leaders in education and business throughout the state. Virginia Greene (State Ldr Ext Home Econ) was elected vice-chairman.

### INTERDISCIPLINARY STUDIES

J. B. Park (Assoc Prof) has published a paper with S. O. Young (former grad stu), G. H. Kenner (Assoc Prof), R. R. Moore (Dentist, 123-bypass), B. R. Myers (Dentist, Rt. 93), and B. W. Sauer (Univ of Mississippi) entitled "Dental Implant Fixation by Electrically Mediated Process; 1. Interfacial Strength" in Biomaterials, Medical Devices and Artificial Organs, 6(2), 111-126 (1978). Prof. Park also participated in the Gordan Research Conference on Biomaterials, Proctor Academy, NH, July 17-21.

Prof. Park has received a second year grant (\$24,203) from the National Institutes of Health to study "Piezoelectric Implants for Bone Fixation."

On Aug. 22-23 A. F. von Recum (Prof) consulted with M. Chvapil at the University of Arizona, Tucson, on methods of improving percutaneous implant devices.

- G. H. Kenner (Assoc Prof) attended the Fifteenth Annual Meeting of the Mineralized Tissue Workers held at Sun Valley, ID, Aug. 7-11.
- F. W. Cooke (Prof and Hd) had a profitable sabbatical experience at Stanford University where he participated in their teaching and research programs as a visiting assistant professor of orthopedic surgery.

During Prof. Cooke's absence, D. D. Moyle (Assoc Prof) served as acting head of Interdisciplinary Studies.

### MATHEMATICAL SCIENCES

Renu Laskar (Prof) and Robert B. Allan (Grad Stu) published a paper, "On Domination and Independent Domination Numbers of a Graph," in <u>Discrete</u> Mathematics, 23 (1978) pages 73-76.

Robert E. Haymond (Prof) had an article, "A Theory for Discrete Simulation," accepted by the ACM-CSC organization for the Winter Simulation Conference, Dec. 1978.

### MANAGEMENT SCIENCE

James P. Jarvis (Asst Prof, Math Sci) and Mark A. McKnew (Asst Prof, IM) were contributors of an article, "Applying the Hypercube in Arlington, MA," which appeared in Police Deployment, edited by R. C. Larson (Lexington Books, 1978).

### PHYSICS AND ASTRONOMY

Beverly B. Bookmyer (Prof) and William C. Maddox (Grad Stu) have had "Photolectric Epoch of Minimum Light, V566 Ophiuchi" published in the I.A.U. Inform. Bull. on Variable Stars No. 1457, 1978.

John R. Ray (Prof) participated in "Sources of Gravitational Radiation: A Summer Workshop" July 24-Aug. 4 at the Battelle Seattle Research Center in Seattle, WA. The main purpose of the workshop was to obtain theoretical estimates of gravitational radiation from various sources. These estimates will be used by experimentalists in designing the next generation of gravitational wave antennas.

Philip B. Burt (Prof) published a paper, "Exact, Multiple Soliton Solutions of the Double Sine Gordon Equation," in <a href="Proc.Royal Soc. of London">Proc. Royal Soc. of London A359, 479-95 (1978)</a>.

Prof. Burt and M. Sebhatu (Former grad stu) published a paper, "On Two Nuclear Solitary Wave Exchange Potentials," in Acta Physica Polonica B9, 459-68 (1978). Prof. Burt and B. A. Taylor (Former Grad Stu) published a paper, "Exact, Multiple Soliton Solution for Polynomial Field Theories," in <u>Acta Physica Polonica</u> B 93, 35-41 (1978).

### PLANNING STUDIES

Aitken Clark (Assoc Prof and Hd)
participated in a seminar on Urban
Planning and acted as chairperson with
Graduate Planning Students and invited
speakers including Dr. Lisa Jardin,
Fellow of Jesus College, Cambridge.
This seminar was held July 14 at
Cambridge University, United Kingdom.

### SOCIOLOGY

Christine Hope (Asst Prof) has been elected vice president of the South Carolina Sociological Association for 1978-79.

Richard F. Larson (Prof and Hd) is coauthor with Lyman Ott (Merrell-National Laboratories) and William Mendenhall (Univ of Florida) of <u>Statistics</u>: <u>A</u> <u>Tool for the Social Sciences</u> (second edition) published by Duxbury Press.

Dallas Owens (Asst Prof) presented a paper, "Ridesharing Programs: Governmental Response to Urban Transportation Problems," at the Society for the Study of Social Problems held at San Francisco Sheraton Palace Sept. 2-4.

Christopher Sieverdes (Asst Prof) has been elected president of the South Carolina Sociological Association for 1978-79.

### ZOOLOGY

James E. Schindler (Assoc Prof) presented a paper, "The Biogeochemical Perspective in Southeastern Aquatic Ecology," at the Ecological Society of America's annual meetings held in Athens.

Jack B. Waide (Asst Prof) chaired a session on mathematical ecology and

modeling at the Ecological Society of America's annual meetings held in Athens; was co-author (along with R. L. Todd and B. L. Hains) of a paper presented by B. L. Hains (Grad Stu, Botany) entitled "A Direct Field Comparison of the Use of Tension and Zero-Tension Lysimeters in Terrestrial Nutrient Cycling Studies;" and presented a poster session along with Hains and Todd entitled "Elemental Dynamics in Throughfall, Litter Solution and Soil Solution of a Southern Appalachian Hardwood Forest."

Darrell G. Yardley (Asst Prof) presented a paper, "Biochemical Genetics of the Amylase Locus of  $\underline{D}$ . pseudoobscura," at the annual meetings for the Society for the Study of Evolution.

MINUTES OF THE FACULTY SENATE MEETING, AUGUST 22, 1978

### 1. Call to Order

The meeting was called to order by President Steirer at 3:36 p.m.

### 2. Approval of Minutes

The minutes of the July meeting were approved after a few minor corrections.

### 3. Committee Reports

a. Admissions and Scholarship

Committee - Senator Edie, chairman, reported
as follows:

The Admissions and Scholarship Committee met at 3:30 p.m. Tuesday, August 1. The faculty questionnaire on final exam policy has now been distributed. We would like all senators to urge their college faculty to fill out this short questionnaire and return it by Sept. 15. The results will be meaningful only if a large enough sample is obtained.

Professor Corrine Sawyer met with the committee and discussed the honors program. Clemson has about 200 students in the honors program and Dr. Sawyer is given 1/4 time to administer the program and the Scholarships and Awards Committee

(Wofford has a 1/2 time counselor and a full time secretary and U.S.C. has one 2/3 time faculty member with an 11-month contract, a full time administrative assistant and two work study students to administer their program to 300 to 350 students). At Clemson only the math department has a departmental honors counselor.

The honors students would like the University to establish an honors commons room for our honor students to meet. This would also be an excellent place for faculty to meet and exchange ideas with the honor students.

The committee also noted that the required GPR for graduation with honors or the requirements for senior division honors should be described in the graduation program.

Resolutions on these topics will be forthcoming from the committee.

Chairman Edie discussed future committee plans which involve workshops for undergraduate advisors, recruiting, and the admissions policy. It was suggested that the committee study why the admissions process is under the VP for Student Affairs rather than the VP for Instruction.

It was suggested that the Committee review the grading policy on self-paced instruction as compared with regular instruction. It was pointed out that a student can take a module over and over and when it is passed he gets an A.

b. <u>Policy Committee</u> - Senator West, chairman, reported as follows:

The revisions of "The Constitution of the Faculty" as prepared by the Faculty Senate Policy Committee are presented for review by the Faculty Senate. This document is planned as an agenda item for the Faculty Senate in September, 1978. Senators are urged to forward comments, questions, and suggestions concerning this document to W. West (3447) or T. McInnis (3452) prior to September 15, 1978.

Items under study:

The charge statement for the Affirmative Action Committee is being studied by a sub-committee chaired by Senator Fiste. Senators and Faculty with suggestions for action on this committee are urged to contact Senator Fiste.

The policy statement dealing with "Faculty Participation in the Selection of Academic Administrators" is being reviewed.

The "Section 504 Self Evaluation Steering Committee Report on Academic Adjustments" is being reviewed.

During the discussion on this report, Senator Baron pointed out that a selection committee is appointed with no input from the faculty, and he stated that this was not an appropriate procedure.

- c. Research Committee Senator Fennell, chairman, reported that the Committee met on August 17 and is continuing to study research support (how research funds are administered across the University), consulting, and tenure policies.
- d. Welfare Committee In the absence of Chairman Burt, Senator Lambert stated that there would be no report. A question on the poll concerning additional group life insurance option for nine-month faculty (FS-78-4-2) was answered by Secretary Adkins: The poll will be conducted by Mr. Ron Herrin's office as soon as information on eligible faculty can be generated by the computer. (Secretary's Note: A majority of the ninemonth faculty who have signed up for the insurance program must vote in the affirmative for the program to be approved.)

### e. Ad Hoc Committees

University Marshal Committee - Chairman Dickey reported that he has received nominations from colleges which have not supplied a University Marshal in the past, and that his committee will be meeting in the near future to make a recommendation.

### f. University Councils and Committees

Traffic and Parking Committee - President Steirer stated that the barricades will probably be erected again on Palmetto Blvd. The University now has permission to do with it what they want. It seems that Palmetto Blvd. was under state jurisdiction, and that the University did not have permission to put up barricades (the barricades were challenged in traffic court by a student motorcyclist).

Athletic Council - Vice-President Dickey attended the Athletic Council meeting Aug. 7, and his report appears as Item #8 under President's Report. Questions were raised on IPTAY-Faculty/Staff priority and on reallocation of seats for students. The Senate was referred to Item #8 point "d," which concerns committee to study ticket priorities.

Educational Council - Vice-President Dickey attended the meeting of the Educational Council and reported that the anticipated total enrollment is approximately 11,400 with approximately 10,500 on the main campus; there has been a change in the Presidential Screening Committee -- Because of illness W. Gordon McCabe, Jr. has resigned as chairman of the Committee (Secretary's Note: Mr. McCabe passed away August 26) and Mr. Thomas McTeer, Jr. will serve as chairman; the Committee wishes to dispell all rumors that there is a frontrunner for President; the 1979-80 budget is due Sept. 15; a policy on the new retirement age regulation is being developed by the administration (it will be based on evaluation of performance, and the deadline for the policy is Jan. 1).

### 4. President's Report

- 1. I thank Senators Grubb, Lambert, McDowell, and Schindler, Secretary Adkins and Vice-President Dickey for their invaluable aid with Faculty Orientation Aug. 17.
- 2. Because of illness W. Gordon McCabe, Jr. has resigned as chairman

- of the Presidential Screening Committee. Thomas McTeer, Jr. will serve as chairman.
- 3. The faculty consensus on presidential qualifications follows. The list includes the qualifications stipulated by the Board of Trustees along with my comments based on my understanding of faculty desires.

### Background

- (a) Be a recognized scholar or person with an academic background. (Unanimous agreement -- no sentiment whatsoever for anyone lacking such qualities)
- (b) Preferably hold an earned terminal degree. (An earned Ph.D. seems to be mandated)
- (c) Understand fully the teaching,
  research and public service functions of
  the University. (Yes!)
- (d) Understand the role of public-supported universities (Yes!)
- (e) Understand fully the unique role of a land-grant university. (More emphasis is placed on this by faculty in Agriculture and Forestry)
- (f) Be fully sensitive to the needs and desires of students. (The Faculty preferred to leave the expression of this to students)
- (g) Articulate well and expand on the University's problems, accomplishments and future goals. (This is a high priority)
- (h) Be able to educate all of the University's constituencies on the development of the institution. (High priority)
- (i) Be a well seasoned and effective administrator or executive in either the private or public sector. (Other qualifications seem more important)
- (j) Be able to set goals and move toward them with a firm pace. (Considered a primary part of the job)

- (k) Have astute political sense.
  (Faculty think each individual should
  have basic instincts for this, but not
  necessarily the experience)
- (1) Be able to provide a good evaluation of results. (Setting policy a primary responsibility for president)
- (m) Be an excellent planning leader.
  (Same as 1)

### Personal Qualifications

- (a) Ability to coordinate all academic activities of a large university.(Faculty would prefer coordination of academic affairs be responsibility of dean of the University)
- (b) Ability to gain full recognition from the faculty, students and trustees as an effective academic and administrative leader. (Important)
- (c) Ability to make persuasive presentations to the various governmental agencies, the Legislature and the numerous constituencies of the University.

  (Faculty feels that this can be learned)
- (d) Potential to make a significant contribution to the development of higher education in South Carolina. (What's good for Clemson is good for higher education in South Carolina)
- (e) Ability to attract and retain recognized scholars as members of the faculty. (Faculty doesn't see this as his/her function save in setting overall tone)
- (f) Capability of securing gifts and grants for the University that permit it to do those unique things that make for a great learning and research center. (Important)

So what do faculty members want? In order of priorities -- Faculty members want an individual with an earned Ph.D. with a teaching and research background. The next president should be a two-way communicator who as an administrator is secure enough to surround himself/

herself with strong people who are delegated enough authority to do their jobs well.

The next president should be able to educate the people of South Carolina about Clemson's public service as a land grant institution. He/she should exercise strong leadership in determining policy and establishing a positive public image.

The next president should have some administrative experience, but need have no experience in dealing with legislatures provided it is obvious that he/she is able and willing to learn what is needed to function in this area. Finally he/she should be a cautious innovator who does not tinker with the academic excellence that the faculty feels already exists.

The faculty does not want an individual who will expand the University's enrollment or even physical plant so much as one who will expand its horizons.

- 4. Ed Merrell has resigned from the faculty. He was the Senate's representative on the Site and Landscape Development Committee. I need a volunteer.
- 5. I also need a volunteer for the appointment to the University Union Board. Butch Trent has asked me several times to make that appointment, but I can find no takers. Please volunteer.
- 6. Vice-President Dickey and I will be visiting the Experiment Stations Aug. 29 and 30.
- 7. I have attempted to contact the president of the University of South Carolina faculty without sucess. I will continue trying. No other faculty organizations exist at public institutions.
- 8. Vice-President Dickey attended the Athletic Council Aug. 7. Matters of interest to the faculty are:
- (a) Bowl ticket priorities have been established.
  - 1. Official party comes first.

- 2. Total season ticket sales is determined by adding IPTAY, Faculty/ Staff, and average student attendance without non-student dates.
- 3. Each group will receive the number of tickets equal to the percentage of total regular season tickets sold in that group.
- 4. A. Faculty/Staff. 50% will go to IPTAY-faculty/staff, distributed according to current IPTAY priority list. 2 or more season tickets equal 2 bowl tickets. 1 season ticket equals 1 bowl ticket. Tickets remaining go to B. IPTAY members may go to IPTAY pool for more tickets.
- B. Faculty/Staff. Non-IPTAY faculty/staff will have access to 50% plus remainder from A for season ticket holders. Number of tickets to be purchased same as A. If insufficient tickets available, availability will be determined by lottery.
- (b) Faculty priority for season tickets extended to Aug. 1.
- (c) Voted to ban umbrellas and umbrella hats in stadium.
- (d) Appointed a committee to study ticket priorities in response to Faculty Senate motion. The chairman will be Billy Edge. Members will be Todd Lankford, Bobby Joe Skelton, Ray Noblet, Jerry Reel, and Bill McLellan.
- (e) Athletic Department budget in black with income of \$3.5 million. IPTAY raised \$1,507,125.22 in 1977-78. Every sport is funded in scholarships to full level allowed by NCAA and AIAW. HEW has not contacted Clemson about Title IX, but it is believed Clemson is in compliance. Any problems will be resolved as quickly as they become known.

A discussion followed. Senator Young disagreed with the way in which Item #3 "f" under Background was presented. The change was made to reflect his criticism. President Steirer reported that the Presidential Screening

Committee declined the invitation to meet with the Faculty Senate. It is the wish of the Committee to continue to isolate the screening procedures from all outside pressure. It was move and seconded that the material on the Presidential Screening Committee be accepted as information and that the Senate move on to the next item of business. The motion was passed unanimously.

### 5. Old Business

- a. The floor was declared open for discussion on the Amendment to the Bylaws printed in Attachment A, page 5 of the July 18 minutes which would change Article 1, Section 2, Quorum. To get the matter on the floor, Senator Snipes moved acceptance of the Amendment, and Senator Hester provided the second. The motion to accept failed by a 30 to 1 vote.
- b. Senator Baron referred to page 3 of the July 18 minutes and asked why FS-78-4-3 was rejected. President Steirer stated that Dean Hurst will present fuller documentation of his case at a later date.

### 6. New Business

There was none.

### 7. Adjournment

The meeting adjourned at 4:57 p.m.

Respectfully submitted,

T. R. Adkins, Jr. Secretary

Members absent:

D. B. Smith (Agriculture)

J. J. Komo (Engineering)

E. A. Merrell (Forest and Recreation Resources) Resigned

P. B. Burt (Sciences)

### **ADDENDUM**

See stories on Board of Trustees' fall meeting and 1978-79 budget in Addendum.

# COMPETITION OPENS FOR BIOMEDICAL RESEARCH SUPPORT GRANT FUNDS

An institution with a minimum of \$200,000 in Public Health Service (PHS) sponsored research grants and awards is eligible to make application to the National Institutes of Health (NIH) for a Biomedical Research Support Grant (BRSG). The University has qualified for, applied for, and received a BRSG in the amount of \$21,147. The NIH requires that an ad hoc committee of scientific and administrative personnel, qualified by training and experience, must be established to advise on the intra-university allocation of BRSG funds. This Committee, recommended by appropriate college deans and appointed by the Vice-President for Academic Affairs, includes Drs. J. D. Hatcher, R. W. Henningson (chairman), D. M. Henricks, L. I. Park, G. L. Powell, G. A. Tanner, and J. B. Park. The Committee is responsible for deciding how BRSG funds will be utilized and establishing a mechanism for such use.

The Committee, consistent with Clemson University health related research interests and NIH policies, has decided that the BRSG funds will be utilized to support pilot biomedical or behavioral research by young investigators. The following mechanism has been established to allocate the BRSG funds within the University.

DEFINITIONS: A young investigator is one generally not more than five years past the Ph.D. Pilot research explores new ideas to test their validity and to provide preliminary findings necessary to support research project grant applications.

APPLICATIONS: Applications for support

of biomedical or behavioral, health related, pilot research projects will be accepted from young investigators; from faculty affiliating with Clemson University subsequent to Aug. 15, 1977; and from mature investigators reorienting the direction of their research. Applications, utilizing NIH 398 (available from the Office of University Research) forms and format, should be in the Office of University Research prior to Nov. 1, 1978. Interdisciplinary projects are encouraged. Proposals should be completed to facilitate peer review. Budgets should contain only items requested from BRSG funds and each item should be well justified. It is tacitly understood that a subsequent proposal, seeking sponsored support and based on the proposed or similar work, will be forthcoming if funds are allocated.

PEER REVIEW: The BRSG Committee will expedite competitive peer review of all proposals received prior to Nov. 1, 1978. Peer review will include conformance to application requirements, quality of the research proposed, and an evaluation of the potential of the proposed project for subsequent sponsored support.

ALLOCATION OF FUNDS: The BRSG funds will be awarded, not later than Dec. 10, 1978, on the basis of the competitive peer review. The BRSG Committee anticipates making five or six awards from the \$21,000 available to the Committee. Anonymous peer review comments will be available to the investigators of unfunded applications.

Questions concerning the BRSG, the application process, and/or the eligibility to apply for BRSG funds should be directed to the Office of University Research, (ext. 2375).

### Calendar of Campus Events

1 -- Soccer: N.C. State, here, 2 p.m.

1-13 -- Art Exhibition: Lynn Rhodes, Watercolor. Sponsored by University Union,

#### CALENDAR OF CAMPUS EVENTS (cont.)

- Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
- 2 -- German Film: "M." Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 2-7 -- Musical: Godspell. Presented by the Clemson Players, Daniel Hall Auditorium, 8 p.m. except 3:30 p.m. matinee on Thursday. Open to the public, no admission charge.
- 3,5,9 -- Seminar: "Introductions to Text Formatters" Parts I-III. Sponsored by Academic Computing Support of the Computer Center, M-105 Martin Hall, 3:30 p.m. Open to the public, no charge. For more information, call 656-3466. (3) Part I, (5) Part II, (9) Part III.
  - 4 -- English Hour Reading: "A Memorial Reading from the Work of the Late Professor Thomas E. Douglass." Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
  - 4-5 -- Live Entertainment in Edgar's: Oconee. Sponsored by University Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
    - 4 -- Seminar: "Women in Management." Deals with business skills and ways to develop those skills. Sponsored by Professional Development Office, call 656-2200 for more information.
    - 5 -- Seminar: "Assertiveness Training." Focuses on eliminating non-productive game playing. Sponsored by Professional Development Office, call 656-2200 for more information.
    - 5 -- Seminar: "Distinguished Chemical Industry Business Seminar" by Harry B. Bartley Jr., President of Celanese Chemical Co. Sponsored by Chemistry and Geology Department, 313 Brackett Hall, 7:30 p.m. Open to the public, no admission charge.
    - 6 -- Soccer: Clemson Invitational, here, 2 p.m. Cleveland State vs. S. Florida, Quincy vs. Clemson.
    - 6 -- Seminar: "Powerful Speech." Devoted to practical aspects of developing speech communication skills. Sponsored by Professional Development Office, call 656-2200 for more information.
  - 6-8 -- Tennis: Fourth Annual Clemson Fall Tennis Classic, here, all day. Clemson, South Carolina, Wisconsin, Wake Forest and Furman.
    - 7 -- Football: Virginia Tech (Homecoming), here, 1 p.m.
    - 7 -- Bob Hope Show. Sponsored by University Union, Littlejohn Coliseum, 8 p.m. Open to the public, tickets available at Union ticket office, \$10 reserved seats, \$8 general admission. Also appearing Furman University Troubadours.

## CALENDAR OF CAMPUS EVENTS (cont.)

- 7-27 -- Art Exhibition: William Halsey. Sculptures and paintings including portrait of President Robert C. Edwards. Sponsored by Alumni Association, Alumni Center, 8 a.m.-4:30 p.m. weekdays, 9 a.m.-noon Saturdays. Open to the public, no admission charge.
  - 8 -- Soccer: Clemson Invitational, here, 1 p.m. Quincy vs. S. Florida, Cleveland State vs. Clemson.
  - 9 -- Lecture: "Basic Chemical Materials Supply and Logistics" by Robert B. Johnson, President BCM Inc., Memphis, TN. Sponsored by Agronomy and Soils Department, A-203 P&AS Bldg., 9:05 a.m. Open to the public, no admission charge.
- 9-30 -- Art Exhibition: "Courthouse A Photographic Document." The 120 photographs in this exhibition represent a pictorial record of buildings which are unique expressions of American society and architecture at a time when the courthouse played a vital role in society. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
- 10,12 -- Seminar: "Introduction to Job Control Language and Catalogued Procedures" Parts I-IV. Sponsored by Academic Computing Support of Computer Center, M-105 Martin Hall, 3:30 p.m. Open to the public, no charge. For more information, call 656-3466. (10) Part I, (12) Part II.
  - 12 -- Lecture: "Secrets of the Supernatural" by Ed and Lorraine Warren. Sponsored by University Union, Tillman Hall Auditorium, 8 p.m. Open to students, faculty, staff and guests, 75¢ admission charge.
- 12-13 -- Seminar: "Letter and Report Writing." Topics include current trends in business writing, organizing ideas, being understood and drawing up reports. Sponsored by Professional Development Office, call 656-2200 for more information.
  - 13 -- Live Entertainment in Edgar's: Calliope. Sponsored by University Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
  - 14 -- Trip to Virginia Football Game. Sponsored by University Union, details and sign up at Union Information Desk.

#### PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

#### ADDENDUM

## to the Clemson University Newsletter

October 1, 1978

#### TRUSTEES HOLD FALL MEETING

A \$94.8 million budget, a \$1 million fund-raising campaign to benefit the entire University, and reports on some impressive statistics about the student body were highlights of actions by Clemson's Board of Trustees at its fall meeting Sept. 15.

Approval of the budget for fiscal year 1978-79 had been delayed because of late passage of the state appropriation bill. The budget includes some \$44 million for education and general programs and \$29.2 million for the several public service and consumer protection-type programs Clemson administers. (See budget story which follows.)

The fund-raising campaign, to be conducted by the Clemson University
Foundation, will establish a minimum \$1 million permanent endowment—The
Robert Cook Edwards Endowment for
Excellence in Science and Technology.
The endowment reflects the land—grant concept and honors President Edwards who will retire in June 1979 after more than two decades as the University's chief executive officer.

The endowment will support such programs as professorships, fellowships, research and public service programs and continuing education. All colleges of the University will be eligible for disbursements from the endowment under the broad guidelines set by the Clemson University Foundation directors and the trustees.

In a report from the board's student affairs committee, T. Kenneth Cribb, trustee from Spartanburg, noted that Clemson's entering freshman class has an average SAT score of 1000, 103 points higher than the national average and more than 200 points higher than the

South Carolina average. (See related story on page 3 of Newsletter.)

He also said almost half the entering class ranked in the top 10 percent of their high school class, compared to 27 percent in 1972, and about 800 entering freshman--40 percent of the total--qualified for some kind of advanced academic standing this year, including 330 who earned 1,543 credit hours under the national Advanced Placement Program.

Cribb called the statistics "a great testimonial...to the work that our folks are doing in attracting top talent to the University. That's also why a diploma from Clemson is worth more than diplomas from most other schools now, and it's also why we have several times the number of applications from students than we can handle."

In his president's report Edwards pointed out that Clemson's default rate on student loans as of June 30, 1977, was 3.6 percent, compared to 16.9 percent nationwide and 22.3 percent for South Carolina (38 institutions of higher education).

"Clemson's experience and Clemson's method of dealing with this problem have been used by HEW as a model," Edwards said, crediting better analysis of student financial need and better administration of loan programs as the reason the University's default rate is so low. "This is one of the best indicators again of the dedication of our students and their acceptance of responsibility, not only on campus, but after they leave the University," he said.

In other action the board:

--Paid tribute to the late W. Gordon McCabe Jr. of Greenville, a trustee since 1960 who died Aug. 26 after a long

illness. McCabe was a retired executive of J. P. Stevens and Company, Inc., and was the first non-New York resident to be named chairman of the Board of Managers of the New York Cotton Exchange. The trustees' resolution said: "We express our profound sense of loss that he will no longer serve with this board. We are grateful for the privilege that has been ours of working with him and of having the benefit of his wisdom and understanding."

--Rescinded, effective Jan. 1, 1979, the University policy of mandatory retire-ment\_at age 65 and directed the administration to prepare a new policy for consideration at its January meeting.

--Heard a report from trustee Paul Quattlebaum Jr. of Charleston, head of the board's development committee, that the Pooled Income Fund of the Clemson University Foundation had passed the half-million mark, a 500 percent increase in two years.

--Named the central dining-kitchen facility at the Clemson Outdoor Laboratory "The Kresge Lodge" in recognition of the support, amounting to \$100,000, provided by the Kresge Foundation toward completion of the facility.

--Learned from presidential screening committee chairman Thomas B. McTeer Jr., a trustee from Columbia, that some 260 nominations and applications for the presidency are currently on file.
McTeer said the committee, which will meet again Oct. 21, was "extremely pleased with the quality of the candidates."

--Named trustee D. Leslie Tindal of Pinewood chairman of the board's educational policy committee and vice chairman of the executive committee.

--Appointed O. J. Dickerson, head of the Plant Pathology and Physiology Department, to the position of State Plant Pathologist. (Five members of the Board of Trustees constitute the State Crop Pest Commission.)

--Ratified emergency regulations approved earlier by mail ballot to establish a \$3 fee for each blood test for equine infectious anemia ("swamp fever") conducted by the Livestock-Poultry Health diagnostic laboratory, and to establish regulations and penalties for implementing the new state fertilizer inspection law.

--Reaffirmed its policy authorizing the administration "to dismantle and/or dispose of buildings and structures that no longer represent sound investments," with the added proviso that structures of more than 4,000 square-feet must be referred to the board before such action is taken.

#### TRUSTEES APPROVE 78-79 BUDGET

Clemson University's Board of Trustees on Sept. 15 approved a \$94.8 million operating budget for fiscal year 1978-79 that was characterized as "still not back to where we were in spendable dollars in 1974-75."

The trustees also adjourned their fall meeting uncertain about whether student fees will have to be raised for 1979-80 as a result of a possible shortfall in state appropriations next year.

Action on the budget has been delayed because of the late passage of the state appropriation bill. The budget includes some \$44 million for Clemson's basic "education and general" programs—those comparable to the ones found at other institutions of higher education.

Also budgeted was some \$29.2 million for the several public service and consumer protection-type programs Clemson is charged by law with administering.

In a report from the board's budget and finance committee, trustee William Green DesChamps Jr. of Bishopville said that for the first time since 1974 the General Assembly had appropriated to Clemson more funds than were initially recommended by the State Budget and Control Board.

These increases enabled Clemson "to avoid a very disastrous situation which

October 1, 1978

would have necessitated large increases in student fees (this year) at a time when rates charged Clemson students are already among the highest in South Carolina and neighboring states,"

DesChamps said.

He pointed out Clemson's annual budget has suffered "effective reductions" during the period since 1974 because of minimal increases in state funds that "have not even kept pace with rates of inflation," two actual mandated budget reductions after fiscal years had already begun, and changes in state policy that now require state agencies to assume the direct costs of certain mandated increases in employee salaries and fringe benefits.

For fiscal year 1979-80 the State Budget and Control Board has directed a new format in budget preparation and made initial allocations at a level 5 percent below the funding levels for 1978-79.

"If these situations continue and the 'bottom line' amounts for state appropriations become the amounts appropriated by the General Assembly," DesChamps said, "student fees will have to be increased in substantial amounts for the academic year beginning the fall of 1979."

President Robert C. Edwards said that according to the state auditor's office, "The fiscal situation for 79-80 and beyond...is going to be extremely critical. Hopefully, general fund revenues will be greater than is currently estimated and hopefully if student fees have to be increased they won't have to be increased significantly, but at least for the first time in several years we're in a position to let students know before they have been accepted for 1979-80 that the cost for attending Clemson will conceivably be higher than it is now."

In addition to the education and general and public service budget items, the trustees also earmarked \$13.6 million for "auxiliary enterprises" such things as (dormitory, food, medical,

laundry services), which by law must be self-supporting and do not receive state funding; \$5.4 million for scholarships and other student financial aid; and about \$964,000 for grants and contracts.

While the budget is \$8.9 million higher than last year (\$7.6 million more in state funds), a \$5.5 million chunk of the increase will be eaten up by state-mandated employee pay increases and fringe benefits. Approximately \$500,000 will be required to handle increased enrollment demand, and \$1.3 million will be used to replace educational and research equipment that is outdated.

A total of 46 additional positions will be funded under the new budget--25 unclassified and 13 classified positions in the public service area and 8 faculty positions on campus--at a cost of about \$775,000.

Only about 54 percent of Clemson's annual income is derived from state appropriations. Federal funds account for about 9 percent, 10 percent comes from private gifts and grants, 8 percent from student fees, 15 percent from the University's auxiliary enterprises and 4 percent from miscellaneous sources.

Budget items for the University's public service and consumer-protection programs for 1978-79 include:

--\$14.9 million for the Cooperative Extension Service, which includes the statewide network of county extension agent offices and such programs as community and resource development, home economics, agricultural education, and 4-H and youth development.

--\$10.3 million for the S.C. Agricultural Experiment Station, the only program of agricultural research funded by the state that focuses on South Carolina needs and agricultural conditions.

--\$1.6 million for the Livestock-Poultry Health Division, which has responsibilities for control of certain livestock diseases and for assuring the wholesomeness of red meat and poultry produced in South Carolina slaughtering establishments.

--\$1.3 million for the Division of Regulatory and Public Service Programs (Plant Pest Regulatory Service, Department of Fertilizer Inspection and Analysis, and the Department of Seed Certification).

--\$1.2 million for extension programs in forest and recreation resources.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

Vol. 18 No. 5

October 15, 1978



#### LIBRARY COMPLIES WITH NEW COPYRIGHT LAW AND RESERVE BOOK POLICY

As a general rule the library can no longer accept multiple copies of copyrighted material for placement on reserve without written permission of the copyright owner. Faculty members will need to obtain such permission and submit a copy of that permission to reserve room personnel when placing multiple photocopies on reserve.

Nor can the library allow multiple photocopies to be left on reserve for subsequent semesters. At the end of the semester all multiple copies of photocopied copyrighted material will be returned to the faculty member.

Under special circumstances an exception to this rule can be made when the faculty member can adequately demonstrate that he/she has complied with the copyright law and guidelines applicable to such multiple copying.

This change in policy affects any material to be placed or retained on reserve beginning with the spring semester 1978-79.

# FACULTY RESEARCH COMMITTEE GRANT APPLICATIONS BEING ACCEPTED

Proposals for Faculty Research Committee grants should be in the Office of University Research (107 E-Martin Hall) not later than Nov. 1, 1978. Application forms may be secured in the Office of University Research. Only proposals using the Faculty Research Committee application form will be considered by the committee.

The committee makes awards to new faculty

members initiating research, to faculty members initiating research in a new area, and to faculty members in areas where other sources of support are inadequate or nonexistent.

#### UNIVERSITY MARSHAL APPOINTED

Dr. Clayton V. Aucoin has been appointed by President R. C. Edwards as University Marshal for a three-year period beginning July 1, 1978. Dr. Aucoin replaces Dr. James T. Lazar whose term expired June 30, 1978.

# INFORMATION AVAILABLE ON DANFORTH FELLOWSHIPS

Inquiries about the Danforth Graduate Fellowships, to be awarded by the Danforth Foundation of St. Louis, MO, in April 1979, are invited by Baccalaureate Liaison Officer Dean Claud B. Green, E-102 Martin Hall.

The Fellowships are open to all qualified persons who have serious interest in teaching careers in colleges and universities and who plan to study for a Ph.D. in any field of study common to the undergraduate liberal arts curriculum in the United States.

Applicants for the baccalaureate awards must be college seniors and may not have undertaken graduate level programs of study. The deadline to seek information about the campus nomination process is Oct. 25, 1978.

The Danforth Graduate Fellowship is a one-year award but is normally renewable until completion of the advanced degree or for a maximum of four years of graduate study. Fellowship stipends are

based on individual need, but they will not exceed \$2,500 for single Fellows and for married Fellows with no children. Fellows who are married or are "head of household" with one child receive up to \$3,500. There are dependency allowances for additional children. The Fellowship also covers tuition and fees up to \$4,000 annually.

# COMPETITION OPENS FOR BIOMEDICAL RESEARCH SUPPORT GRANT FUNDS

An institution with a minimum of \$200,000 in Public Health Service (PHS) sponsored research grants and awards is eligible to make application to the National Institutes of Health (NIH) for a Biomedical Research Support Grant (BRSG). The University has qualified for, applied for, and received a BRSG in the amount of \$21,147. The NIH requires that an ad hoc committee of scientific and administrative personnel, qualified by training and experience, must be established to advise on the intra-university allocation of BRSG funds. This Committee, recommended by appropriate college deans and appointed by the Vice-President for Academic Affairs, includes Drs. J. D. Hatcher, R. W. Henningson (chairman), D. M. Henricks, L. I. Park, G. L. Powell, G. A. Tanner, and J. B. Park. Committee is responsible for deciding how BRSG funds will be utilized and establishing a mechanism for such use.

The Committee, consistent with Clemson University health-related research interests and NIH policies, has decided that the BRSG funds will be utilized to support pilot biomedical or behavioral research by young investigators. The following mechanism has been established to allocate the BRSG funds within the University.

DEFINITIONS: A young investigator is one generally not more than five years past the Ph.D. Pilot research explores new ideas to test their validity and to provide preliminary findings necessary to support research project grant applications.

APPLICATIONS: Applications for support

of biomedical or behavioral, health related, pilot research projects will be accepted from young investigators; from faculty affiliating with Clemson University subsequent to Aug. 15, 1977; and from mature investigators reorienting the direction of their research. Applications, utilizing NIH 398 (available from the Office of University Research) forms and format, should be in the Office of University Research prior to Nov. 1, 1978. Interdisciplinary projects are encouraged. Proposals should be completed to facilitate peer review. Budgets should contain only items requested from BRSG funds and each item should be well justified. It is tacitly understood that a subsequent proposal, seeking sponsored support and based on the proposed or similar work, will be forthcoming if funds are allocated.

PEER REVIEW: The BRSG Committee will expedite competitive peer review of all proposals received prior to Nov. 1, 1978. Peer review will include conformance to application requirements, quality of the research proposed, and an evaluation of the potential of the proposed project for subsequent sponsored support.

ALLOCATION OF FUNDS: The BRSG funds will be awarded, not later than Dec. 10, 1978, on the basis of the competitive peer review. The BRSG Committee anticipates making five or six awards from the \$21,000 available to the Committee. Anonymous peer review comments will be available to the investigators of unfunded applications.

Questions concerning the BRSG, the application process, and/or the eligibility to apply for BRSG funds should be directed to the Office of University Research, (ext. 2375).

#### ACCOUNTING AND FINANCE

Jimmy D. Sheriff (Assoc Prof) was appointed South Carolina's Membership Chairman for the American Accounting Association during 1978-1979 by Dr. Maurice Moonitz, president of the AAA.

The appointment was made at the Association's annual meeting Aug. 20-24 in Denver.

Robert Rouse (Assoc Prof) has published "Accounting and Auditing Refresher,"
July 17, 1978, for the South Carolina
Society of CPA's (Myrtle Beach); "Review
of Statements of Financial Standards
Board," July 24 and 31, for McKnight,
Frampton, Buskirk & Co.; "Review of
Statements on Auditing Standards," Aug.
7 and 14, for McKnight, Frampton,
Buskirk & Co.

# AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

Glenna Colclough (former Agric Sci. Assoc) and Stephen Lilley (Vstg Asst Prof) presented a paper, "Perceived Blockages in the Occupational Attainment of Southern Black Youth," at the annual meetings of the Rural Sociology Society in San Francisco, CA, Sept. 1.

M. S. Henry (Assoc Prof) was co-author of an article, "Water as a Constraint to Economic Development in Western North Dakota," in <u>Regional Science Perspectives</u> (Vol. 8, No. 2: 14-31, 1978).

Edward L. McLean (Prof), Prof. Lilley and Paul E. Lovingood Jr. (Univ of South Carolina) are co-authors of AE 402,

Migration of the Population. South Carolina Counties, 1950-1970.

#### AGRICULTURAL ENGINEERING

Gaines E. "Buddy" Miles (Asst Prof) represented the South Carolina Agricultural Experiment Station at a conference sponsored by the Agricultural Research Institute (ARI) at the University of Maryland Sept. 27-28. The conference goal was to formulate ARI recommendations for various governmental agencies, departments and committees on the preparation and dissemination of weather information to agriculture and forestry.

Charles V. Privette (Assoc Prof) attended

the Eastern United States 4-H Engineering Event held at Richmond, VA, Sept. 25-27. Prof. Privette was chairman of the Automotive Driving section of the event which also included tractor driving and small engines.

#### CIVIL ENGINEERING

Subhash C. Anand (Prof) and Roger H. Shaw, senior analyst, Bechtel Power Corp., Los Angeles (former Grad Stu, CE) had a paper published in Computer Methods in Applied Mechanics and Engineering, Vol. 15, No. 1 July 1978, pp. 1-12. The paper is entitled "Use of LST Elements in Elastic-Plastic Solutions" and is based on part of the research that was conducted by the senior author under a research grant from the National Science Foundation.

#### **ECONOMICS**

Hugh Macaulay (Alumni Prof) delivered the opening convocation address at Presbyterian College Aug. 29.

Richard B. McKenzie (Prof) has published an article, "On the Methodological Boundaries of Economic Analysis," Journal of Economic Issues, Sept. 1978.

Bruce Yandle (Prof) has a monograph, Regulated Advertising and the Process of Self-Medication, published by The Proprietary Association, Sept. 1978.

#### ELECTRICAL AND COMPUTER ENGINEERING

Prof. Carl W. Malstrom has been recently selected to be the Society for Computer Simulation Director on the National Computer Conference Board of Directors. The National Computer Conference is one of the major annual activities of the American Federation of Information Processing Societies.

Prof. Malstrom teaches in the College of Electrical and Computer Engineering and is manager of Clemson's Engineering Computer Laboratory.

In addition to this new board appointment, Prof. Malstrom will continue to serve on the National Board of Directors of the Society for Computer Simulation.

#### ELECTRON MICROSCOPE FACILITY

A photograph taken by J. S. Hudson, Electron Microscope Facility, and G. R. Carner, Professor of Entomology, has won first place in the Photomicrography Category in the 1978 Natural History Magazine photography competition. It appeared in the August-September issue of Natural History. The photograph is presently on display at the Natural History Museum in New York City.

J. S. Hudson participated in a two-week short course "Modern Techniques in Electron Microscopy" held at Duke University Marine Laboratory, Beaufort, NC, Sept. 2-16.

#### ELEMENTARY AND SECONDARY EDUCATION

W. Owens Corder (Prof) spoke Sept. 12 to the teachers at Townville and LaFrance Elementary Schools on identifying handicapped students. He spoke Sept. 19 to the Pendleton Elementary teachers on identifying handicapped students.

Carolyn Briscoe (Assoc Prof) conducted an in-service session for elementary teachers in Greenville County Sept. 20. The topic was "Individualizing Instruction in the Elementary Classroom."

Elizabeth B. Galloway (Prof) was coprogram author for second grade level, "Back to Basics" basal reading series, 1978 edition, Scott-Foresman Company. She was also the speaker at the XI Chapter of ADK "Parent Involvement in Reading."

John V. Hamby (Assoc Prof) gave a talk, "A Developmental Approach to Field Experiences," at the Pickens County Elementary Teachers In-Service Meeting Aug. 24.

#### **FORESTRY**

- G. E. Kessler (Prof) authored the paper "Programs and Priorities in Nonindustrial Private Forestry," published in the Journal of Forestry: 76 (7).
- D. D. Hook (Prof and Dir) and R. M. M. Crawford (Prof) St. Andrews University, Scotland, were editors of a recently published book, Plant Life in Anaerobic Environments, (Ann Arbor Science Publishers, Inc., Ann Arbor, MI) p. 564.

Prof. Hook and J. R. Scholtens (Inst) authored a chapter, "Adaptations and Flood Tolerance of Tree Species," in the aforementioned book.

#### **ENGLISH**

Sterling Eisiminger (Asst Prof) published "Melville's Small Debt to Poe" in American Notes and Queries, 15, No. 5 (1977), 70-1.

Robert W. Hill (Assoc Prof) published "Purgatorio," a poem, in <u>Ascent</u>, 4, No. 1 (1978), 51-2.

#### **GEOLOGY**

G. M. Haselton (Prof) gave a seminar to the members of the International Quaternary Association in Zürich, Switzerland, Sept. 13 during a three-day technical session.

#### HISTORY

R. S. Lambert (Prof) has published "A Loyalist Odyssey: James and Mary Cary in Exile," <u>South Carolina Historical Magazine</u> (July, 1978).

Jerome V. Reel Jr. (Prof) has published "History Through Opera: A Classroom Experience," <u>History Teacher</u>, Vol. XI, No. 4 (Aug. 1978).

Joseph L. Arbena (Assoc Prof) has published "The Southeastern Conference on Latin American Studies: A Quarter Century of Service" in the <u>Latin</u>
American <u>Research</u> <u>Review</u>, XIII:3 (1978),
168-174.

#### HORTICULTURE

Alta R. Kingman (Asst Prof) and graduate students Patsy Bentley, Danny O'Connor and Eleanor Pascalides presented a workshop on hortitheraphy for mental health patients at the Annual Conference of the National Council for Therapy and Rehabilitation through Horticulture, held in Topeka, KS, Sept. 17-20.

Prof. Kingman also presented a paper, "An Evaluation of Hardwood Barks Used in Growing Mixtures of Selected Container-Grown Woody Ornamental Species," at a recent meeting of the Southern Nurserymen's Association Research Sessions in Atlanta, GA.

M. LeRon Robbins (Assoc Prof) was elected chairman of the Pickling Cucumber Improvement Committee of Pickle Packers International at the 1978 meeting recently held in Davis, CA.

#### INDUSTRIAL MANAGEMENT

David M. Swanson (Assoc Prof) was appointed recently to the South Carolina District Export Council by Secretary of Commerce Juanita Kreps.

Carl Gooding (Assoc Prof), having successfully completed a series of certification examinations, has been "Certified in Production and Inventory Management" by the American Production and Inventory Control Society.

Jean L. Woodruff (Instr) was named an "Outstanding Young Woman of America" by National Federation of Women's Clubs.

#### INTERDISCIPLINARY STUDIES

J. B. Park (Assoc Prof, Bioengineering and Materials Engineering) has received a grant from the National Aeronautics and Space Administration, Lewis Research Center in Cleveland, Ohio, to develop a percutaneous implant by using ion-beam sputtering technique. The total amount of the grant, which began Sept. 15, 1978, for the first year, was \$16,545. He will collaborate with A. F. von Recum (Prof, Bioengineering) and G. H. Kenner (Assoc Prof, Bioengineering and Materials Engineering).

Prof. Park also published a paper, "Shrinkage Influenced by Chain Rupture During Tensile Deformation," <u>Journal of Macromolecular Science-Physics</u>, <u>B15</u> (3), 409-420 (1978) with K. L. Devries and W. O. Statton (both of the Univ of Utah).

Prof. Park and Prof. Kenner were guest faculty members at the University of Pennsylvania School of Medicine during the "Conference on Electric and Magnetic Control of Muscoskeletal Growth and Repair," Sept. 18-20. Prof. Park delivered two lectures on studies involving the use of electrical stimulation for soft and hard tissue growth into porous implants. Prof. Kenner showed how electrical stimulation can be used to prevent the development of disuse osteoporosis in rabbits.

#### LANGUAGES

Gaston J. Fernandez (Prof of Spanish)
has published a paper Dios y el Patriarca
en el "Otono del Patriarca" in the
Selected Proceedings of the TwentySeventh Annual Mountain Interstate
Foreign Language Conference, edited by
M. L. Suarez and E. Zayas-Bazan of East
Tennessee State University.

#### MATHEMATICAL SCIENCES

K. T. Wallenius (Prof) attended the Thirteenth Annual Department of Defense Cost Analysis Symposium at Leesburg, VA, where he presented an invited paper on "Some Alternative Criteria for Selecting Predictor Variables in Parametric Cost Estimation," Sept. 27-29.

During Sept. 11-16 at the University of

Texas, Austin, A. Sobczyk (Prof) (with P. Burt) participated in the Seventh International Colloquium on Group Theory and Mathematical Physics.

J. V. Brawley (Prof) presented a talk to the faculty and student body at Middle Tennessee State University in Murfreesboro, TN, Oct. 2. The talk was entitled "The Gambler's Ruin." He also discussed the future of mathematical sciences with the faculty of the Mathematics and Computer Science Department.

#### MUSIC

Edith B. Card (Asst Prof) conducted an in-service training workshop for Elementary Music Specialists in the Columbia City School System in Columbia, Sept. 29.

#### NURSING

Lynne A. Hall (Instr) and Becky F.
Campbell (Instr) have been chosen as
Outstanding Young Women of the Year.
Their biographical summaries will be
included in the annual awards volume,
Outstanding Young Women of America.
They are also candidates for the Outstanding Young Woman of the Year award
for South Carolina. From the state
finalists the Ten Outstanding Young
Women of America will be selected.

#### PROFESSIONAL DEVELOPMENT

Claude S. Simpson, Jr. (Instr, IM) will be chairperson for a course, "Positive Discipline," to be held Oct. 18 at Clemson.

John H. Marvin (Assoc Prof, Text) will chair an Oct. 17-18 seminar, "Current Technology in Drawing Through Spinning: Ring and Open-End," to be held here.

Instr. Simpson will be chairperson for a course, "Results-Oriented Engineering Management," here Oct. 19-20.

Robert W. Rouse (Assoc Prof, Acct and Fin) will be seminar leader for a course, "The Job of the Controller," to be held Oct. 23-24 at the Sheraton Palmetto Inn in Greenville.

Thomas W. Zimmerer (Prof, IM) will be chairperson for a course, "Improving Managerial Skills of Supervisors," to be held at Sacred Heart College in Belmont, NC, Oct. 30-31.

Thomas B. Maertens (Instr, IM) will be chairing a seminar, "Improving Managerial Decision Making," here Oct. 30-31.

#### **PSYCHOLOGY**

L. Berger made a presentation in a symposium sponsored by the Division Two (Teaching of Psychology) of the American Psychological Association at the recent APA convention in Toronto, Canada. The presentation was titled "Involvement, Reality and Modeling in the Undergraduate Industrial Practicum.

#### **TEXTILES**

Hassan Behery (Assoc Prof) has been elected as publicity chairman for the 1978 Textiles Industries Conference organized by the American Society of Mechanical Engineers in Raleigh, NC, Oct. 17-18.

Prof. Behery has also been appointed a member of the Executive Committee of the American Society of Mechanical Engineers, Textile Engineering Division.

Prof. Behery, principal investigator, has received an addition of \$34,500 from the Air Force to their previous contract to develop an alternate fabric for their Class A uniform. This will bring the total value of the contract to \$157,500.

#### ZOOLOGY

Darrell G. Yardley (Asst Prof) hosted the sixth annual meeting of the

Southeastern Ecological Genetics
Conference Sept. 22-24 and presented a
paper, "Amylases of <u>D. pseudoobscura</u> and
Hemolymph-Midgut pH Associations" at
those meetings. The meetings were
attended by ecological geneticists
from several universities throughout
the southeastern U.S. and were held at
the Department of Recreation and Park
Administration's Recreation-Outdoor
Education Research Laboratory.

Scott Deshefy (Grad Stu) also presented a paper, "Ecological Genetics of Alsophila pometaria," at those meetings (J. B. Waide and Prof. Yardley, coauthors).

MINUTES OF THE UNIVERSITY AUDIO VISUAL COMMITTEE MEETING, APRIL 24, 1978

Present: R. T. Benson, W. H. Owens, S. W. Thompson, J. H. Jenkins, W. A. Shain, C. M. McHugh, J. F. Dickey, T. F. Collins, J. E. Pisaneschi, R. C. Davenport, G. Halfacre, D. W. Blair, T. E. Burke

Chairman Owens called the meeting to order at 12:20 p.m.

The minutes of the March 27, 1978, meeting were approved as presented.

Chairman Owens then asked for subcommittee reports.

Display and Demonstration Subcommittee: (submitted report)

Communications Subcommittee: The report was distributed to the committee. It was recommended that copies be forwarded to Vice President Nicholas and Dean Hurst.

T. Collins moved we adopt the report, seconded by C. McHugh; after a short discussion the committee voted to adopt with one member abstaining.

Chairman Owens welcomed the new committee members:

R. C. Davenport - Vocational Education

G. Halfacre - Extension Horticulturist

D. W. Blair - Economics

T. E. Burke - E.C.E.

Chairman Owens then thanked the following individuals for their efforts on behalf of the A.V. committee:

Display and Demonstration Subcommittee

Joyce Jenkins, chairperson Jim Stockham Joe Dickey

Communications Center Subcommittee

C. M. McHugh, chairman

T. F. Collins

J. E. Pisaneschi

Open House Subcommittee

J. H. Marvin, chairman, and Bob Benson for his work as secretary

Chairman Owens then asked the nominations committee for their report.

The nominations for officers for 1978-79 were presented to the AV Committee as follows:

Chairman - W. H. Owens Secretary - T. F. Collins

The meeting was then opened to further nominations; hearing none, nominations were closed. W. H. Owens and T. F. Collins were elected unanimously to serve as chairman and secretary respectively for the 1978-79 years.

The meeting was adjourned at 12:55 p.m.

Respectfully submitted,

Robert T. Benson Secretary

MINUTES OF THE COUNCIL OF ACADEMIC DEANS MEETING, AUGUST 14, 1978

The Council of Academic Deans met Aug. 14, 1978, in R538 Nursing Building. Dean Hurst called the meeting to order

at 9 a.m. with the following persons present: Dean Anderson, Professor Dalton (for Dean McClure), Dean Landrith, Dean Wilcox, Dean Box, Dean Trevillian, Dean Cox, Dean Labecki, Dean Vogel, Dean Schwartz, Dean Brown, Dean Willis, and Dr. Ted Adkins (for Dr. Steirer).

Dean Hurst distributed copies of the Permanent Improvements Forecast for Fiscal Years 1979-83 which was prepared by the Office of Development.

Dean Hurst announced that the orientation packets for new faculty could be picked up in his office Wednesday afternoon, Aug. 16.

Dean Hurst announced that the 1979-80 Announcements (catalog) will contain only those items authorized prior to Jan. 1 and cautioned the deans to arrange their timetables accordingly.

Dean Hurst discussed the "classified pool" being monitored by Barnee Price in the Personnel Office. He stated that a few positions are remaining and Mr. Price will soon be notifying the deans of the positions so that they can fill them, exchange them, or return them to the pool for others to utilize. Dean Hurst emphasized that there is no E & G money available for new positions.

Dean Schwartz again asked the deans for discussion relative to computer facilities and to the feasibility of developing a Minicomputer Acquisition Policy. There was general discussion relative to the central computer, minicomputers, microcomputers, and special purpose computers and the capabilities of each. Dean Schwartz stated that if a committee were

appointed in this regard that its purpose would be to advise and recommend, not to have goverance in the matter.

Several deans expressed an interest in developing a Student Data Base and Dean Schwartz suggested that George Alexander and Terry Ivester address the deans at a future meeting on the subject.

Dean Farrell Brown discussed the "Guideline for Graduate Student Employment" forms which he had distributed at the July deans' meeting. He stated that the guidelines could still be amended. After a brief discussion, it was decided that it should be distributed and tried for a period of time. Dean Brown stated it would also be included in the Graduate Admissions Manual.

Dean Hurst announced that effective Sept. 1, 1978, the authority for admitting a postgraduate student will be vested in the Office of Graduate Studies and University Research. Dean Schwartz is responsible for defining a "postgraduate student," and this will appear in appropriate publications including both the undergraduate and graduate catalogs.

Dean Anderson stated that a new commuter parking area has been established behind the P&AS Building. This will free up some space for employee parking at Redfern Health Center which was previously all-commuter parking and is now half-commuter and half-employee.

The meeting was adjourned at 10:30 a.m.

Respectfully submitted,

Annette H. Kesler



VICE PRESIDENT FOR ACADEMIC AFFAIRS AND DEAN OF THE UNIVERSITY

September 20, 1978

MEMORANDUM

TO: The Academic Deans

FROM: Victor Hurst, Dean of the University

SUBJECT: Guidelines for Faculty Evaluation and Faculty

Evaluation Procedures

During 1977-78, there were misunderstandings on the part of both the administration and the faculty as to evaluation procedures. The fact that there was some confusion is not surprising; the fact that there was not more confusion is even more surprising. The administration and faculty alike had looked at the Manual for Faculty Members; a card outlining "Faculty Evaluation Procedures and Guidelines for Faculty Evaluation;" and the three evaluation forms themselves. To add to this, oral instructions were given in such a manner that they received different interpretations. The forms to be used for 1978-79 will be the same as those used for 1977-78. With this in mind, it is requested that the following procedures be followed:

- 1) Form 1: Professional Data Sheet -- should be submitted by the faculty member to the department head at least two weeks prior to evaluation. The approximate time for evaluation should be known to the faculty member not less than one month prior to the anticipated meeting of the department head and the faculty member.
- 2) Form 2: Evaluation Worksheet (initial input) -- should be discussed between the department head and the faculty member early in the academic year according to the Purpose and Explanations 1 and 2 for the Evaluation Worksheet, as described under "Faculty Evaluation Procedures." In the case of twelve months faculty, it would be highly desirable to carry on these discussions during the month of July. In regard to nine months faculty, it would be desirable to finish discussions by not later than September 15.
- 3) Form 2: Evaluation Worksheet (final input) -- is to be completed by the department head at an appropriate time\* as the fiscal or academic year draws to a close. The following steps are to be followed:
  - a. Department head to complete Form 2: Evaluation Worksheet.

The Academic Deans September 20, 1978 Page Two

- b. Department head discusses this evaluation with the faculty member. If the faculty member wishes, he may append a statement to Form 2. One copy of Form 2, with attachments (should there be any), will be given at this time to the faculty member and one copy, with attachments (should there be any), will be retained by the department head.
- c. Department head completes Form 3: Evaluation Summary, and signs it as the evaluator. It is shown to the faculty member who may append a statement.
- d. Form 3 is forwarded to the dean of the college who reviews the form with the department head. Form 3 is then returned, with or without comments by the dean, by way of the department head to the faculty member who shall again have the right to append a personal statement. The faculty member shall then sign the final form. The faculty member retains the original Form 3 for his own files, one copy remains in the department, and one copy goes to the dean. The dean's copy of Form 3 is transmitted to the Dean of the University for review and then is returned to the college dean for filing.

\*The appropriate time may vary, but the evaluation process should be completed by May 11, 1979.

VH/ep

cc: Dean C. B. Green
 Dean A. E. Schwartz
 Dean S. M. Willis
 Dr. W. F. Steirer, Jr.

#### CLEMSON UNIVERSITY

#### FACULTY SALARY REPORT - FALL SEMESTER 1978-79

(Nine-Month Basis)

This Report Consists of:

College-Wide Maximum, Minimum, Median, and Average Salaries, by Sex, for Professors, Associate Professors, Assistant Professors, and Instructors;

University-Wide Maximum, Minimum, Median, and Average Salaries for Above Ranks;

Maximum, Minimum, Median, and Average Salaries, by Sex, for Professional Librarians.

Note: For occupancy classes containing less than five members, no information is given other than the number in the class. This number is shown in parentheses but is not included in the faculty totals. Part-time and "visiting" faculty, and those on leave without pay, have been excluded.

Office of the Vice President for Academic Affairs

and

Dean of the University

PDFRP190-1 09/28/78 PAGE 1

## PROFESSORS

COLLEGE	FACULTY #	MAXIMUM \$	MINIMUM \$	MEDIAN \$	AVERAGE \$
		MALE			
AGRI SCIENCES	63	29, 115	20,245	24,890	24,715
ARCHITECTURE	11	28,625	20.715	25,289	24,557
EDUCATION	15	27,616	19,597	22,840	22,694
ENGINEERING	38	34, 390	20,809	26,474	26,696
FOR & REC RES	13	29,938	20.775	23,768	24, 467
IM & TS	22	32,000	23,000	26,500	27,288
LIBERAL ARTS	9	33, 150	21,230	23,200	25,764
SCIENCES	46	33,300	22,190	26,147	26,673
		FEMA	L E		
AGRI SCIENCES	(2)				
ARCHITECTURE	(1)				
EDUCATION	(1)				- 1
LIBERAL ARTS	(1)				1
NURS ING	(1)				
SCIENCES	(2)				-
		TOTA	L		
	217	34,390	19,597	25,449	25,618

PDFRP190-1 09/28/78 PAGE 2

# ASSOCIATE PROFESSORS

COLLEGE	FACULTY #	MAXIMUM \$	MINIMUM \$	MEDIAN \$	AVERAGE \$		
		MALE					
AGRI SCIENCES	81	24,540	13,950	19,449	19,379		
ARCHITECTURE	17	25,389	17,917	21,426	21,585		
EDUCATION	14	21,772	18,168	19,476	19,539		
ENGINEERING	48	26,741	16,874	21,059	21,435		
FOR & REC RES	11	22,120	18,000	20,417	20,295		
IM & TS	18	25,600	18,510	23,000	22,493		
LIBERAL ARTS	29	22,050	16,650	19,000	19,323		
SCIENCES	38	24,000	17,020	20,800	20,498		
		FEMA	LE				
AGRI SCIENCES	(4)						
EDUCATION	(3)						
IM & TS	(2)						
LIBERAL ARTS	(2)						
NURSING	(3)						
SCIENCES	(4)		•				
		TOTA	L				
	256 (18)	26,741	13,950	20,327	20,337		

PDFRP190-1 09/28/78 PAGE 3

## ASSISTANT PROFESSORS

COLLEGE	FACULTY #	MAXIMUM \$	MINIMUM \$	MEDIAN \$	AVERAGE \$			
		MALE						
AGRI SCIENCES	45	19,632	14,729	16,413	16,701			
ARCHITECTURE	5	17,460	14,205	16,000	15,987			
EDUCATION	(4)							
ENGINEERING	11	20.030	16,500	18,000	18,162			
FOR & REC RES	8	19,200	15,426	17,366	16,990			
IM & TS	20	21,500	14,050	19,100	18,277			
LIBERAL ARTS	45	17,950	12,300	14,650	14,869			
NURSING	(1)				_			
SCIENCES	22	18,500	15,000	16,500	16,326			
	FEMALE							
AGRI SCIENCES	8	17,244	15,394	16,360	16,220			
ARCHITECTURE	(1)							
EDUCATION	(4)				-			
FOR & REC RES	(2)							
IM & TS	(2)							
LIBERAL ARTS	15	18,950	13,025	15,262	15,050			
NURSING	14	21,967	15,500	18,157	18,054			
SCIENCES	(4)							
		TOTA	L					
	193 (18)	21,967	12,300	16,360	16,421			

PDFRP190-1 09/28/78 PAGE 4

## INSTRUCTORS

COLLEGE	FACULTY #	MAXIMUM \$	MINIMUM \$	MEDIAN \$	AVERAGE \$
		MALE			
AGRI SCIENCES	12	16,360	10,804	13,088	13,544
ARCHITECTURE	(2)				
EDUCATION	(3)				
FOR & REC RES	5	16,259	12,882	15,542	15,005
IM & TS	5	17,000	13,000	15,600	15,173
LIBERAL ARTS	9	16,470	11,000	13,500	13,667
SCIENCES	(2)				
		FEMA	LE		
AGRI SCIENCES	(3)				
EDUCATION	(1)				
ENGINEERING	(1)				
FOR & REC RES	(1)				
GRADUATE SCHOOL	(1)				
IM & TS	(3)				
LIBERAL ARTS	6	13,600	10,450	11,100	11,591
NURS ING	17	14,580	12,000	13,086	13,407
SCIENCES	6	17,000	11,000	15,300	14,216
		TOTA	L		
	60 (17)	17,000	10,450	13,500	13,653

PDFRP190-1 09/28/78 PAGE 5

## LIBRARIANS

COLLEGE	FACULTY #	MAXIMUM \$	MINIMUM \$	MEDIAN \$	AVERAGE \$
		MALE			
LIBRARY	5	15,221	12,270	14,265	13,937
		FEMA	L E		
LIBRARY	6	16, 172	13,394	14,724	14,417
		TOTA	L		
	11	16,172	12,270	14,265	14,198

# Calendar of Campus Events

- 15-27 -- Art Exhibition: William Halsey. Sculptures and paintings including portrait of President Robert C. Edwards. Sponsored by Alumni Association, Alumni Center, 8 a.m.-4:30 p.m. weekdays, 9 a.m.-noon Saturdays. Open to the public, no admission charge.
- 15-30 -- Art Exhibition: "Courthouse -- A Photographic Document." The 120 photographs in this exhibition represent a pictorial record of buildings which are unique expressions of American society and architecture at a time when the courthouse played a vital role in society. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
  - 16 -- Lecture: "Engineering for Architecture" by Hanskari Bandel, Structural Engineer, Severud, Perrone, Strum and Bandel, New York. Sponsored by Clemson Architectural Foundation and College of Architecture, Lee Hall Auditorium, 8 p.m. Open to the public, no admission charge.
  - 16 -- JV Football: Furman, here, 2 p.m.
  - 16 -- French Film: "La Poupee." Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 16-20 -- Art Exhibition: "Student Arts and Crafts." Sponsored by University Union, Union Art Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
- 16-30 -- Art Exhibition: "Bob Chance Ceramics." Most of the pieces in this exhibition by the Greenville, S.C., potter are functional and will be available for purchase. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
  - 17 -- Lectures: Ana Rivera, Consumer Affairs Officer. "The Role of the FDA," McAdams Hall Auditorium, 11:15 a.m. "Food Labeling," A-204 Plant and Animal Science Building, 12:20 p.m. Open to the public, no admission charge.
  - 17 -- Concert: "Appalachian Folk Music" by Edith Card. Sponsored by Department of Music Chamber Music Series, Daniel Hall Auditorium, 8 p.m. Open to the public, no admission charge.
- 17,19 -- Seminar: "Introduction to JCL and Catalogued Procedures" Parts III and IV. Sponsored by Academic Computing Support of the Computer Center, M-105 Martin Hall, 3:30 p.m. (17) Part III, (19) Part IV. Open to all interested persons, no charge. For more information, call 656-3466.
  - 18 -- Lecture: Kelly Montieth, Comedian and Political Satirist. Sponsored by Speakers Bureau, Tillman Auditorium, 8 p.m., reception immediately following. Open to the public, no admission charge.
- 20-21 -- Live Entertainment in Edgar's. Sponsored by University Union, Edgar's,

#### CALENDAR OF CAMPUS EVENTS (cont.)

- 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
- 21 -- Football: Duke (Hall of Fame), here, 1 p.m.
- 21 -- Chicken Barbecue for Clemson-Duke Game. Sponsored by Alpha Tau Alpha and Society for the Advancement of Agricultural Education. Across street from Jervey Athletic Center, 10:30 a.m.-12:30 p.m. Open to the public, \$2.50 per plate.
- 22 -- Soccer: University of North Carolina, here, 2 p.m.
- 23 -- Lecture: "Italian Urban Renewal" by Marinella Ottolenghi, Planner, Rome, Italy. Sponsored by Clemson Architectural Foundation and College of Architecture, Lee Hall Auditorium, 8 p.m. Open to the public, no admission charge.
- 23 -- Seminar: "Job Control Language and Catalogued Procedures." Sponsored by Academic Computing Support of the Computer Center, M-105 Martin Hall, 7-10 p.m. Open to all interested persons, no charge. For more information, call 656-3466.
- 24,26 -- Seminar: "Job Control Language II" Parts I and II. Sponsored by Academic Computing Support of the Computer Center, M-105 Martin Hall, 3:30 p.m. (24) Part I, (26) Part II. Open to all interested persons, no charge. For more information, call 656-3466.
  - 25 -- Lecture: "International Fertilizer Development" by Dr. W. D. Bishop, Director, Agro-Economic Division, International Fertilizer Development Center, Florence, AL. Sponsored by Agronomy and Soils Department, A-203 Plant and Animal Science Building, 9:05 a.m. Open to the public, no admission charge.
  - 25 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." Opportunity for staff members to enhance and/or modify their behaviors in the direction of better communication, mutual respect, and an increased awareness of consumer problems. Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff members, no charge.
  - 26 -- Seminar: "Distinguished Chemical Industry Business Seminar" by John Kroeger, Vice President, Shell Oil Company. Sponsored by Chemistry and Geology Department, 131 Brackett Hall, 7:30 p.m. Open to the public, no admission charge.
- 26-28 -- Conference: "Ninth Annual Clemson Reading Conference: A Potpourri of Reading." Seventeen speakers and consultants who are specialists in elementary, high school, and adult reading skills will report on new ideas in teaching reading. For more information, call 656-3482.
  - 27 -- Halloween All-Nighter: Games, Contests, Prizes. Sponsored by University Union, Union Building, all night. Open to students, faculty and staff, no admission charge.
- 27-28 -- Live Entertainment in Edgar's: "The Archer Road Band. Sponsored by University Union, Edgar's, 9 p.m. Proof of age and University I.D.

# CALENDAR OF CAMPUS EVENTS (cont.)

required, 50¢ admission charge.

- 27-28 -- Workshop: "The Community as Client: Assessing Levels of Community Health" by Effie S. Hanchett, Ph.D., R.N., Associate Professor, University of Toronto, Canada. Sponsored by College of Nursing, Continuing Education. Enrollment limited to registered nurses, social workers, community health workers and educators with at least a baccalaureate degree. Preregistration required. For more information, call 656-3079.
  - 28 -- Trip to Gatlinburg. Sponsored by University Union. Details and sign up at Union Information Desk.
  - 28 -- Soccer: Erskine, here, 2 p.m.
  - 30 -- Seminar: "Utilities" Part I. Sponsored by Academic Computing Support of the Computer Center, M-105 Martin Hall, 3:30 p.m. Open to all interested persons, no charge. For more information, call 656-3466.
  - 30 -- JV Football: Georgia, here, 1:30 p.m.
  - 30 -- Seminar: "Superoxide Dismutase and Oxygen Toxicity in Microorganisms" by Dr. H. M. Hassan, Duke University Medical Center, Durham, NC. Sponsored by Microbiology and Food Science Departments, 101 Kinard Lab, 4 p.m. Open to the public, no admission charge.
  - 30 -- Lecture: "Landscape Architecture" by Ian McHarg, Landscape Architect, Philadelphia, Pennsylvania. Sponsored by Clemson Architectural Foundation and College of Architecture, Lee Hall Auditorium, 8 p.m. Open to the public, no admission charge.
- 30-31 -- Atlanta Contemporary Dance Residency. (30) Performance, Tillman Hall Auditorium, 8 p.m. Open to the public, children 50¢, students \$1, adults \$2. (31) Workshops, Fike Recreation Center, 10 a.m. Open to the public, no charge.
  - 31 -- Lecture: Dr. Leonard Wolf. Halloween special with the nation's foremost expert on Dracula and other monsters. Sponsored by Speakers Bureau, Tillman Hall Auditorium, 8 p.m., reception immediately following. Open to the public, no admission charge.
  - 31 -- Spanish Play. Sponsored by Language Department and given by students, Daniel Hall Auditorium, 8 p.m. Open to the public, no admission charge.
  - 31 -- Seminar: "Graphics I" Part I. Sponsored by Academic Computing Support of the Computer Center, M-105 Martin Hall, 3:30 p.m. Open to all interested persons, no charge. For more information, call 656-3466.

# PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

Vol. 18 No. 6

November 1, 1978



EEMSON III.

CLEMSON RE F



MOUNT PLEASANT MAN MAKES GIFT -- John T. Mundy, right, discusses terms of the endowed professorship with Clemson University President Robert C. Edwards.

#### FIRST NURSING PROFESSORSHIP ESTABLISHED

The first endowed professorship in the College of Nursing has been assured with a \$54,000 deferred gift from 1928 alumnus John T. Mundy of Mount Pleasant.

The professorship, which will eventually provide a salary supplement to an outstanding faculty member, has been named the Evelyn Marguerite Wilson Mundy Professorship in memory of his wife.

Dean Geraldine Labecki of the College of Nursing said the funds will be used for a much-needed research professorship.

"Our profession is just on the brink of discovery of nursing knowledge," said Labecki, "and gifts of this nature will make it possible for us to continue new areas of research."

Mundy's decision to establish a trust

through the Clemson University Foundation with a gift of securities valued at \$54,000 makes the professorship possible.

Under its terms Mundy receives a lifetime income from the trust. At his death the assets will be used to constitute the John T. Mundy Memorial Endowment Fund. Investment earnings from this endowment will fund the College of Nursing professorship.

Mundy retired in 1971 as manager of industrial development with S.C. Electric & Gas Co. He was with the company more than 20 years.

A 1928 Clemson graduate with a B.S. degree in electrical engineering, Mundy served in the Army from 1942 until 1946, attaining the rank of lieutenant colonel.

#### PUBLIC RELATIONS DEPARTMENT CHANGES NAME

The Department of Public Relations will have a new name effective Nov. 1, when it will become the Department of University Relations.

Stanley G. Nicholas, vice president for development, says the name change is being made "to reflect more accurately the functions and responsibilities of the department."

The department, whose director is Melvin Long, comprises three communications units: university news services, agricultural public service news services, and publications.

#### AGRICULTURAL ECONOMICS & RURAL SOCIOLOGY

The following faculty from the department participated in the 1978 Annual Meeting of the Rural Sociological Society at

San Francisco, CA, Aug. 30-Sept. 1:

Thomas A. Lyson (Asst Prof) presented a paper, "Some Attitudinal Differences Among Black and White High School Students Aspiring to Become Teachers." Prof. Lyson also served as a discussant for a session entitled "Approaches to Structural Change in Appalachia and the Rural South."

Edward L. McLean (Prof) delivered a paper, "Power and Decision-Making in a Rural County: A Longitudinal Analysis." Prof. McLean was also elected chairperson of the Southern Rural Sociology Research Committee for 1979.

Prof. Lyson attended a meeting of S-114 Technical Committee in New Orleans, LA, Sept. 24-26. He is Clemson University's representative on the Technical Committee.

#### AGRICULTURAL ENGINEERING

Robert E. Williamson (Assoc Prof) organized through the Agricultural Engineering Department and the Agricultural Council a student-faculty tour of the Sunbelt Agricultural Exposition at Moultrie, GA, Oct 11-12. Fifty-five students and 10 faculty attended the exposition which demonstrated the latest agricultural equipment and facilities on the 500-acre site.

Richard O. Hegg (Assoc Prof), Clyde L. Barth (Prof) and V. L. Quisenberry (Assoc Prof, Agron and Soils) have received a \$13,785 grant from the S. C. Water Resources Research Institute for a one-year project to investigate "Overland Flow Treatment of Animal Feedlot Runoff Water in the Piedmont."

Barbara J. Griffin (Asst Prof) was honored by the American Home Economics Association in New Orleans, LA, June 26 for "service to the profession" for her work as national chairman of the Energy and Changing Lifestyles Committee for 1975— 1978.

Prof. Griffin has been serving since

April 1978 on the National Institute of Building Sciences Task Force on Insulation and is one of two members on the steering committee and congressional briefing team.

Richard A. Spray (Assoc Prof) presented four 2-hour seminars on "Energy and Environmental Response Simulation" at the Southern Regional Adult Leaders Forum at Rock Eagle 4-H Center in Eatonton, GA, Oct. 10-11. The purpose of the workshop was to enhance energy programming in 4-H activities.

#### ARCHITECTURAL STUDIES

Johannes Holschneider (Prof) published a paper, "Einrichtungstherapie auf Amerikanisch - Der Architeckt und Gestalttherapeut Donald Keneth Busch," Architektur und Wohnen, 3/78, p. 44-48.

George Polk (Assoc Prof) had a one-man print and sculpture show at the Pickens County Art Museum Sept. 17-Oct. 6, Pickens. His subjects, which range from owls to herons to trees with a few manmade objects thrown in, are his reproductions of the natural lines, rhythms, and patterns of things of nature.

Richard Norman (Assoc Prof), representing the Clemson College of Architecture, was selected by the Research Corporation to attend the AIA Research Corporation Summer Institute on Energy Conscious Design held at the Harvard Graduate School of Design July 28-Aug. 4.

#### CHEMISTRY

R. A. Abramovitch (Prof & Hd) published a paper in collaboration with P. Cannone and G. Lemay of the Department of Chemistry, Université Laval, Québec, Canada. The paper was entitled "The reaction of 4-chloroquinoline 1-oxide with Activated Acetylenes: Furo [3,2-c]quinolines" and appeared in Heterocycles, 9, 1217 (1978).

Joe F. Allen (Prof) presented seminars

on "Availability of Short-Lived Radioisotopes and Their Use in Chemistry, Medicine, and Industry" at the Baptist College of Charleston Sept. 22 and at Erskine College Sept. 29.

#### CITY AND REGIONAL PLANNING

Glen E. Varenhorst (Assoc Prof) presented a paper, "A Framework for the Planning and Management of Change," at the national conference of the American Institute of Planners Sept. 26-Oct. 1 in New Orleans, LA.

#### CIVIL ENGINEERING

Subhash C. Anand (Prof) and Frank E. Weisgerber (Asst Prof, Univ of Pittsburgh, former Grad Stu, CE) have published a paper, "Usage of the Tresca Yield Condition in Finite Element Plane Strain Analysis," in the <u>International Journal of Solids and Structures</u>, Vol. 14, No. 8, 1978, pp. 625-637.

#### ENGLISH

Dixie Elise Hickman (Asst Prof) read a paper, "Love and Marigolds in Toni Morrison's The Bluest Eye," at the Southeast NCTE Affiliate Conference in Birmingham, AL, Oct. 5-7.

John Idol Jr. (Assoc Prof) read a paper, "The Responses of Contemporary Novelists to Look Homeward, Angle," at St. Mary's College, Raleigh, NC, Oct. 1.

Mark Steadman (Prof) published "Cast on the Waters," a short story, in the South Carolina Review, 10, No. 2 (1978), 33-46. He also read from his works in progress for the Greenville County Library, sponsored by the National Endowment for the Humanities, Sept. 20.

The Children's Literature Symposium, sponsored by the Department of English and the College of Liberal Arts, will be neld Nov. 18 in Daniel Hall Auditorium. Elaine Konigsburg, the main speaker, won

the 1968 Newberry Medal for From the Mixed-Up Files of Mrs. Basil E. Frankwieler. Mrs. Konigsburg has written and illustrated several other books for young readers, including (George), About the B'Nai Bogels, and The Second Mrs. Giaconda. The program also includes Elisa Sparks, Department of English; Claire O. Caskey, Department of English, speaking on "In Defence of Nonsense"; and a display of nine original drawings by Mrs. Konigsburg used in her books.

#### EXTENSION PROGRAM

Cooperative Extension Service Director W. T. O'Dell has announced appointments of two state program leaders for extension work. R. Lynn Harwell was named state leader for agricultural programs and David Dale Pyle head of 4-H youth work.

Harwell, formerly a member of the extension agricultural economics staff, had been acting leader for agriculture since last year. He is a Texas native and graduate of the University of Texas with a master's degree from Texas A & M and a doctorate from Oklahoma State.

Pyle, an Ohio native, is a graduate of Purdue University, with a master's degree and a doctorate from Ball State University. He has an extensive background in 4-H work and came to Clemson from the University of Florida staff.

#### FOOD SCIENCE

Robert F. Borgman (Prof) has been reappointed to the Research and Allocation Committee of the S. C. Heart Association. This committee reviews and approves applications for research funds submitted to the association.

Joseph J. Jen (Assoc Prof) and R. L. Thomas (former Grad Res Asst) published a paper, "Antagonistic Effect of CPTA and Far-Red Light on the Carotenogenesis in Lutescent Tomatoes," which appeared

in the <u>Journal</u> of <u>Food</u> <u>Biochemistry</u> 2:23-27 (1978).

Charles V. Morr (Stender Prof) chaired a meeting of the Journal Management Committee, Journal of Dairy Science, American Dairy Science Association, in Champaign, IL, Sept. 14.

Prof. Morr presented an address on "Milk Protein Research in Retrospect" to the Quentin Van Winkle Symposium of the Physical Chemistry of Milk Proteins, Ohio State University, Columbus, OH, Oct. 14.

Prof. Morr presented a talk on 'Milk and Vegetable Proteins in Formulated Foods" to the South Carolina Dairy Technology Society Meeting in Columbia, Sept. 20.

Prof. Morr presented a talk on "Technical Problems and Opportunities in Using Vegetable Proteins in Formulated Food Systems" to the Dixie Section-Institute of Food Technologists Meeting in Stone Mountain, GA, Oct. 6.

#### **GEOLOGY**

Villard S. Griffin (Prof) has recently authored an article, "Preliminary Geologic Map of the S. C. Inner Piedmont Belt," which appeared in V. 21 of Geologic Notes. This represents an early phase of a research project supported by the S. C. Geological Survey.

#### **HISTORY**

Roger P. Leemhuis (Asst Prof) read a paper, "James L. Orr: Reconstruction Governor," at the Duquesne History Forum in Pittsburgh, PA, Oct. 19.

Richard M. Golden (Asst Prof) reviewed
B. Robert Kreiser's Miracles, Convulscons,
and Ecclesiastical Politics in Early
Eighteenth-Century Paris in History:
Reviews of New Books, VI (Aug 1978).

Joseph L. Arbena (Assoc Prof) has

published a review of Henry Kirsch,
Industrial Development in a Traditional
Society: The Conflict of Entrepreneurship and Modernization in Chile (Univ.
Presses of Florida) in South Eastern
Latin Americanist, XXII:2 (Sept. 1978).

Richard Saunders (Assoc Prof) has published a book, The Railroad Mergers and the Coming of Conrail (Greenwood Press, 1978) about the creation of railroad giants, such as the Seaboard Coast Line and the Penn Central in the years since 1960. The book and its author were the subject of a feature article in the October 30, 1978, issue of Forbes.

Jerome V. Reel Jr. (Prof) delivered an invited paper, "History Through Opera: Phase Two," to the 24th annual conference of the National Opera Association, Oct. 11, Tuscon, AZ.

#### HISTORY AND VISUAL STUDIES

John T. Acorn (Prof and Hd) was a lecturer at the Penland School of Art under their Visiting Scholars Program. He has also participated in an exhibition entitled "Three Sculptors" held in the Fine Arts Building at the University of Georgia.

#### MATHEMATICAL SCIENCES

William H. Ruckle (Prof) was an invited participant in a conference on functional analysis at Oberwolfach, West Germany, during the week of Sept. 24-30. On Sept. 27 he gave a lecture to the conference entitled "Matrix Mappings Between Sequence Spaces Having the Normal Topology." On Thursday he presided over the conference.

Prof. Ruckle presented a colloquium Oct. 2 at the University of Brussels entitled "Geometric Games of Search and Ambush." On Oct. 5 he gave a morning lecture at the University of Frankfurt and an afternoon lecture at the Universit of Bonn on the theme "Absolutely Divergen Series and the Geometry of Banach Spaces.

Renu Laskar (Prof) published a paper, "Decomposition of Some Composite Graphs into Hamilton Cycles," in Colloquia Mathematica Societatis János Bolyai, 18, Combinatorics, Keszthely (Hungary), 705-716. This paper was presented at the International Conference on Combinatorics held in Hungary in 1976 while she was on sabbatical leave.

Calvin T. Long (Vstg Prof) has delivered two invited addresses before a meeting of the National Council of Teachers of Mathematics in Cheyenne, WY. The meeting was held Sept. 28-30 and was attended by approximately 1,000 mathematics educators from the US and Canada. Prof. Long also delivered an invited address at the Fifteenth Annual Northwest Mathematics Conference held in Portland, OR, Oct. 12-14, which was attended by nearly 2,000 mathematics teachers.

D. R. LaTorre (Prof) published the article, "Semilattices of Bisimple Orthodox Semigroups," in the <u>Journal of Algebra</u>: 52 (2), 1978, pp. 285-301.

Fred Morgan (Asst Prof) attended the SREB Committee on Statistics Annual Meeting Oct. 11-13 in Galveston, TX. He discussed the statistics program in the Department of Mathematical Sciences and the statistical consulting service at the Computer Center.

#### NURSING - BACCALAUREATE PROGRAM

Becky Campbell (Instr) coordinated an effort to administer flu injections to the Senior Citizens of Pickens County during the week of Oct. 10. Faculty members participating included Arlene Privette (Instr), Lynne Hall (Instr), Mary Barber (Instr), Lori Vaughan (Instr), Cyndy Belcher (Asst Prof), Julia Higgins (Asst Prof), Cathy Heriot '(Grad Stu), Kathy O'Rourke (Instr), and Becky Campbell (Instr).

#### PHYSICS AND ASTRONOMY

P. B. Burt (Prof) was an invited

participant in the VII International Conference on Group Theory and Solitons, University of Texas, Austin, Sept. 11-16. He presented a paper, "Collapsons: New Nonlinear Excitations."

Raymond C. Turner (Assoc Prof) and P. Alston Steiner (Assoc Prof) participated in the Southeastern Magnetic Resonance Conference held at the University of Tennessee at Knoxville Oct. 5 and 6. Prof. Turner presented a paper on "Crystal Symmetry and the g Tensor: Potassium Azide as an Example."

A. L. Laskar (Prof) published a paper, "The Effect of Impurity Doping on the Diffusion of Sr<sup>2+</sup> in Agcl," in <u>J. Physics c: Solid State Physics 11, 3397-3401 (1978).</u>

#### PROFESSIONAL DEVELOPMENT

H. E. Van Bulck (Asst Prof, IM) will be chairperson for a course, "Salesmanship: Principles and Techniques," to be held Nov. 9-10 at Clemson University.

Ralph E. Knowland (Prof and Hd, Bldg. Sci) will chair the "Working Together: A Forum for Architects, Constructors and Owners" seminar to be held here Nov. 1-2.

Robert W. Rouse (Assoc Prof, Acct and Fin) is chairperson for a Nov. 10 course on "Tax Legislative Update and Review of Selected Current Issues in Accounting" to be held at the Ramada Inn, Greenville.

J. C. Hubbard Jr. (Prof, Tex) and Edwin I. Stearns (retired Hd, Tex) will co-chair a seminar, "Slashing: Today and Tomorrow," to be held Nov. 14-15 at the Ramada Inn, Rock Hill.

Prof. Rouse will chair the "Cost Calculation and Control of Industrial Operations" seminar to be held here Nov. 14-15.

William C. Whitten Jr. (Prof, Econ) will chair a seminar, "Corporate Cash Management," to be held at The Sheraton-Palmetto Inn, Greenville, Nov. 16.

#### RECREATION AND PARK ADMINISTRATION

Jack Stevenson (Prof) was coordinator of the First General Session for the S. C. Recreation and Park Society's annual conference meeting in Myrtle Beach Oct. 1-3. He also served as chairman for two meetings of the S.C.R.P.S. Personnel Standards Committee.

#### SOCIOLOGY

The Department of Sociology was host to the annual convention of the South Carolina Sociological Association Sept. 22-23. C. Sieverdes and C. Hope (Asst Profs) were in charge of arrangements. Workshops were held on undergraduate teaching, faculty evaluation, and training sociology majors for tomorrow's labor market. Workshop leaders were Prof. Ron Pavalko of Florida State University and Vaughn Grisham of the University of Mississippi.

Richard F. Larson (Prof and Hd) reviewed Social Control of the Welfare State by Morris Janowitz and Mass Society and the Extension of Welfare 1960-70, by Kirsten Gronbjerg, both in Social Forces (Sept. 1978).

Dallas Owens (Asst Prof) co-chaired a session, "The Popular in Popular Culture: How Can It Be Defined and Determined?" at the annual convention of the Popular Culture Association of the South held in Nashville Oct. 8-10. He also read a co-authored paper, "A Model for Explaining Movie Popularity."

# MINUTES OF THE UNIVERSITY LIBRARY COMMITTEE MEETING, OCTOBER 9, 1978

Present: Harold N. Cooledge Jr., Alison C. Drews, Ann W. Baxter, John V. Hamby, Jack C. McCormac, Becky F. Campbell, Syed S. H. Rizvi, Garry Haehnle, Bill Smith, J. W. Gordon Gourlay, Dean C. B. Green, Ms. Rosemary A. Spadoni (chairperson, 1977-78)

Ms. Spadoni conducted the election of officers and reviewed the work of the Committee 1977-78.

Ann W. Baxter was elected chairperson; J. W. Gordon Gourlay, secretary.

#### Remarks by Dean Green

Dean Green spoke of the importance of the work of the University Library Committee, library expansion and the book budget. He noted that a Committee to Recommend Guidelines for the Classification and Promotion of Professional Librarians at Clemson University had been appointed and that this Committee was studying the systems used at libraries in several institutions. The professional librarians have for many years been members of the academic faculty.

#### Extension of Library Hours

Prior to the meeting, Library Hours Extension by Michael M. Ozburn, Student Body President, had been distributed to members of the University Library Committee. This statement by Mr. Ozburn was given priority for discussion. was the consensus of the Committee that the library remain open until twelve o'clock midnight Sunday through Thursday that circulation and reserve book room services be provided by library person but that there not be any special char; such as documents, microfiche, journal etc.; that a security officer be in the building from eleven o'clock until closing time and that he secure and lo the building.

It was the consensus also that the sit tion be re-evaluated when sufficient data had been made available.

Time of next meeting: Monday, November 13, 3:00 p.m., Classroom, Ground Floor of the Library.

J. W. Gordon Gourlay Secretary University Library Committee

#### MINUTES OF THE FACULTY SENATE

September 19, 1978

The Senate Chamber

## 1. Call to Order

The meeting was called to order by President Steirer at 3:36 p.m.

# 2. Approval of Minutes

Senator Fennell, Chairman of the Research Committee, moved for deletion of paragraph 2 under 3c. Research Committee concerning consulting policies. He stated that his committee is studying consulting policies in detail in all colleges, and that discussion at this time is premature. The motion to delete was approved unanimously.

# 3. Special Reports

President Steirer introduced Dean of Extension Sam Willis. Dean Willis explained that the Board of Trustees of Clemson University established within the Clemson University Foundation a permanent endowment of not less than \$1,000,000.00 to be known as the Robert Cook Edwards Endowment for Excellence in Science and Technology, the annual income from which is to be allocated by the Directors of the Foundation upon the basis of recommendations received from the President of Clemson University to include, but not be limited to, recommendations for graduate fellowships, scholarships, professorships, visiting professors, research and public service programs and continuing education, to the end that the excellence of the academic programs of the University will be enhanced, the economic life and well-being of the citizens of South Carolina and the nation will be improved, and the institution will become even more the "high seminary of learning" envisaged by its founder, Thomas Green Clemson. Dean Willis is the Campus Coordinator of the endowment.

President Steirer introduced Past Vice President Tom McInnis who spoke on behalf of The Faculty Club Planning Committee. He reported that approximately 160 have indicated that they are interested in a Faculty Club and have sent in donations of \$25 each. He stated that a minimum of 200 individuals are needed to start the club. [Secretary's note: Past President Ray Noblet informed me that the Development office has received 225 donations and that the fund now exceeds \$5000.] During a discussion the following points were brought out: A board of directors elected by the membership will run the club and make decisions on its operation; the club will be accessible to active Alumni and at least 300 members will be needed for a successful club.

# 4. <u>Committee Reports</u>

a. Admissions and Scholarship Committee - Senator Edie, Chairman, reported that the Admissions and Scholarship Committee met on September 5 and completed work on four resolutions (FS-78-9-1 through 4) which will be introduced under new business. Three of these resolutions deal with strengthening the University honors program.

To date the committee has received over 500 completed questionnaires from faculty on their final exam policies. Tabulation of the results is nearly complete. The next committee meeting will be October 3 at 3:30 PM in the library class room. Mr. Marvin Carmichael, the director of financial aid, will be invited to discuss the availability of student scholarships.

The committee plans to study the new Withdrawal Policy as amended.

b. Policy Committee - Senator West, Chairman, reported as follows:

The Faculty Senate Policy Committee held one full committee meeting, and two sub-committee meetings since the August Senate session. Reports from the Sub-committee dealing with 'Affirmative Action Committee' and 'Faculty Participation in the Selection of Academic Administrators' were reviewed. The committee chairman reviewed the meetings with Dean Hurst, Dean Willis, and President Steirer and their review of the proposed Faculty Constitution Revisions.

The policy committee does not suggest a rewrite of the Affirmative Actions Committee description (page 25, Faculty Manual). Work is underway to rework the policy dealing with 'Faculty Selection of Academic Administrators'. The committee is attempting to determine 'who' are academic administrators, and how selection committees are structured. The Faculty Senate Constitution-Revisions will be addressed under Old Business. No report on behalf of the sub-committee on public relations was presented.

c. Research Committee - Senator Fennell, Chairman, stated that the Research Committee did not meet during the past month. Current Studies: Research Support - the committee solicits faculty suggestions on methods to further improve University support of research, contact George Worm, Industrial Management, or Bob Fennell, Mathematical Sciences; Consulting Policy - College Deans are being queried with regard to individual college policies.

Senator Hester asked that the Research Committee request how much overhead is allotted to clerical help.

- d. Welfare Committee No report.
- e. Ad Hoc

University Marshal Committee - Chairman Dickey reported that the committee has recommended Dr. Clayton Aucoin, Professor of Mathematical Sciences and Industrial Management, be appointed as the next University Marshal.

- f. <u>University Councils and Committees</u>
  - (1) Undergraduate Council Senator Hipps reported that the following matters of concern to the Senate and faculty as a whole were dealt with at the September meeting of the UGC:

# Statement of Class policy

Recommendation that each professor prepare a <u>Statement of Class Policy</u> for the students in each course he teaches for distribution in writing to the students at the first class meeting was <u>defeated</u> by the Council after a long discussion. Opposition focused primarily on the legalistic ramification of having a <u>Written</u> policy requiring teachers to have a policy statement rather than the need for a statement of class policy itself.

# FS-78-2-3: Resolution on Use of Plus and Minus Final Grades

Ad hoc committee chaired by Judy Melton and including Gary Powell, Dean Vickery, and Kenneth Darr was appointed by Chairman Green to study resolution. Committee to report at November meeting.

# College of Architecture

Proposed changes in nomenclature to include College and Department in course prefix to permit a listing of all College of Architecture courses together in the University Catalog, i.e., CAVA; College of Architecture-Visual Arts. Proposal tabled until October meeting.

# (2) Graduate Council - Senator Edie filed the following report:

At the last Graduate Council meeting a number of new graduate courses were approved. Also, a report concerning the implementation of a cooperative education plan for graduate students was discussed.

At the request of the faculty of the College of Agricultural Sciences, a new college policy was discussed. The policy states that only experiment station projects (regardless of the source of support for the students) can be used for thesis or dissertation projects. The Graduate Council made the following statement on the subject:

"The Graduate Council has gone on record in expressing its concern with regard to the policy of Agricultural Sciences concerning research and invites graduate students and graduate faculty to bring to attention any specific cases in which graduate student research is being unduly restricted." Senator Edie requested that this policy be referred to the Research Committee for further study.

# President's Report

a. As you are well aware the Board of Trustees met this past Thursday and Friday. Several items relating to the Board should be of some interest to you.

(1) The Board passed the following item on Retirement Policy:

Statement: On October 29, 1956, in an Executive Session, the Board of Trustees adopted unanimously a retirement policy which stated in effect that, as of June 30, 1957, persons would normally be retired who had reached the age of 65 during the current fiscal year. Provisions were made whereby individuals could be employed on a year-to-year basis following their having reached the age of 65 during a given fiscal year, but the intent was clear to retire persons at the age of 65.

Due to recent changes in law and judicial holdings, such a policy will no longer be valid after January 1, 1979, inasmuch as it discriminates on the basis of age.

Recommendation of the Executive Committee: That the Board of Trustees rescind, effective January 1, 1979, the retirement policy adopted by the Board of Trustees on October 29, 1956; and that the Administration prepare a new retirement policy for consideration and adoption by the Board of Trustees at its next meeting.

(2) The figures presented below are the figures given to the Board on the academic capabilities of the entering freshmen class.

# SAT SCORES OF COLLEGE BOUND SOUTH CAROLINA HIGH SCHOOL SENIORS\*

<u>Verbal</u>			<u>M</u> a	<u>ith</u>
•	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
1976-77	382	369	433	388
1877-78	388	371	434	389

\*South Carolina Bound Seniors, College Board ATP Summary Report

# SAT SCORES OF ENROLLED FRESHMEN AT CLEMSON UNIVERSITY

<u>Verbal</u>			<u>Mat</u>	<u>h</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	
Fall 1977	460	461	543	497	
Fall 1978	467	472	545	508	

#### HIGH SCHOOL CLASS STANDING OF CLEMSON ENTERING FRESHMEN

Year	Top 10 Percent	Top 20 Percent	Top 50 Percent
1978	40 %	64 %	95 %
1977	35	62	95
1976	38	62	95
1975	33	58	93
1974	32	54	91
1973	30	53	91
1972	27	47	87

# SCHOLASTIC APTITUDE TEST (SAT) SCORES

National Senior Average Vs. Clemson Entering Freshmen Average

		_					
	1972	<u>1973</u>	1974	<u>1975</u>	1976	1977	<u>1978</u>
Clemson Average	995	982	975	983	996	985	1000
National Senior Average	937	926	924	906	903	899	897

- (3) The default rate on Federally-backed Student Loans has recently become a much-discussed item. The Board of Trustees was told proudly that Clemson's program for loan recovery is considered a model by HEW. The national default is 16.8% for 3019 institutions of higher learning, South Carolina's rate is 22.6% (38 institutions) while Clemson has a default rate of only 3.6%.
- (4) The Board will next meet on January 12 and 13. With your approval I will invite the Board to a reception on Friday evening, January 12 as we have done the past two years. I will arrange for the funding as well.
- b. In April, the Senate directed me to arrange a meeting with appropriate faculty members from all the state-supported institutions of higher education. No mechanism for such a meeting exists, but a start is being made. On October 13, Vice-President Dickey, Secretary Adkins, Senator Baron and myself will travel to Columbia to meet with officers of the USC Faculty Senate. We all hope that the sharing of information and concerns will produce meaningful results.
- c. Gordon Howard is the new Senator from Forest and Recreation Resources. Welcome!
- d. Thanks are due Senators Young and Whitten for accepting the last two committee assignments open to Faculty Senators. Senator Young will serve on the University Union Board and Senator Whitten on the Landscape and Site Development Committee.
- e. A last-ditch drive for membership in the Faculty/University Club is underway. An appeal has been sent to the members of the staff who were determined to be eligible at the last meeting of the Planning Committee in May. Frankly, if this appeal and continued efforts to get faculty members to join don't soon. show results the whole matter must be reevaluated. There has been an effort for approximately ten years to get a Faculty/University Club started. Never has that effort come both so close to succeeding and, yet, been further away.
- f. Vice-President Dickey and I found the trip on August 29-30 to the Experimental Stations both informative and entertaining. We were able to discuss matters of mutual concern with the faculty members at the stations. The trip that we will take on September 26-27 to Hobcaw should be of equal value.

- g. Your constituents appreciate the time and effort you are now spending on Senate business. Yet the kind of results that we all hope to see the Senate produce will require even more time and effort in committee assignments and preparation than previously the case.
- h. The article which appeared in the press on September 15 reporting that some 400 faculty members (other than Francis Marion College) received raises of 15-35% distorted and misrepresented the salary situation, but the best way of dealing with it is to ignore it. A later article on faculty salaries as information would be valuable.

#### 6. Old Business

- a. <u>Constitution</u> Senator West moved to go into a committee of the whole to consider the Revision of the Constitution of the Faculty of Clemson University for not more than one hour. The motion received a second and was approved unanimously. After the one hour period of discussion, the Senate resumed regular business.
- b. <u>University Marshal</u> Vice President Joe Dickey, Chairman of the Committee, moved that Dr. Clayton Aucoin, Professor of Mathematical Sciences, be appointed University Marshal. After a second the motion was approved unanimously.
- c. <u>FS-78-4-5</u> A discussion ensued on the Student Liability Insurance Coverage Resolution. President Steirer suggested that Senator Hood consult with the Student Senate on the implementation of this resolution.

# 7. New Business

The following four resolutions were introduced by Senator Bryant from the Admissions and Scholarship Committee:

FS-78-9-1 Honoring Gordon McCabe

Whereas the Board of Trustees of Clemson University has always been one of the University's greatest assets and

Whereas Trustee W. Gordon McCabe, Jr. served the University in the highest tradition as both a member of the Board of Trustees since 1960 and as chairman of the Educational Policy Subcommittee

Therefore, be it resolved that the faculty of Clemson University deeply regrets his passing. His guidance and interest in the University and its academic excellence will be missed.

[The motion to accept was seconded and was approved unanimously.]

FS-78-9-2 Publishing Honors Criteria

Whereas the requirements for graduation with honors, high honors and highest honors will change beginning in the Spring 1980 commencement and

Whereas graduation with departmental honors is a relatively new distinction

be it therefore resolved that the criteria for such honors at graduation should be published in the graduation program.

[The motion to accept was seconded and was approved unanimously.]

FS-78-9-3 Increase time available for Honors Program

Whereas the honors program at Clemson University today has grown to over two hundred undergraduate students and

Whereas the proper administration of this vital program and counseling of these students requires far more than the one-quarter time faculty position originally allotted,

be it therefore resolved that the university should fully support this program by increasing the faculty release time for administration of Clemson University's honor program.

[The motion to accept was seconded and was approved 15 to 12.]

FS-78-9-4 Honors Common Room

Whereas an active honors program both encourages scholarship in the student body and allows faculty to better teach gifted undergraduate students and

Whereas the honor students at Clemson University have requested that an honors common room be established

be it therefore resolved that the Faculty Senate of Clemson University supports the request for a common room in which honor students can meet, study and exchange ideas with invited faculty.

[The motion to accept was seconded but was not approved.]

Senator Hester introduced the following resolution and moved its acceptance:

FS-78-9-5 Endorsement of safety measures taken at pedestrian crosswalk to Clemson House.

Whereas the safety and well being of the University community is endangered by the present pedestrian crosswalk from the Campus to the Clemson House,

Be it hereby resolved that the Faculty Senate endorses the radar monitored speed limit enforcement, the efforts of the President of the University in his discussions with the Highway Department, and the proposed short term solution of improved lighting in the crosswalk area, and

Further strongly endorses a near term implementation of a pedestrian crosswalk scheme such as a stoplight(s), bridge(s), or tunnel(s) that will overtly separate pedestrian and automobile traffic.

[The motion to accept was seconded and was approved unanimously.]

Senator Flemming introduced the following resolution for Senator Coulter and moved its acceptance:

#### FS-78-9-6 Grade distribution

The 1977-78 Grade Distribution Report of the Office of Vice President for the Second Semester lists faculty members by name in reporting the grades given by them without taking into account variables such as the specific hours-to-grade ratios, special internship or activities courses, or the ratio between upper and lower division courses taught in a given semester; and

Whereas the result of ignoring these and other determining variables is often to create a false impression, not only of the real grading standards of the University, but also of the individual professor's own standards; and

Whereas this misinformation may become available to students as well as administrative judges of academic performance with the result of unjust damage to the reputations of professors; be it therefore resolved that

The Faculty Senate (1) deplores the collection and dissemination of the Grade Distribution Report, and (2) wishes to see the practice of collecting this information in the current manner to cease altogether.

[A motion was made by Senator Fennell to submit this resolution to the Admissions and Scholarship Committee for further study and recommendation. After a second this motion was approved unanimously.]

Senator West introduced the following resolution and moved its acceptance:

# FS-78-9-7 Retirement Policy

Whereas the Board of Trustees has rescinded the retirement policy established for Clemson University in 1956;

Whereas, the Board of Trustees has directed the Administration to prepare a new and suitable retirement policy for the Board's examination; and

Whereas, that policy will have a profound impact upon the Faculty of Clemson University; Be it therefore, resolved that a sufficient number of faculty representatives, including the president of the Faculty Senate, be included as participants in the process of drafting a new retirement policy; and Be it further resolved, that any retirement policy which will affect the Faculty of Clemson University and be included in the Faculty Manual receive the review and approval of the Faculty Senate.

[The motion to accept was seconded and was approved unanimously.]

Vice President Dickey introduced the following two resolutions and moved their acceptance:

### FS-78-9-8 Establishment of Committee on Protocol

Whereas there is need for a faculty standing committee to plan for ceremonial and social occasions in the academic life of the University and to maintain its traditions and symbols

be it therefore resolved that a Committee on Protocol, consisting of the University Marshal, the college marshals, and the vice president of the Senate, ex officio, be established to plan Faculty-sponsored social and ceremonial functions, to cooperate with University administrative officials in planning inaugural ceremonies, and to make recommendations for the preservation or modification of University historic and academic traditions and symbols, and

be it further resolved that, in keeping with the general practice among universities, a formal inaugural ceremony should be held to install the new President during the 1979-80 academic year.

[The motion to accept was seconded and was approved unanimously.]

FS-78-9-9 Social events to recognize President Edward's retirement and welcome the President-elect to campus.

Whereas President Edwards will retire and his successor will be named during the present academic year

be it therefore resolved that the Faculty should sponsor suitable social events before Commencement next May to recognize President Edward's retirement and to welcome the President-elect to the campus.

[The motion to accept was seconded and was approved unanimously.]

Senator Burt, Chairman of the Welfare Committee, introduced the following resolution and moved its acceptance:

FS-78-9-10 Commendation of Tiger Editor and Staff

Whereas, the Tiger in its recent report of funding in the University has rendered valuable service to the entire University community,

Be it resolved that the Faculty Senate commends the Tiger editor and staff for the timeliness and professionalism of their news coverage.

[The motion to accept received a second and was approved unanimously.]

8. The meeting adjourned at 6:05 p.m.

Respectfully submitted,

T. R. Adkins, Jr.

Secretary

#### Members absent:

A. R. Mazur (Agriculture) substitute present

B. R. Smith (Agriculture)

H. F. Senter (Sciences)

# Calendar of Campus Events

- 1 -- English Hour Lecture: "The Lyric Collection as Genre: Byron's Hebrew Melodies" by Dr. Frederick W. Shilstone. Sponsored by English Department, Strode Tower Lounge, 8 p.m., open to the public, no admission charge.
- 1,6 -- Seminar: "Utilities" Parts II and III. Sponsored by Academic Computing Support of the Computer Center, M-105 Martin Hall, 3:30 p.m. Open to the public, no admission charge. (1) Part II, (6) Part III. For more information, call 656-3466.
  - 2 -- Seminar: "Graphics I" Part II. Sponsored by Academic Computing Support of the Computer Center, M-105 Martin Hall, 3:30 p.m. Open to the public, no admission charge. For more information, call 656-3466.
  - 2 -- Seminar: "Role of Land Treatment of Wastewater in Environmental Quality" by Dr. Patrick Hunt, Research Leader, Coastal Plain Soil and Water Conservation Research Center, USDA-Science and Education Administration, Florence, S.C. Sponsored by Departments of Agricultural Engineering and Environmental Systems Engineering, 100 McAdams Hall, 4 p.m. Open to the public, no admission charge.
  - 3 -- Concert: University of Georgia Orchestra with Jane Palmer, piano soloist. Sponsored by Music Departments at Clemson University and Central Wesleyan College, Tillman Hall Auditorium, 8 p.m. Open to the public, no admission charge.
  - 3 -- Soccer: Virginia, here, 3 p.m.
- 3-4 -- Live Entertainment in Edgar's: Applewood. Sponsored by University Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
  - 4 -- Engineer-In-Training Examination. Part I of the written examination required for professional engineering registration. Sponsored by College of Engineering, 226 Riggs Hall, 7:30 a.m. 5 p.m.
  - 5 -- Soccer: Maryland, here, 2 p.m.
  - 6 -- Speech Night. Finals of Public speaking contest for English 301 students. Sponsored by Calhoun Forensic Society and English Department, Daniel Hall Auditorium, 7 p.m. Open to the public, no admission charge.
  - 6 -- Lecture: "Their Work" by James Nagle, Architect, Booth, Nagle & Hartrey, Chicago, IL. Sponsored by Clemson Architectural Foundation and College of Architecture, Lee Hall Auditorium, 8 p.m. Open to the public, no admission charge.
- 6-17 -- Art Exhibition: "Glenn Abbott, Weathered Wood Weavings." Sponsored by University Union, Union Gallery, 8 a.m. 5 p.m. Monday Saturday, noon 5 p.m. Sunday. Open to the public, no admission charge.

#### CALENDAR OF CAMPUS EVENTS (cont.)

- 6-27 -- Art Exhibitions: "Bill Owens Photographs" and "John Acorn Sculpture." The photography exhibit contains 50 photographs by the West Coast photographer most known for his photographic survey of middle America. In conjection with the photographs will be the recent laminated plywood sculptures of Acorn, chairman of the Visual Studies Department at Clemson. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 8 a.m. 4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
  - 7 -- November Nonsense. Sponsored by University Union, Bowman Field, noon 6 p.m. Open to students, faculty, staff and guests, no admission charge.
  - 7 -- Classes suspended for Election Day.
  - 7,9 -- Seminar: "Graphics II" Parts I and II. Sponsored by Academic Computing Support of the Computer Center, M-105 Martin Hall, 3:30 p.m. Open to the public, no charge. (7) Part 1, (9) Part II. For more information, call 656-3466.
    - 8 -- Concert: "The King of the Clarinet, Peanuts Hucko and His Jazz Five."
      Sponsored by the Clemson University Concert Series, Littlejohn Coliseum,
      8 p.m. Admission by season ticket, student use card, or individual tickets
      on sale at Gate 5. Open to the public.
- 9-10 -- Seminar: "Salesmanship: Principles and Techniques." Sponsored by Professional Development Office, call 656-2200 for more information.
  - 9 -- Clay Day. Sponsored by University Union, loggia, noon 4 p.m. Open to students, faculty, staff and guests, no admission charge.
- 10-11 -- Live Entertainment in Edgar's: Dan Tinen, harpsichordist and pianist.

  Sponsored by University Union, Edgar's, 9 p.m. Proof of age and University
  I.D. required, 50¢ admission charge.
- 10-11 -- Annual Meeting: State Section of the American Society of Agricultural Engineers. Sponsored by Agricultural Engineering Department, call Bob Williamson at 656-3250 for more information.
  - 11 -- Football: North Carolina (Parents' Day), here, 1 p.m.
  - 13 -- Spanish Film: "The Adventures of Juan Quin Quin." Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
  - 13 -- Seminar: "Graphics III." Sponsored by Academic Computing Support of the Computer Center, M-105 Martin Hall, 3:30 p.m. Open to the public, no charge. For more information, call 656-3466.
- 13-18 -- Drama: Night Must Fall. Presented by Clemson Players, Daniel Hall Auditorium, 8 p.m. except 3:30 p.m. matinee Thursday. Open to the public, no admission charge.

# CALENDAR OF CAMPUS EVENTS (cont.)

14 -- Seminar: "Tapes and Disks." Sponsored by Academic Computing Support of the Computer Center, M-105 Martin Hall, 3:30 p.m. Open to the public, no charge. For more information, call 656-3466.

#### SOLAR OPEN HOUSE

The Clemson University Housing Institute

invites faculty and staff

to preview two solar research and demonstration houses

near the site of the LaMaster Dairy Research Center

Cherry Road

Tuesday afternoon, November 14 from two to five o'clock in the afternoon

## PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) shoul be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted the written memorandum to Dr. Claud B. Green, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each mont must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY



Vol. 18 No. 7

November 15, 1978

SCUTH CARCINA FORM

#### LIBRARY HOURS EXTENDED

Extended hours for research and study began Nov. 5 at the Robert Muldrow Cooper Library. The library is now open until 1 a.m. Sunday through Thursday for a seven-month trial period, though the circulation and reserve desks will continue to close at 11 p.m.

During the trial period ending May 10, 1979, surveys will be conducted to determine the feasibility of the new hours.

Three security guards and one library employee will staff the building during the late hours.

Based on a proposal by the executive branch of student government, the new hours were approved Oct. 26 by the president's cabinet. Its final implementation was worked out in a recent meeting between vice-president for academic affairs Victor Hurst, library director Gordan Gourlay and student government officers.

"Previously the request had been for the circulation and reserve desk to remain open also," said Gourlay. "This is a new proposal. We are only keeping the library open longer and using the building and facility itself as a resource."

# THE TIGER NAMED ALL-AMERICAN AGAIN

The <u>Tiger</u> newspaper has reaped All-American college newspaper honors for the second straight semester.

Last spring's issues were awarded the honor in national competition conducted by the Associated Collegiate Press and the National Scholastic Press Association. The fall 1977 issues received the award earlier this year.

Each time, <u>The Tiger</u> won "marks of distinction" for news coverage and content, writing and editing, editorial leadership and opinion features, and physical appearance and visual communication.

Professional journalists who judged <u>The Tiger</u> called it "a well-designed, aggressive, interesting newspaper."

The Tiger was also named All-American in 1975 and has held the honor of being named South Carolina's best college newspaper each year since 1975 by the S.C. College Press Association.

#### ACCOUNTING AND FINANCE

Lawrence S. Clark (Asst Prof) was recently awarded the Certificate in Management Accounting by the Institute of Management Accounting of the National Association of Accountants. This certificate is a professional designation for Management Accountants and is awarded upon passing a series of uniform examinations and meeting specific educational and professional standards.

#### AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

J. C. Hite (Prof) has been appointed a member of the Research Committee of the American Water Pollution Control Federation. Prof. Hite will have responsibility for compiling the annual survey of literature on the economics of water pollution control.

Stephen Lilley (Vstg Asst Prof) presented a talk on "A Technique for Classifying

Age-Sex-Race Migration Rates" in a round table discussion at the Southern Regional Demographic Group annual meeting in San Antonio, TX, Oct. 11-13. Edward L. McLean (Prof), Paul E. Lovingood Jr. (USC), and Prof. Lilley are coinvestigators for this research.

#### AGRICULTURAL ENGINEERING

The Agricultural Engineering Department hosted the fall meeting of the South Carolina Section of the American Society of Agricultural Engineers at McAdams Hall Nov. 10 and 11. Darrell L. Roberts (Assoc Prof), program chairman for the event, presided at the technical session on "Communication -- Can I Be More Effective?"

Richard A. Spray (Assoc Prof) conducted a workshop and seminar in "Energy-Environment Simulation" for the Marketing Division of the Southeastern Electric Exchange at Miami, FL, Oct. 22-24. The Exchange membership consists of investerowned power companies from Maryland to Texas.

Joe M. Bunn (Prof) published a paper,
"Development of Bulk Curing Schedules
for Burley Tobacco," in the October
issue of <u>Tobacco</u> <u>Science</u> along with
co-authors Wiley H. Henson Jr. and
Linus R. Walton (Agricultural Engineers,
USDA-SEA, Univ of Kentucky).

#### **CHEMISTRY**

A. R. Pinder (Calhoun Prof) gave a seminar, "Mass Spectrometry in Organic Chemistry," at Presbyterian College, Clinton, Oct. 26.

R. A. Abramovitch (Prof & Hd) gave a seminar, "Electron Deficient Reactive Intermediates," at the University of North Carolina in Charlotte Oct. 25.

Keith McDowell (Assoc Prof) and Lynn Lewis (Grad Stu) have published a paper, "Frequency-Dependent Multipole Polarizabilities. II. Application of a Reduced Green's Function Formulation of TDHF Theory to the Helium Isoelectronic Sequence," in J. Chem. Phys., 69, 2269 (1978).

Prof. McDowell presented an invited talk, "A Review of Reduced Green's Function Theory in Quantum Mechanical Perturbation Theory," at the Southeastern Theoretical Chemistry Conference held at the University of Georgia Oct. 27.

#### ECONOMICS

Ralph D. Elliott (Assoc Prof and Dir of Prof Dev) has had an article on "An Alternative to the Comparability Concept for the Determination of Federal Pay Levels" published in <u>Business and Economic Perspectives</u>, University of Tennessee at Martin.

Rodney H. Mabry (Assoc Prof) and Holley H. Ulbrich (Assoc Prof) have published a paper, "Judicial Services: A Public or Private Good?" in the fall issue of the Review of Industrial Management and Textile Science.

Richard B. McKenzie (Prof) has published "The Ranking of Southern Departments of Economics: New Criteria and Further Evidence" in the Southern Economic Journal and Voter Apathy: The Economic Dimensions of a Growing Problem, National Dividend Foundation, Oct. 1978.

Prof. McKenzie also gave a speech Oct. 12 on consumer protection to the Upper South Carolina District Woman's Clubs.

#### ELEMENTARY AND SECONDARY EDUCATION

William Pennscott (Prof) attended the Southern Association for Counselor Educators and Supervisors Convention in Nashville, TN, where he was appointed to the College Student Development Counseling Committee and participated in a panel presentation entitled, "College Student Development Counseling: A Dialogue on Preparation."

Prof. Pennscott conducted a workshop on communication skills for CETA counselors

in Greenville County.

R. Ken Peden (Assoc Prof) presented a talk, "Environmental Education Strategies for Classroom Teachers," at the American School Health Association Convention in Dearborn, MI, Oct. 11-14. He was also elected to the ASHA Research Council for 1978-81.

#### ENTOMOLOGY AND ECONOMIC ZOOLOGY

S. B. Hays (Prof and Hd) attended and participated in the Southern Regional Committee for RPAR Data Gaps Research - research priority selection meeting held in Raleigh, NC, Aug. 21. Prof. Hays attended and participated in the Governing Board Meeting of the Entomological Society of America in St. Louis, MO, Aug. 23-25 as a newly elected member of the national governing board representing the Southeastern 13 states.

John A. DuRant (Assoc Prof), Donald G. Manley (Asst Prof), Prof. Hays and John A. Bass (Grad Res Asst) attended and participated in the boll weevil eradication meeting held in Elizabeth City, NC, Sept. 12-14.

- D. G. Manley (Asst Prof), J. B. Kissam (Prof), D. R. Johnson (Asst Prof), C. S. Gorsuch (Asst Prof), R. P. Griffin (Instr), and M. E. Gilreath (Vstg Instr) attended and participated in the Southern Region Plant Pathology and Entomology Workshop held in Knoxville, TN, Oct. 16-19.
- J. C. Morse (Assoc Prof) attended the 50th Anniversary Meeting of the Eastern Branch of the Entomological Society of America held in New York City, Sept. 27-29, at which he presented an invitational address on "Cladistic Methods in Comparative Entomology." While in New York, Prof. Morse also presented an invitational paper to the faculty of the Ameican Museum of Natural History entitled "A Technique for Analysis of Historical Biogeography and Other Characters in Comparative Biology."

Sam G. Turnipseed (Prof) and G. R. Carner

(Prof) attended and participated in the planning session for NSF pest management project held in Washington, DC, Oct. 17-19.

Prof. DuRant attended and participated in technology review for boll weevil eradication trial program held in Raleigh, NC, Oct. 17-18. He is a member of the State Research Subcommittee for this trial program.

Prof. Hays talked on "The Africanized Honey Bee and Its Implications for the Southeastern U.S." at the Pickens County Beekeepers Association meeting Sept. 27 from 8-10 p.m. in Long Hall.

T. R. Adkins Jr. (Prof) attended and participated in the carbaryl-RPAR impact assessment organizational meeting in Washington, DC, Oct. 23-26.

Jack M. Whetstone (Grad Res Asst) and A. G. Eversole (Assoc Prof) published a paper, "Predation on Hard Clams, Mercenaria mercenaria, by Mud Crabs, Panopeus herbstii," in the Proceedings of the National Shellfisheries Association 68: 42-48.

Vicki M. Ferguson (former Grad Res Asst) and Richard C. Fox (Prof) published a paper, "A Comparison of Aquatic Insects in Natural Inlets with Those in the Heated Effluent From the Oconee Nuclear Station - Littoral Zone," in the Journal of the Georgia Entomological Society.

#### **HISTORY**

Patricia Hill Buchanan (Prof) presented a paper, "Problems and Techniques of Biography Writing," at the Carolinas Symposium on British Studies held at Appalachia State University, Boone, NC, Oct. 21-22.

Charles H. Lippy (Asst Prof) was a guest lecturer Oct. 12 at the University of South Carolina. Under the auspices of the Department of Religious Studies, he spoke to a class and delivered a public lecture on "The President as Priest: Civil Religion and the Folklore of the American Presidency."

#### HISTORY AND VISUAL ARTS

Samuel Wang (Assoc Prof), Mike Vatalaro (Asst Prof), Tom Dimond (Media Specialist) and graduate students Terry Dimond, Jim Coates, and Alan MacTaggart were selected to have their work included in the 28th Annual Guild of South Carolina Artists' Exhibition Sept. 30 at the Columbia Museum of Art, McKissick Museum. This exhibition was sponsored by Senator and Mrs. Strom Thurmond and Senator and Mrs. Ernest F. Hollings.

Two of Sam Wang's photo-serigraphs were published in the Photography Annual 1979.

#### INDUSTRIAL EDUCATION

J. Page Crouch (Prof) served as chairman of the seventeenth annual South Eastern Industrial Arts Conference in Atlanta, GA, Oct. 5-7.

William E. West (Prof) read a paper and presented a report at that conference. He was also reelected to serve as SIAC secretary-treasurer for the 1978-1979 year.

Prof. West is one of 10 national leaders in industrial arts to be selected to serve as the National Advisory Committee to the "National Standards for Industrial Arts Education Programs" project. This USOE project, headquartered at Virginia Polytechnic Institute and State University, is to determine program standards for industrial arts education and will involve a three-year study of industrial arts education in the United States public education programs.

#### INDUSTRIAL MANAGEMENT

J. Michael McDonald (Asst Prof) chaired the session on "Managerial Decision Making" at the 14th Annual Meeting of the Southeastern Chapter of the Institute of Management Sciences in Atlanta, GA, Oct. 11-13.

Warren Menke (Prof) chaired the session on "Simulation Modeling and Analysis"

for the 14th Annual Southeast TIMS Meeting in Atlanta, GA, Oct. 12.

#### INFORMATION SYSTEMS DEVELOPMENT

John C. Peck (Dir) attended Cullinane Corporation's User Week '78 in Newport Beach, CA, Oct. 15-19. He presented a paper, "Active Use of the Integrated Data Dictionary in Information Systems," and chaired a meeting of Cullinane Corporation's Technical Advisory Committee.

#### MATHEMATICAL SCIENCES

The South Carolina Council of Teachers of Mathematics Fall Conference was held at Columbia College, Columbia, Oct. 27 and 28. John D. Fulton (Prof and Hd) presented a talk, "A Sampling of Career Experiences of Clemson Mathematical Sciences Alumni," and S. M. Lukawecki (Prof) presented the Mathematical Sciences Undergraduate Program. John Kenelly (Prof) arranged and chaired a panel discussion on "Teaching Techniques for AP Calculus."

T. G. Proctor (Prof) was chairman of a Contributed Papers Session at the Society for Industrial and Applied Mathematics Meeting in Knoxville, TN, Oct. 30-Nov. 1. The SIAM Education Committee also convened during this meeting to consider a list of projects including the publication of a Careers Booklet. Prof. Proctor is chairman of this committee.

Prof. Kenelly presented a workshop to the mathematics teachers of Rock Hill School District Number Three at Rock Hill Oct. 27.

John Luedeman (Assoc Prof) gave a CPR-Basic Life Support Course to the teachers of Oconee County on their in-service training day Oct. 27.

#### MUSIC

Edith B. Card (Asst Prof) discussed the Singing Schools and shaped note music reading with the Foxfire class at Rabun County High School, Clayton, GA, Oct. 3.

She also met with the student committee and advisors of Foxfire Books as consultant on music for a forthcoming issue.

#### PHYSICS AND ASTRONOMY

Beverly B. Bookmyer (Prof) and William C. Maddox (Grad Stu) contributed a paper, "Orbital Analysis of RW Tauri," delivered by Mr. Maddox at the meeting of SESAPS held in Blacksburg, VA, Oct. 26-28.

Other participants in the SESAPS meeting were:

A. L. Laskar (Prof) presented the following two papers, co-authored by W. J. Mealing Jr. (Former Grad Stu): "Diffusion of Silver in Rubidium Azide" and "Ionic Thermo-Current in Impurity-doped KN3 and RbN3."

H. W. Graben (Prof), W. E. Gettys (Prof) and K. N. Chang (Former Grad Stu) presented a paper, "Atomic Helium Four Bound State Trimer."

Max D. Sherrill (Prof) participated in the symposium on Solid State Physics and presented an invited paper, "Cylindrical Josephson Tunneling."

M. J. Skove (Alumni Prof), E. P. Stillwell (Prof) and J. W. Cook Jr. (Former Grad Stu) presented a paper, "On the Resistance of a Bent Single Crystal Whisker."

T. O. Walker (Vstg Instr) and Prof. Sherrill presented a paper, "Galvanomagnetic and Electric Field Effect Measurements on Polycrystalline Bismuth Films."

M. Bhushan (Grad Stu) presented a paper co-authored by Prof. Sherrill entitled "Measurement of Josephson Current in Cylindrical Junctions."

#### PROFESSIONAL DEVELOPMENT

Thomas B. Maertens (Instr, IM) will chair a seminar, "Supervisory and Foremanship Skills," which will be held Nov. 28-29 at Clemson.

Thomas W. Zimmerer (Prof, IM) will be chairperson for a seminar, "Managing the Training Function," which is to be held here Nov. 30 and Dec. 1.

Claude S. Simpson Jr. (Instr, IM) is to chair the "Advanced Training Techniques Workshop" which will be held Nov. 28-29 at Clemson.

#### RECREATION AND PARK ADMINISTRATION

Paul Richard Saunders (Vstg Instr) presented a paper, "Use of U. S. Forest Service Permanent Plot Data to Predict Rural Recreation Potential," at the 1978 Leisure Research Symposium and National Recreation and Park Association Congress held in Miami Beach, FL, Oct. 13-19.

Dick Conover (Asst Prof) and Instr. Saunders participated in the Tri-State Conference on Coastal Recreation sponsored by NOAA, Department of Commerce, held in Myrtle Beach, Oct. 23-24. They are also reviewing the management plans for the South Carolina Coastal Council.

Lawrence W. Gahan (Prof) was installed as 1978-1979 president at the 33rd Annual Conference of the South Carolina Recreation and Park Society held in Myrtle Beach Oct. 1-3. Prof. Gahan served as the annual conference program chairman during 1977-1978.

Prof. Gahan was elected vice president of the Citizens - Board Members branch of the National Recreation and Park Association during the annual Congress for Recreation and Parks held in Miami Beach, FL, Oct. 14-18. He also co-chaired an educational session on citizen-board member training and seved as a panelist for a session entitled "What Your Pro Expects From the Board Member and What Your Board Member Expects From the Pro." Prof. Gahan just completed a three-year term at the end of the Congress as a member of the Board of Trustees of The National Recreation and Park Association.

Jack Stevenson (Prof) led four workshops

in "Role Play for Professionals in the Tourist Industry" for the Charleston Travel Industry's Fourth Annual Conference Oct. 27 at the Mills Hyatt House. Prof. Stevenson also led an invited workshop on "Interpersonal Communication: You Make the Difference" at the National Recreation and Park Association Annual Congress in Miami Oct. 18.

#### **TEXTILES**

Edward S. Olson (Prof) chaired a meeting of the Palmetto Section, AATCC in Rock Hill, Oct. 13-14. The session was on "Energy Conservation Using Unstable Foams."

Christine W. Jarvis (Asst Prof) presented a paper, "A Dynamic Investigation of the Relationships Among Binder Adhesion, Deformation and Tensile Properties of Polyester Nonwoven Fabrics," authored by Edward A. Vaughn (Hd) and R. C. Brannon (Grad Stu), at the 1978 TAPPI meeting held Sept. 25-27 in Orlando, FL.

# MINUTES OF THE UNIVERSITY AUDIO VISUAL COMMITTEE MEETING, SEPTEMBER 28, 1978

Present: W. H. Owens, B. R. Smith, W. H. Durham, S. W. Thompson, A. C. Groseclose, T. E. Burke, W. A. Shain, T. F. Collins.

Chairman Owens called the meeting to order at 12:25 p.m.

The minutes of the April 24, 1978, meeting were approved as presented.

Chairman Owens reviewed the Committee's projects for last year and expressed his appreciation to the subcommittee members for their participation. Those projects were:

- (1) Open house of the audio-visual laboratories on the campus
- (2) Audio-visual equipment display at the Clemson House
- (3) Communications Center evaluation.

The receipt of a final report from J. H. Jenkins, chairman of the Equipment Display Subcommittee, was acknowledged with appreciation from Chairman Owens.

Chairman Owens read excerpts of letters from Vice President Nicholas and Dean Victor Hurst concerning the Communications Center evaluation report that had been sent to them.

After a general discussion it was agreed that the equipment display and the open house, in some form, would be repeated this year. There was general agreement that the Communications Center Evaluation should be held on a bi-annual basis. Several locations for the equipment display were discussed including the Forest and Recreation Resources Building, the Plant and Animal Science Building and the Loggia and Ballroom in the student center.

T. E. Burke moved that the committee focus on one program that would combine the equipment display and the audio-visual open house; the combined activity would be called "Communications Carnival." The motion was seconded and passed unanimously. It was agreed that this was a big project and should be the only one for the year.

Chairman Owens then passed out a list so that each committee member could indicate the part of the "Carnival" in which he or she would like to take part.

After deciding that the lunch hour was a convenient time and that the next meeting would be Oct. 26, 1978, the meeting was adjourned.

# MINUTES OF THE COUNCIL OF ACADEMIC DEANS MEETING, SEPTEMBER 18, 1978

The Council of Academic Deans met Sept. 18, 1978, in the Horticulture Conference Room in the Plant and Animal Science Building. Dean Hurst called the meeting to order at 9 a.m. with the following persons present: Dean Anderson, Dean McClure, Dr. E. J. Kozma (for Dean Landrith), Dean Wilcox, Dean Box, Dean

Trevillian, Dr. R. F. Larson (for Dean Cox), Dean Labecki, Dean Vogel, Dean Green, Dean Schwartz, Dean Willis, and Dr. Steirer. Also attending briefly were President Edwards, Mr. Melvin Long, Vice President Barnette, Mr. George Alexander, Mr. Terry Ivester, and Dr. Ray Noblet.

President Edwards briefly addressed the deans regarding various academic matters. He made particular mention of the action by the Board of Trustees at its Sept. 15 meeting in which they directed that the retirement policy that has been in effect since 1956 be rescinded effective Jan. 1, 1979. Due to recent changes in federal law, this policy will no longer be valid inasmuch as it discriminates on the basis of age. The administration was directed by the Board of Trustees to prepare a new retirement policy for consideration and adoption by the Board of Trustees at its next meeting.

Mr. Barnette advised the group that he has appointed Mr. Walter D. Stone, Jr. as the new director of the Physical Plant, effective Oct. 16, 1978. Mr. Barnette expressed his appreciation to the deans for their patience in getting through a difficult summer while he was acting director. He stated that Mr. Stone at first will need to devote his full attention to his immediate job, but that later he will be meeting with the deans and others to determine their needs. Mr. Barnette stressed that communications will be kept open between the Physical Plant and the academic area.

Dr. Noblet informed the deans that the progress toward the establishment of a Faculty Club has been slower than they had hoped. He said that only 155 persons had joined and that in order to meet the \$5,000 Alumni challenge grant, at least 200 persons need to indicate an interest. He requested the help of the deans in supporting the membership drive.

Mr. George Alexander and Mr. Terry Ivester from the Division of Administrative Programming Services (DAPS) presented slides outlining the concepts of a student data base that could serve the academic area as well as other administrative areas. Mr. Alexander solicited input from the deans in this regard and distributed a "Student Information Questionnaire" for them to complete and return to him, indicating what types of information would be helpful to them. He announced that a Student Data Base Committee consisting of Col. Marx, Mr. Jerry Jordan, Mr. Terry Ivester, and Mr. John Trice had been appointed to develop Phase I (Scope).

The deans discussed the following proposed "Withdrawal from Class Policy for Undergraduates":

- a. That the first seven weeks of a semester constitute a free drop period. Courses dropped during this period are not recorded on the student's permanent record.
- That a student enrolled in a class after the first seven weeks of classes shall have final grades recorded unless the student withdraws from the University or can demonstrate to the Dean of Undergraduate or Graduate Studies confirmable extenuating circumstances why the student should be allowed to withdraw from that course. Students withdrawing from the University in the last five weeks of classes shall have final grades recorded. Instructors may dismiss a student from class for cause at any time. Students so dismissed during the last five weeks of classes shall recieve a grade of "F."

This proposed policy was approved by the deans, and Dr. Steirer was asked to take it back to the Faculty Senate for their review inasmuch as changes have been made since the policy was first initiated.

Dean Hurst cautioned the deans that when appointing committees for the selection of academic administrators they should check with Dean Willis (Affirmative Action Coordinator for the Academic Area) to be sure that they are in compliance with Affirmative Action guidelines before proceeding with the filling of these positions.

Dean Hurst requested that proposals for the Alumni Visiting Professorship for 1979-80 be submitted to his office by Nov. 15, 1978. He advised the deans that they could request the position for their college without having a particular person in mind to fill the position.

Dean Willis made the following announcements:

- 1. Reminded the deans to send Dual Employment forms through channels.
- 2. Stated that there are two regulations relative to the hiring of Foreign Nationals in permanent and temporary positions: Sections 655 and 656 of Title 20 of the Code of Federal Regulations.

  Mr. Otis Nelson, Director of the International Services Office, is familiar with these regulations and is reponsible for providing on-campus clearance for these persons to work.
- 3. In appointing persons to Graduate Assistantships, he asked the deans to caution their departments to exercise more care in indicating the proper source of funds, employment status, and object codes.
- 4. When an employee is to receive a

marginal review, there is now a State Personnel requirement that this person receive a 30-day advance written notice of such review. Our Personnel Division has sent out a letter to this effect dated September 5, 1978.

- 5. During the month of October we will set about to review our Affirmative Action plan and therefore will be setting new goals.
- 6. The Board of Trustees and the Clemson University Foundation have approved the "Robert C. Edwards Endowment for Excellence in Science and Technology."

Dean Green distributed enrollment figures for Summer School showing comparisons over a 10-year period of the numbers of students and the Credit Hour Production for each year.

Several items were distributed from the Office of Admissions and Registration relative to Preliminary Grade Reports, Fall Semester Enrollments, Undergraduate Student Enrollment comparisons, and SAT scores.

Respectfully submitted,

Annette H. Kesler

3 cr (2,3)

Clemson University
Clemson, South Carolina

#### MINUTES

of the meeting of

#### THE EDUCATIONAL COUNCIL

August 7, 1978

#### Present: Robert C. Edwards, presiding

Ben W. Anderson
Luther P. Anderson
Melvin E. Barnette
Benton H. Box
J. D. Davenport
J. F. Dickey
J. W. Gordon Gourlay
Victor Hurst
Geraldine Labecki
Harold F. Landrith

Melvin C.Long
Harlan E. McClure
Joseph B. McDevitt
Stanley G. Nicholas
A. E. Schwartz
Wallace D. Trevillian
K. N. Vickery
Henry E. Vogel
Lyle C. Wilcox
S. M. Willis
E. N. Tyndall, Secretary

#### 1. Minutes

The minutes of the meeting of April 3, 1978, were approved as submitted.

#### 2. Academic Matters by Colleges:

<u>Statement and Recommendations</u>: The Dean of the University recommended the following:

#### A. COLLEGE OF AGRICULTURAL SCIENCES

## (1) New Undergraduate Courses:

DySc	400	Cultured Dairy Products	3 cr	(2,3)
RS	471	Demography	3 cr	(3,0)

#### (2) New Graduate Courses:

600

DySc

AgEc	810	Water	& Marine	Resources	Management	3	cr (3,0)	)
		&	Policy					

Cultured Dairy Products

# (COLLEGE OF AGRICULTURAL SCIENCE)

(cont	inued	New	Graduate Courses)	
	PlPa	803	Fungal Plant Pathogens	4 cr (3,3)
	RS	671	Demography	3 cr (3,0)
	в. со	LLEGE OF	ARCHITÉCTURE	
(1)	Reinstat	ement of	Undergraduate Courses:	
	ААН	427	Eighteenth Century Visual Arts	3 cr (3,0)
	AAH	428	Nineteenth Century Visual Arts	3 cr (3,0)
(2)	Reinstat	ement of	Graduate Courses:	
	ААН	627	Eighteenth Century Visual Arts	3 cr (3,0)
	AAH	628	Nineteenth Century Visual Arts	3 cr (3,0)
	В. со	LLEGE OF	'ENGINEERING	
(1)	New Grad	uate Cou	urse:	
	ChE	815	Polymer Engineering Laboratory	3 cr (2,3)
(2)	Graduate	Course	Changes:	
	CE	801	Matrix Methods of Structural Analysis (Title, prerequisite, and description change)	3 cr (3,0)
	CE	802	Prestressed Concrete Analysis and Design (Description change)	3 cr (3,0)
	CE	803	Reinforced Concrete Structural Systems (Description change)	3 cr (3,0)
	CE	804	Theory and Design of Thin Plates (Description and prerequisite change)	3 cr (3,0)
	CE	805	Plastic Analysis and Design of Steel Structures (Title, description, and prerequisite cham	3 cr (3,0)
	CE	806	Metal Compression Members (Title, prerequisite, & description change	3 cr (3,0)
	CE	807	Numerical and Approximate Methods of Structural Analysis (Description and prerequisite change)	3 cr (3,0)

# (COLLEGE OF ENGINEERING)

(Cont	inued	. <u>Gra</u>	duate Course Change)		
	CE	808	Finite Element Method in Engineering (Title and description change)	3 cr	(3,0)
	CE	901	Theory and Design of Shell Structures (Title, prerequisite, & description change)	3 cr	(3,0)
	CE	902	Dynamic Analysis of Structures (Title, description, & prerequisite change)	3 cr	(3,0)
	ME	809	Thermal Systems (Description & prerequisite change)	3 cr	(3,0)
	ME	816	Energy Conversion (Description & prerequisite change)	3 cr	(3,0)
	D. CO	LLEGE	OF FOREST & RECREATION RESOURCES		
(1)	New Unde	rgradu	nate Courses:		
	For	312	Reproduction of Forest Trees	2 cr	(1,3)
	LS	130	Alpine Skiing	1 cr	(0,45)
(2)	New Grad	uate C	Courses:		
	For	805	Advanced Silviculture I - Forest Soils	3 cr	(3,0)
	For	806	Advanced Silviculture II - Forest Tree Growth & Development	3 cr	(3,0)
(3)	Undergra	ıduate	Course Change:		
	For	205	Dendrology (Description change)	4 cr	(3,3)
	For	418	Forest Valuation (Prerequisite change)	3 cr	(3,0)
(4)	Graduate	Cours	se Change:		
	For	618	Forest Valuation (Prerequisite change)	3 cr	(3,0)
(5)	Curricul	Lum Rev	vision: Effective, Fall 1978		

(5) <u>Curriculum Revision</u>: <u>Effective</u>, Fall 1978

Forest Management

#### E. COLLEGE OF INDUSTRIAL MANAGEMENT & TEXTILE SCIENCE

(1) New Undergraduate Courses:

Acct 101 Accounting and Finance Orientation 1 cr (1,0)

Econ 101 Economics in Our Times 1 cr (1,0)

(2) Curriculum Revision: Effective, Fall 1978

Bachelor of Science in Economics

(ATTACHMENT 2), pgs. 16-19

(3) Curriculum Revision: Effective, Fall 1978

Bachelor of Arts in Economics

(a) Change Note which reads: Note: Those seeking teacher certification will be required to complete more than 130 semester hours.

Twenty-four semester hours above the sophomore level are required, including Econ 314 and 407. (Econ 314 should be scheduled to follow immediately after Econ 202.) Courses also must include 9 semester hours to be selected from Econ 302, 399, 403, 404, 410, 412, 420, and 424. The remaining hours may be selected from Ag Ec 456, Econ 301, 302, 305, 306, 308, 309, 399, 403, 404, 408, 410, 412, 419, 420, 421, 422, 424, Ex St 462, Hist 306, IM 404, 405, 406, Mgt Sc 311, SE 484.

To read: Note: Those seeking teacher certification will be required to complete more than 130 semester hours.

Twenty-four semester hours above the sophomore level are required, including Econ 314 and 407. Econ 101, 203 do not count toward the major. Hours for the major may also include Hist. 306, IM 404, 405, 406, Mgt. Sc 311, and SE 484.

(b) Delete Footnote #2 which reads: The sequence Math 101, 102, 203, 106 may be replaced by Math 106, 108, 301, or by Math 106, 108, Ex St 301.

Replace with this statement: <sup>2</sup>The sequence Math 101, 102, 203, 106 may be replaced by Math 106, 108, 301.

F. COLLEGE OF LIBERAL ARTS

#### (1) New Graduate Course:

Psych 623 Theories of Personality

#### G. COLLEGE OF NURSING

12 1		** 1		
(T)	New	Under	graduate	Course:

Nurs 440 Nursing Care of the High-Risk Maternity 4 cr (2,6)
Client and Her Infant

## (2) Undergraduate Course Deletion:

Nurs 436 Nursing Care of the Acutely Injured 4 cr (2,6)
Person

H COLLEGE OF SCIENCES

#### (1) Undergraduate Course Changes:

CompSc	422	Systems (Number	Programming change)	3	cr	(3,0)
CompSc	481	Special (Credit	Topics in Computer Science change)	1-3	cr	(1-3,0)
Math	402/H402	~	of Probability uisite change)	3	cr	(3,0)

## (2) <u>Undergraduate Course Deletion</u>:

CompSc 322 Systems Programming 3 cr (3,0)

#### (3) New Graduate Course:

CompSc 622 Systems Programming 3 cr (3,0)

#### (4) Graduate Course Changes:

Math	602	Theory of Probability (Prerequisite change)	3 cr (3,0)
Math	701	Number Systems for the Elementary Grades (Title & description change)	3 cr (3,0)
Math	702	Number Systems for the Middle Grades (Title and description change)	3 cr (3,0)

#### (5) Curriculum Revision: Effective, Fall 1978

Mathmatical Science

(ATTACHMENT 3), p. 20

(Continued . . . COLLEGE OF SCIENCES

#### (6) Curriculum Revision: Effective, Fall 1978

(a) Minor Concentrations

<u>Change</u>: "Cluster Minor", Group I Social Sciences to: <u>Economics</u>, History, Political Science, Psychology, Sociology, Geography.

(b) Botany - Pregraduate School Molecular Option

Add: Geography as an elective in social sciences.

Action: Approved

#### 3. Memoranda of Agreement - 2/2 and 3/2 Programs

Statement and Recommendations: The Dean of the University recommended approval of the "2/2" and "3/2" Guidelines which are contained in ATTACHMENT 4, pages 21-22 and ATTACHMENT 5, pages 23-24, respectively.

Action: Approved

E. N. Tyndall. Secretary

Effective: Fall 1978

## FOREST MANAGEMENT

#### Senior Year

First Semester		Second Semester		
For 417 Forest Mgt. and Reg. For 420 Forest Products P1PA 405 Forest Pathology Po1Sc 101 Amer. Natl. Govt. Emphasis Area	4 (3,3) 2 (2,0) 3 (2,3) 3 (3,0) 6	For 401 Logging and Milling For 412 Forest Protection For 414 Management Plans For 416 Forest Policy and Adm. For 418 Forest Valuation Elective <sup>2</sup>	3 (2,3) 2 (2,0) 1 (0,3) 2 (2,0) 3 (3,0) 6 17	
	18		1/	

<sup>&</sup>lt;sup>2</sup>Any 300-400 level course or as specifically approved by class advisor.

Effective: Fall 1978

#### BACHELOR OF SCIENCE DEGREE IN ECONOMICS

First Semester	Freshman Year	Second Semester	
Engl 101 English Composition Hist 172 Western Civilization Math 102 Introduction to Math Analysis  Acct 201 Principles of Acct. Natural Science* Elective	3 (3,0)	Engl 102 English Composition Hist 173 Western Civilization Math 101 Finite Probability Acct 202 Principles of Acct. Natural Science* Elective	3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 3-4 1
	Sophomore Yea	<u>r</u>	
Econ 201 Principles of Econ. Literature Requirements <sup>2</sup> Social Science Elective Math 106 Cal. of One Var. I Elective	3 (3,0) 3 (3,0) 3 4 (4,0) 4	Econ 202 Principles of Econ. Literature Requirements <sup>2</sup> Social Science Elective Fin 306 Corp. Finance Elective	3 (3,0) 3 (3,0) 3 3 (3,0) 4 16
	Junior Year		
Econ 314 Inter. Econ. Theory Law 312 Commercial Law or Law 322 Legal Envo. of Busi. CompSC 205 Elementary Comp. Programming Option Major	3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 3 3	Econ 407 National Income & Emp. Analysis  Major Math 203 Ele. Stat. Inference or Math 301 Stat. Theory & Methods I  Option Elective	3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0)
	Senior Year		
Major Option Approved Electives	6 6 6 18	Major Option Approved Electives	6 5-3 6-10 17-19

TOTAL SEMESTER HOURS = 132

\*Excluding Physical Science 101 & 102 Social Science electives should be chosen from Geography 101, 301, 302, History 101, 102, 301, Political Science 101, 201, 301, Psych 201, 302, Soc 201, 202, 324, 351.

 $<sup>^{1}</sup>$ Math 101, 102, 106, may be replaced by Math 106, 108, 206.  $^{2}$ Courses to be selected from English 202, 203, 204, 205, 206, 207, 208, & 209.

Courses acceptable for major credit include all 300 and 400 level economics courses, Hist 306, IM 404, 405, 406, MGT SC 311, SE 484.

B.S. in Economics - College of IM & TS

Effective: Fall 1978

# Bachelor of Science in Economics

#### Options

# Accounting Option

Acct	301	Intermediate Accounting	3 (3,0)
Acct	302	Intermediate Accounting	3 (3,0)
Law	313	Commercial law	3 (3,0)
Acct	303	Cost Accounting and	3 (3,0)
Acct	305	Income Taxation	3 (3,0)
		or	
Acct	411	Advanced Accounting and	3 (3,0)
Acct	415	Auditing	<u>3</u> (3,0)
			15

#### Computer Science

CompSc	308	Data Processing for Business	
		Applications	3 (3,0)
CompSc	409	Introduction to Numerical Analysis I	3 (3,0)
CompSc	410	Introduction to Numerical Analysis II	3 (3,0)
Math	208	Engineering Math. I	4 (4,0)
MgtSc	311	Introduction to Econometrics	3 (3,0)
			16

#### Environmental Studies

CRD	357	Natural Resources Economics	3 (3,0)
AgEcon	403	Land Economics	3 (3,0)
EnSc	471	Man and His Environment	2 (2,0)
WRE	450	Water Resources Engineering	3 (3,0)
Bot	145	Environmental Dynamics	2 (2,0)
EnSc	472	Environmental Planning & Control	2 (2,0)
			15

#### Management Science

MgtSc	311	Introduction to Econometrics	3 (3,0)
MgtSc	413	Management Science I	3 (3,0)
MgtSc	414	Statistical Analysis	3 (3,0)
IM	404	Managerial Economics	3 (3,0)
Acct	303	Cost Accounting	3 (3,0)
		or	
Acct	305	Income Taxation	3 (3,0)
		or	
Law	313	Commercial Law	<u>3</u> (3,0)
			15

(CONTINUED Next Page)

# (Continued . . . ATTACHMENT 2) B.S. in Economics - College of IM & TS

# Options

		Mathematical SciencesStatistics	
Math Math Math Math Math	108 206 405 411 452	Cal. of One Var. II Calculus of Sev. Var. Stat. Theory and Meth. II Linear Algebra Linear Programming	4 (4,0) 4 (4,0) 3 (3,0) 3 (3,0) 3 (3,0) 17
		Public Administration*	
PolSc PolSc PolSc PolSc	302 321 341 422 423	State and local Government Gen. Public Admin. Pol. Sci. Meth. Prob. of Pub. Admin. Municipal Admin.	3 (3,0) 3 (3,0) 3 (2,1) 3 (3,0) 3 (3,0) 15
		Social Science**	
Hist PolSc	306 321	Amer. Econ. Development Gen. Public Administration or	3 (3,0) 3 (3,0)
PolSc Soc Elective	361 351	Inter. Politics Industrial Sociology	$ \begin{array}{c} 3 & (3,0) \\ 3 & (3,0) \\ \underline{6} \\ 15 \end{array} $
		<u>Textile Science</u>	
Text Text Text Text Text Text Text	122 305 306 313 314 475	Intro. to Textiles Basic Fibers Yarn Formation Fabric Formation Dyeing and Finishing Textile Marketing	2 (1,3) 3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0)
		<u>Urban Studies</u>	
CRP CRP CRP Soc	411 412 421 206 331	Intro. to City and Regional Planning City and Regional Planning Theory Urban Social Structure Intro. to Methods of Sociological Research Urban Sociology	3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0)
			15

(Continued . . . ATTACHMENT 2)
B.S. in Economics - College of IM & TS

Change Note which reads: Note: Twenty-four semester hours above the sophomore level are required, including Econ 314 and 407. (Econ 314 should be scheduled to follow immediately after Econ 202. Courses also must include 9 semester hours to be selected from Econ 302, 403, 404, 410, 412, and 420. The remaining hours must be selected from Ag Ec 456, Econ 301, 302, 305, 306, 309, 403, 404, 410, 412, 419, 420, 421, 422, 424, Ex St 462, Hist 306, IM 404, 405, 406, Mgt Sc 311, SE 484.

To read: Note: Twenty-four semester hours above the sophomore level are required, including Econ 314 and 407. Econ 101, 203, do not count toward the major. Hours for the major may also include Hist. 306, IM 404, 405, 406, Mgt Sc. 311, and SE 484.

<sup>\*</sup> Pol. Sc 101, 201 are required; Econ 420 and Econ 421 are to be included in major.

<sup>\*\*</sup> Electives in this option to be selected from 300 and 400 level courses in history, political science, psychology, and sociology.

<sup>+</sup> Students electing this option should select Law 312 rather than Law 322.

Effective: Fall 1978

# B.S. Degree

#### MATHEMATICAL SCIENCES

# Freshman Year

First Semester			,	Second Semester					
СН	101	General Chemistry	4	(3,3)	СН	102	General Chemistry	4	(3,3)
CompSC	205	Elem. Comp. Prog.	3	(3,0)	Econ	201	Principles of Econ. <sup>2</sup>	3	(3,0)
Eng1	101	English Composition	3	(3,0)	Eng1	102	English Composition	3	(3,0)
Hist	172	or 173 West. Civ. <sup>2</sup>	3	(3,0)	Math	108	Cal of One Var II	4	(4,0)
Math	106	Cal. of One Var. I	4	(4,0)	Elect	ive <sup>2</sup>		3	
			17					17	

2/2 Program

Memorandum	of	Agreement	Between	Clemson
Univers	sity	and		

agriculture, engineering, forestry, nursing, etc., may, upon successful completion of an approved pre-professional curriculum transfer to Clemson University to complete requirements for the Bachelor of Science Degree. The faculty of the College at Clemson responsible for the specific degree program will recommend a course of pre-professional study equivalent to the first two years of non-professional subjects required by that College as prerequisite to their major. The details of the program and the understanding are as follows:

- Two-year pre-professional curriculum will be established at \_\_\_\_\_\_. This curriculum shall consist of a freshman and a sophomore year as recommended at the beginning of each academic year and which will reflect curriculum changes enacted during the previous year. The respective courses will have the appropriate department approval.
- 2. Upon admission to \_\_\_\_\_\_\_, the student participating in a pre-professional program must send a letter of intent to enroll to the Dean of the respective College at Clemson University in which the program of choice is offered.
  The Dean will appoint an academic advisor for the student.
- 3. The student will apply to Clemson University Office of Admissions after the completion of the first academic year for admission after the completion of the second academic year. Upon completion of the professional curriculum at Clemson University the student will be awarded a Bachelor of Science from Clemson University.

(Attachment 4) 2/2 Program

- 4. Credit for courses in the approved pre-professional curriculum at

  passed with a grade of "C" or higher will be
  transferred to Clemson University in the Bachelor of Science Degree
  program provided the student meets current admission standards at
  Clemson University.
- students in the pre-professional curriculum with all matters related to their transfer to Clemson University. The Dean of each College involved in the joint program or a duly appointed representative, at Clemson University, will cooperate in the counseling of these students.
- 6. An Interagency conference of participating institutions will be held annually to review curriculum.

3/2 Program

Memorandum	of	Agreement	Between	Clemson
Univers	sity	y and		

Students enrolled atinterested in a Liberal Arts program
and in preparation for a career in engineering, nursing, forestry, etc.,
may, upon successful completion of an approved three year program in a
Liberal Arts pre-professional curriculum transfer to Clemson University
to complete requirements for the Bachelor of Science Degree from Clemson
and the Bachelor of Arts Degree from The Faculty of
the College at Clemson responsible for the specific degree program will
recommend a course of study equivalent to the first two years of non-
professional subjects required by that College as prerequisite to their
major. The details of the program and the understanding are as follows:
1. Three-year Liberal Arts pre-professional curriculum will be established
at This curriculum shall consist of the first two
years of non-professional subjects as recommended at the beginning of
each academic year and which will reflect curriculum changes enacted
during the previous year. The respective courses will have the appropriate
department approval.
2. Upon admission to, a student participating in a Liberal
Arts pre-professional program must send a letter of intent to enroll to
the Dean of the respective College at Clemson University in which the
program of choice is offered. The Dean will appoint an academic advisor
for the student.
3. The student will apply to Clemson University Office of Admissions after the
completion of the second academic year for admission after the completion of
the third academic year. Upon completion of the professional curriculum at
Clemson University the student will be awarded a Bachelor of Science Degree
from Clemson University and the Bachelor of Arts Degree from

(continued -- next page)

(Attachment 5) 3/2 Program

Some Colleges may elect to award the Bachelor of Arts after successful completion of the first year of studies at Clemson University.

- 4. Credit for courses in the approved Liberal Arts pre-professional curriculum at \_\_\_\_\_\_ passed with a grade of "C" or higher will be transferred to Clemson University in the Bachelor of Science Degree program provided the student meets the current admission standards at Clemson University.
- will provide a counseling service to assist students in the Liberal Arts pre-professional curriculum with all matters related to their transfer to Clemson University. The Dean of each College involved in the joint program or a duly appointed representative, at Clemson University, will cooperate in the counseling of these students.
- 6. An Interagency conference of participating institutions will be held annually to review curriculum.

FINAL ENROLLMENT IN GRADUATE SCHOOL, FIRST SEMESTER 1978-79

MAJOR	NON- DEGREE	PROF MAST	MA/MS	EDS	PHD	TOTAL
College of Agricultural Sciences						
Agric (Undeclared)	12	0	0	0	0	12
Agric Econ	0	4	7	0	10	21
Agric Engr	0	0	4	0	4	8
Agric Mech	0	8	0	0	0	8
Agronomy	0	2	16	0	5	23
Animal & Food Ind	0	0	15	0	0	15
Animal Physiology	0	0	0	0	11	11
Animal Science	0	7	1	0	0	8
Dairy Science	0	2	3	0	0	5
Entomology	0	3	20	0	13	36
Horticulture	0	3	16	0	0	19
Nutrition	0	15	11	0	4	30
Plant Pathology	0	1	5	0	10	16
Plant Physiology		0	0	0	10	10
Poultry Science	0	3	3	0	0	6
Wildlife Biology	0	0	20	0	0	20
Total Agricultural Sciences	12	48	121	0	67	248
College of Architecture						
Arch (Undeclared)	4	0	0	0	0	4
Architecture	0	52	0	0	0	52
City & Region Plan	0	25	0	0	0	25
Visual Studies	0	11	0	0	0	11
Total Architecture	4	88	0	0	0	92
College of Education						
Educ (Undeclared)	522	0	0	0	0	522
Adm & Supervision	0	57	0	51	0	108
Agri Educ	0	10	0	0	0	100
Elementary Educ	0	243	0	0	0	243
Industrial Educ	0	31	0	0	0	31
Personnel Services	0	183	0	0	0	183
Reading	0	68	0	0	0	68
Sec Educ (English)	0	8	0	0	0	8
Sec Educ (History)	0	7	0	0	0	7
Sec Educ (Math)	0	18	0	0	0	18
Sec Educ (Nat Sci)	0	19	0	0	0	19
Total Education	522	644	0 .	51	0	1217
College of Engineering						
Engineering (Undeclared)	9	0	0	0	0	9
Bioengineering	Ó	0	16	0	3	19
Ceramic Engr	0	0	4	0	0	4
Chemical Engr	0	2	10	0	5	17
Civil Engr	0	14	13	0	5	32
E1 & Comp Engr	0	14	18	0	7	39
Engr Mechanics	0	0	3	0	0	3
Envir Sys Engr	0	17	18	0	12	47
Materials Engr	0	0	1	0	0	1

MAJOR	NON- DEGREE	PROF MAST	MA/MS	EDS	PHD	TOTAL
Machanical Fran	0	19	12	0	3	34
Mechanical Engr Systems Engr	0	0	11	0	5	16
Water Res Engr	0	1	2	0	0	3
Total Engineering	9	67	108	0	40	224
Total Engineering	,	07	100	· ·	70	227
College of Ind Mgt & Textile Sci	•					
IM&TS (Undeclared)	10	0	0	0	0	10
Economics	0	0	13	0	0	13
Engr Management	0	0	0	0	16	16
Management	0	0	29	0	0	29
Management Science	0	0	0	0	9	9
Text & Poly Sci	0	0	0	0	8	8
Textile Chemistry	0	0	7	0	0	7
Textile Science	0	0	4	0	0	4
Total Ind Mgt & Textile Sci	10	0	53	0	33	96
College of Liberal Arts						
Liberal Arts (Undeclared)	4	0	0	0	0	4
English	U	0	43	0	0	43
History	0	0	9	0	0	9
Total Liberal Arts	4	0	52	0	0	56
College of Nursing						
Nursing (Undeclared)	3	0	0	0	0	3
Nursing	0	0	17	0	0	17
Total Nursing	3	0	17	0	0	20
College of Sciences						
Sci (Undeclared)	16	0	0	0	0	16
Biochemistry	0	0	13	0	5	18
Botany	0	0	12	0	0	12
Chemistry	0	0	15	0	14	29
Mathematical Sci	0	0	51	0	13	64
Microbiology	0	0	20	0	0	20
Physics	0	0	11	0	15	26
Zoology	0	0	17	0	23	40
Total Sciences	16	0	139	0	70	225
College of For & Rec Resources						
For & Rec Resources (Undeclared)	2	0	0	0	0	2
Forestry	0	11	9	0	0	20
Rec & Park Adm	0	30	0	0	0	30
Total For & Rec Resources	2	41	9	0	0	52

582 895 492 51 210 2230 GRAND TOTAL

Clemson/Furman MBA Program 152

Enrollment by Men and Women - Full Time and Part Time Clemson University First Semester 1978-1979

November 15, 1978

Total	2516 452 2968	1307 525 1832 1319 724	1163 793 1956	8799	1345 84 42 201	1672	10471	856	11478
TOTAL Part Time	75 8 83	25 33 58 49 49	22 93 115	341	769 30 24 42	865	1206	856 145	2207
Full Time	2441 444 2885	1282 492 1774 1270 688	1141 700 1841	8458	576 54 18 159	807	9265	9	9271
Total	1038 148 1186	572 163 735 539 197	466 219 685	3342	597 27 18 33	675	4017	610	4660
<u>IN</u> Part Time	46 6 52	13 21 34 11 13	7 25 32	142	429 14 12 4	657	601	610	1242
WOMEN Full Time	992 142 1134	559 142 701 528 184	459 194 653	3200	168 13 6 29	216	3416	0	3418
Total	1478 304 1782	735 362 1097 780 527	697 574 1271	5457	748 57 24 168	266	6454	246	6818
Part Time	29 2 31	12 12 24 24 38 23	15 68 83	199	340 16 12 38	907	605	246	965
Full Time	1449 302 1751	723 350 1073 742 504	682 506 1188	5258	408 41 12 130	591	5849	0 7	5853
Classification	1st Semester Freshman 2nd Semester Freshman Sub-Total	1st Semester Sophomore 2nd Semester Sophomore Sub-Total 1st Semester Junior 2nd Semester Junior	1st Semester Senior 2nd Semester Senior Sub-Total	TOTAL	Graduate - Masters Level Postgraduate Non-Degree Graduate - Ph.D. Level	TOTAL	CAMPUS TOTAL	Institutes Clemson-Furman MBA	UNIVERSITY TOTAL

Total Enrollment by Courses and Academic Classification

Clemson University First Semester 1978-1979

	Freshman	man	Soph	phomore	Junior	ior	Senior	lor	Post				
Major Course	(Semester	ster)	(Semester	ster)	(Semester	ster)	(Semester	ster)	Grad	Mast	PhD	Uncl	Total
	lst	pu7	Lst	pu7	Lst	puz	ISC	pu7					
	c	c	c	_	c	c	c	c	<b>C</b>	11	C	C	11
Agriculture (Non-Degree)	<b>&gt;</b> (	) <sub>1</sub>	> 0	> 0	> -	> 0	> 0	) 1	) c	1 (	0 0	0 0	1 -
	∞	<b>-</b>	0	0	<b>-</b>	<b>&gt;</b>	<b>)</b>	<b>-</b> 1 :	7	<b>O</b>	<b>&gt;</b> (	<b>)</b>	CT i
Agricultural Economics	∞	<b>—</b>	4	4	13	9	12	2	0	12	6	0	74
Agricultural Engineering	26	-	7	2	12	∞	10	4	0	4	4	0	78
c	00	2	2	7	14	2	13	∞	0	∞	0	0	73
Agronomy	- ∞	7	12	m	17	13	7	<sub>∞</sub>	0	18	2	0	92
Animal & Food Industries	) C	· c	=		; C		· C	C	C	14	C	0	14
	۳ c	o C	o c	o c	) <sub>[</sub>	o C	) c	o	o C	-	) C	· C	7
	n <b>c</b>	o c	) c	o C	H C	) c	o C	o c	) C	o C	7	) C	=
	, ,	٦ ر	10	) (	7 0	οα	22	, α	o C	7	0	,	129
Allimar Screlice	ر ا	، د	7 0	2 0	٦ °	٥	27	0 4	o C	· C	) C	o C	15
Dodaw Codono	<b>.</b> .	) c	) C	o C	) (	1 ~	1 4		· C	, LC	· c	) C	23
Dally Science	2 1	<b>1</b> c	> -	> -	1 4	n c	- ۱	H C	o c	) (	o C	o	) <del>(</del>
		7 -	٦,	٦ ،	0 0	> \	⊣ ւ ,	> <sub>'</sub>	> 0	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b> (	0 0
Economic Zoology	13	2	4	0	12	9	15	11	7	<b>O</b>	0 (	o (	89
Entomology	0	0	-	0	ന		7	2	0	23	12	0	94
Food Science	2	2	က	7	က	0	œ	2	0	0	0	0	21
Horticulture	27	13	25	13	94	20	38	36	-	18	0	0	237
Nutrition	0	0	0	0	0	0	0	0	0	27	7	0	31
Plant Pathology	0	0	0	0	0	0	0	0	0	7	6	0	16
Plant Physiology	0	0	0	0	0	0	0	0	0	-	10	0	11
Plant Science	0	1	٦	0	0	٦	0	0	0	0	0	0	3
Poultry Science	2	0	က	-1	က		7	3	0	∞	0	0	28
Pre-Veterinary	7	0	4	-	က	0	0	0	0	0	0	0	15
Wildlife Biology	0	0	0	0	0	0	0	0	0	20	0	0	20
College Total	164	47	89	43	152	74	137	93	2	183	64	0	1051
Architecture (Non-Degree)	c	-	<b>C</b>	C	_	<b>C</b>	C	C	C	···	C	C	7
	o c	1 0	· c	· c	) <sub>[</sub>	· -	o C	, r	ی د	, [2			69
Did 1 day Contraction	0	י כ	ס ע	י כ	1 1	۱ ۷	7,	ا د ا	· -	1 0	) C	o C	59
City and Designal Disputace	n C	n c	٦	۰ د	] c	o c	† C	] c	H C	26	o	o	26
Dec Architecture (DA)	9 [	ى د	> 0	<b>,</b>	2 5	) r	. ה	טור	ى د	9 0	o c	) <sub>[</sub>	27
Fre-Architecture (bA)	T0	7 (	0 6	> <	CT c	_ ,	J 5	17	7 ~	<b>&gt;</b>	<b>&gt;</b>	н с	100
	0 ,	ى ر		7 (	25	ه 0	21	16 16	<b>4</b> (	O -	<b>&gt;</b>	<b>&gt;</b>	100
	T	O 1	0 \	7 C	0 1	o و	ے د	0 /	ם נ	T 1	<b>&gt;</b> c	) <sub>-</sub>	77
College local	30	CT	40		04	707		1,4	CT	7.7		7	Ot t

Total Enrollment by Courses and Academic Classification Clemson University First Semester

Page Two														
	Fre	Freshman	Soph	Sophomore	Junior	or	Senior	ior	Post					
Major Course	(Sem	(Semester)		emester)	(Seme	(Semester)	S	ster)	Grad	Mast	PhD	Uncl	Total	
	Lst	2nd	lst	2nd	lst	2nd	lst	2nd						
Education (Non-Degree)	-	0	0	0	0	0	C	С	m	131	C	C	135	
	0	·	, –	0	0	0	0	·	·	0	0	0	7	
Administration and Supervision	0	0	0	0	0	0	0	0	0	62	0	0	62	
Agricultural Education	9	1	6	7	7	9	10	٣	1	∞	0	0	55	
Early Childhood Education	32	<sub>∞</sub>	24	<b>∞</b>	40	7	37	13	0	0	0	0	169	
Elementary Education	98	17	94	14	9	24	70	25	0	132	0	0	760	
Industrial Education	6	c	9	5	10	9	11	12	2	23	0	0	87	
Industrial Education (Ind.Art)	m	m	5	1	5	n	2	m	0	0	0	0	25	
Industrial Education (Indust.)	2	7	-	m	2	7	2	2	0	0	0	0	1.7	
Industrial Education (Voc-Tec)	2	2	2	2	1	2	0	1	0	0	0	0	12	
Personnel Services	0	0	0	0	0	0	0	0	0	119	0	0	119	
Reading	0	0	0	0	0	0	0	0	0	45	0	0	45	
Science Teaching	2	0		0	7	1	0	0	0	0	0	0	5	
Science Teaching (Biol Sci)	5	-	m	0	2	1	m	2	0	0	0	0	17	
Science Teaching (Chemistry)		0	0	0	0	0	0	0	0	0	0	0	П	
Science Teaching (Earth Sc1)	0	Н	Н	2	0	0	0	2	0	0	0	0	9	
Science Teaching (Mathematics)	5	Н	2	1	3	2	Н		0	0	0	0	16	
Science Teaching (Physical Sc)	0	0	0	0	7	0	0	7	0	0	0	0	5	
Secondary Education	16	0	2	2	7	7	7	9		0	0	0	39	
Secondary Education (Econ)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Secondary Education (English)	∞	m	<sub>∞</sub>	m	9	7	m	7	٦	7	0	0	47	
Secondary Education (History)	3	_	9	2	7	n	7	7	0	5	0	0	41	
Secondary Education (Math)	10	ന	7	2	7	0	<sub>∞</sub>	7	0	7	0	0	39	
Secondary Education (French)	2	0	0	0	0	0	0	2	0	0	0	0	7	
Secondary Education (German)	0	0	0	0	0	П	0	0	0	0	0	0	7	
Secondary Education (Spanish)	0	0	0	0	0	0		2	0	0	0	0	m	
Secondary Education (Nat Sci)	-	<del></del> -	0	-	П	1	5	2	0	15	0	0	27	
Secondary Education (Pol Sci)	0	0	0	0	2	0	0	0	0	0	0	0	2	
Secondary Education (Psych)	7	-	က	0	0	2	٦	m	0	0	0	0	11	
Secondary Education (Soc)	0	0	0	0	_	7	0	Н	0	0	0	0	m	
College Total	207	48	124	50	167	69	165	94	6	554	0	0	1487	

Total Enrollment by Courses and Academic Classification Clemson University First Semester Page Three

	Fre	Freshman	Sopl	homore	Junior	ior	Senior	ior	Post					
Major Course	(Sem	(Semester)	(Seme	ester)	(Sem	(Semester)	(Semester	ster)	Grad	Mast	PhD	Uncl	Total	
	lst	2nd	lst	2nd	lst	2nd	lst	2nd						
Engineering (Non-Degree)	0	0	0	0	0	0	0	0	0	6	0	0	6	
Engineering	25	4	9	9	2	2	0	0	0	0	0	0	45	
Bio-Engineering	0	0	0	0	0	0	0	0	0	19	2	0	21	
Ceramic Engineering	∞	11	11	2	14	∞	12	7	0	4	0	0	74	
Chemical Engineering	106	∞	09	16	55	23	28	33	0	10	9	0	345	
Civil Engineering	106	21	62	22	55	37	36	34	2	24	4	0	403	
Electrical Engineering	163	12	92	27	57	42	41	37	9	31	7	0	667	
Engineering Analysis	6	П	က	-	2	9	2	9	0	0	0	0	33	
Engineering Mechanics	0	0	0	0	0	0	0	0	0	7	0	0	7	
Engineering Technology	80	15	23	20	26	25	27	19	4	0	0	0	239	
Environmental Systems Engr	0	0	0	0	0	0	0	0	0	34	11	0	45	
Materials Engineering	0	0	0	0	0	0	0	0	0	-1	0	0	П	
Mechanical Engineering	125	27	82	30	54	18	43	25	<sub>∞</sub>	30	က	0	445	
Systems Engineering	0	0	0	0	0	0	0	0	0	10	4	0	14	
Water Resources Engineering	0	0	0	0	0		0	0	0	4	0	0	7	
College Total	622	66	323	124	265	161	192	158	20	180	37	0	2181	
T M and T S (Non-Degree)	C	<b>C</b>	<b>C</b>	<u> </u>			<u> </u>	<b>-</b>	C	-	C	C	11	
A and + . (1011 100 100)	0 0	1 2	, ,	) C			30	٥, ر	) (r	1	o c	) C	203	
Accounting	000	) [	7 + 1	77			70	1 7	n (	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b> 0	620	
Administrative Management	188	10	777				[33 _	5,	<b>)</b> (	<b>&gt;</b> '	<b>&gt;</b> (	<b>)</b> (	700	
Economics (BA)	32	4	7	-			2	2	0	_	0	0	63	
Economics	14	m	17	13			16	<u></u>	0	12	0	0	114	
Engineering Management	0	0	0	0			0	0	0	0	15	0	15	
Financial Management	129	27	57	21			31	21	0	0	0	0	356	
Industrial Management	94	6	22	∞			22	12	0		0	0	163	
Management	0	0	0	0			0	0	0	28	0	0	28	
Management Science	0	0	0	0			0	0	0	0	6	0	6	
Textile and Polymer Science	0	0	0	0			0	0	0	0	∞	0	∞	
Textile Chemistry	9	7	9	-			က	П	0	7	0	0	31	
Textile Science	ന	က	0	0			0	0	0	4	0	0	13	
Textile Technology	7	9	10	9	9	10	12	9	0	0	0	0	63	
College Total	513	123	287	152			197	147	3	64	32	0	2029	

Total Enrollment by Courses and Academic Classification Clemson University First Semester

Page Four														
Major Course	Freshman (Semester)	hman ster)	Sophor (Semes	phomore mester)	Junior (Semest	Junior (Semester)	Senior (Semester)	Senior emester)	Post Grad	Mast	PhD	Uncl	Total	
	1st	2nd	1st	2nd	lst	2nd	1st	2nd						
Liberal Arts (Non-Degree)	Н	0	0	0	0	0	0	0	0	5	0	0	9	
Liberal Arts	23	7	6	n	2	1	0	7	0	0	0	-	47	
English	39	3	25	6	26	19	25	14	0	70	0		201	
French	7	0	3	က	4	3	2	က	0	0	0	0	25	
German		0	0	0	0	0	0	0	0	0	0	0	1	
History	25	က	12	က	7	3	14	∞	0	∞	0	0	83	
Political Science	50	10	26	∞	32	18	28	11	0	0	0	_	184	
Psychology	69	7	29	∞	32	14	34	16	2	0	0	0	211	
Sociology	19	0	12	6	12	12	22	6	1	0	0	1	97	
Spanish	က	-1	9	0	2	2	П	5	0	0	0	0	23	
College Total	234	31	122	43	120	72 1	29	67	3	53	0	4	878	
Nursing (Non-Deorge)	C	C	C	C	C	C	C	O	C	0	C	C	2	
	39	9	16	17	ı,	7	0 0	) (°	) C	ı c	) C	·	96	
	66	15	59	17	71	25	51	26	7	17	) C	ı C	788	
College Total	138	21	75	34	92	32	53	29	7	19	0	·	482	
,	C									5			5	
sciences (Non-Degree)	>	>	>	>	>	>	>	>	>	7T	>	>	77	
Biochemistry	25	9	16	-	10	က	7	2		13	2	0	88	
Botany	7	0	2	2	-	3	-	7	0	12	0	0	32	
Chemistry (BA)	0	0	-	П	0	1	0	2	0	0	0	0	5	
Chemistry	19	0	7	2	∞	2	2	9	0	15	14	0	75	
Geology (BA)		0	2	0	2		2	-	0	0	0	0	6	
Geology	9	0	9	က	m	1	7	0	0	0	0	-	21	
Mathematics (BA)	11	2	2	П	2	-	9	2	0	0	0	0	30	
Mathematics	83	2	42	11	24	12	26	∞	7	52	13	0	274	
Medical Technology	21	3	12	Н	10	2	-1	0	0	0	0	0	53	
Microbiology	37	9	20	11	24	16	27	25	0	20	0		187	
Physics (BA)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physics	13	П	7	-	6	က	2	-1	П	11	15	-	89	
Pre-Dentistry	7	П	7	0	-	0	0	0	0	0	0	0	13	
Pre-Medicine	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pre-Medicine Core	88	7	9	2	-1	3	П		0	0	0	0	109	
Pre-Pharmacy	24	0	6	0	-	0	0		0	0	0	0	35	
Pre-Physical Therapy	26	2	<sub>∞</sub>	2	7	7	0	0	7	0	0	0	77	
	77	9	23	2	28	7	23	14	0	19	21	0	187	3
College Total	412	33	164		131	56 1	.05	67	4	154	89	3	1243	31

Total Enrollment by Courses and Academic Classification

Clemson University	First Semester

))))		
	First Semester	Page Five

TO C TTAC														
	Fre	Freshman	Soph	Sophomore	Jur	Junior	Ser	Senior	Post					
Major Course	(Sem	(Semester) (Semester)	(Seme	ster)	(Seme	(Semester)	(Seme	(Semester)	Grad	Mast	PhD	Uncl	Total	
	lst	1st · 2nd 1st	lst	2nd	lst	2nd	lst	2nd						
For & Rec Res (Non-Degree)	0	0	0	0	0	0	0	0	0	2	0	0	2	
Forest Management	40	2	29	က	17	19	23	45	ന	19	0	0	203	
Recreation and Park Adm	77	27	43	21	70	37	48	40	0	26	0	0	389	
Wood Utilization	ന	7	5	2	-	က	0	9	0	0	0	0	22	
College Total	120	34	77	56	88	59	71	91	က	47	0	0	616	
Non-Degree	10	-	0	0	0	0	0	0	20	0	0	33	99	
College Total	10	1	0	0	0	0	0	0	20	0	0	33	64	
UNIVERSITY TOTAL	2516	452 1307	1307	525	1319	724	1163	793	84	1345	201	-42	10471	

# Male Enrollment by Courses and Academic Classification

# Clemson University First Semester 1978-1979

													I
	Fres	Freshman	Sophomore	nore	Jun	Junior	Senior						
Major Course	(Semester 1st 2nd	ster) 2nd	(Semes	emester) t 2nd	(Semester 1st 2nd	ster) 2nd	(Semester 1st 2nd	ter) Grad 2nd	Mast	PhD	Uncl	Total	
Agriculture (Non-Degree)	0	0	0	0	0			0	2	0	0	2	
Agriculture	4	0	0	0	7			2	0	0	0	7	
Agricultural Economics	7		4	4	10			0	9	7	0	56	
	26	-	7		11			0	7	4	0	72	
	7	5	2	7	14			0	∞	0	0	72	
Agronomy	œ	2	10	3	16			0	10	5	0	75	
Animal & Food Industries	0	0	0	0	0			0	6	0	0	6	
	3	0	0	0	0	0	0 0	0	0	0	0	. ന	
Animal Physiology	0	0	0	0	0			0	0	6	0	6	
Animal Science	16	3	$\infty$	$\infty$	<b>∞</b>		11 6	0	9	0	0	73	
Community & Rural Development	0	7	0	0	П			0	0	0	0	7	
Dairy Science	2	7	0	0	2	2		0	n	0	0	14	
Economic Biology	9	2	0	7	4			0	0	0	0	14	
Economic Zoology	12	4	2	0	m			2	0	0	0	45	
Entomology	0	0	0	0	2			0	19	∞	0	36	
Food Science		7	0	0				0	0	0	0	7	
Horticulture	16	10	12	6		14	16 22	_	12	0	0	137	
Nutrition	0	0	0	0				0	15	2	0	17	
Plant Pathology	0	0	0	0				0	2	∞	0	10	
Plant Physiology .	0	0	0	0		0		0	Н	6	0	10	
Plant Science	0	Н	7	0	0	0		0	0	0	0	2	
Poultry Science	2	0	3	Н	m	0	3 2	0	5	0	0	19	
Pre-Veterinary	2	0	n	7	7	0		0	0	0	0	7	
Wildlife Biology	0	0	0	0	0			0	19	0	0	19	
College Total	112	32	55	35	101		82 66	5	121	52	0	719	
Architecture (Non-Degree)	0	П	0	0	0	0		0	2	0	0	3	
Architecture	0	0	0	0	٦		0 3	9	65	0	0	09	
Building Construction	∞	3	5	3	15		14 13	1	0	0	0	89	
City and Regional Planning	0	0	0	0	0			0	16	0	0	16	
Pre-Architecture (BA)	6	Н	2	0	∞			1	0	0	Н	53	
Pre-Architecture	59		23	m	21	9	19 16	7	0	0	0	158	
Visual Studies	0	0		0	0			0	6	0	0	6	3:
College Total	92	12	33	9	45	18 4	43 45	12	76	C	-	7 7 2	3
											1	, 00	

Male Enrollment by Courses and Academic Classification Clemson University

Education (Non-Degree)	First Semester Page Two														4
On-begree)  On-begree  On-begr		Free	hman	Soph	pomore	Jul	nior	Ser	nior	Post	Year.	האם	115.01	E 1	
ervision 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Major Course	(Seme 1st	2nd	(seme	Ster) 2nd	(seme	2nd	(seme	sscer) 2nd	Grad	Mast	run	Toun	10621	
ervision 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0															
ervision 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0	0	0	0	0	0	0	0	43	0.	0	43	
ervision 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Education	0	٦	0	0	0	0	0	0	1	0	0	0	2	
ton 6 1 8 4 6 5 9 2 1 8 0 0  Indust) 8 1 1 0 4 1 1 11 2 22 0  Indust) 2 2 3 0 4 3 2 2 0 0 0 0  Indust) 2 1 1 2 1 2 1 2 2 0 0 0  Indust) 2 2 1 1 1 2 1 2 2 0 0 0 0  Voc-Tec) 2 2 1 1 2 1 2 1 0 0 0 0 0 0  Sci) 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  Istry) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  Istry) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  Istry) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  Istry) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Administration and Supervision	0	0	0	0	0	0	0	0	0	43	0	0	43	
Education   Comparison   Comp	Agricultural Education	9	П	∞	7	9	2	6	2	-1	∞	0	0	20	
Education	Early Childhood Education	0	0	0	0	1	0	7	0	0	0	0	0	2	
Education   Educ		∞	٦	٦	0	7	7	7	2	0	7	0	0	31	
Education (Ind Art)   2		∞	က	4	2	10	7	11	11	2	22	0	0	80	
Education (Indust)   2	Education (	2	2	က	0	7	က	2	2	0	0	0	0	18	
Education (Voc-Tec)   2	Education (	2	٦	7	2	7	7	2	0	0	0	0	0,	13	
Services  Services  O	Education	2	2	1	2	1	2	0	0	0	0	0	0	10	
aaching (Biol Sci)  1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Personnel Services	0	0	0	0	0	0	0	0	0	42	0	0	42	
acching Biol Sci)  acching (Biol Sci)  acching (Biol Sci)  1 0 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0	Reading	0	0	0	0	0	0	0	0	0	က	0	0	က	
eaching (Biol Sci)         1         0         2         0         1         1         0		-1	0	٦	0	7	7	0	0	0	0	0	0	7	
eaching (Chemistry)         0	Teaching	1	0	7	0	7	7	0	7	0	0	0	0	9	
eaching (Earth Sci)         0         1         1         1         0         0         2         0         0         0         0           eaching (Mathematics)         2         1         0         1         2         1         0	Teaching (	0	0	0	0	0	0	0	0	0	0	0	0	0	
eaching (Mathematics)         2         1         0         1         2         1         0	Teaching (	0	٦	7	7	0	0	0	2	0	0	0	0	2	
Education (Physical Sc)         0	Teaching	2	П	0	7	2	7	0	0	0	0	0	0	7	
Education         3         1         1         1         4         1         0         0         0           Education (Encation (Encation (English))         0	eaching	0	0	0	0	0	0	0	0	0	0	0	0	0	
Education (Econ)       0		က	0	1	1	7		7	4	7	0	0	0	13	
Education (English)         0	Education (	0	0	0	0	0	0	0	0	0	0	0	0	0	
Education (History)     2     6     1     5     5     0     1     0     0       Education (Math)     1     1     0	Education (	0	0	0	7	0	0	0	0	0	ന	0	0	7	
Education (Math)       1       1       0       0       2       0       0       0       1       0       0         Education (French)       0	Education (	2	7	က	2	9	7	2	2	0	7	0	0	26	
Education (French)       0	Education (	-	٦	0	0	2	0	0	0	0	_	0	0	5	
Education (German)       0	Education (	0	0	0	0	0	0	0	7	0	0	0	0	1	
Education (Spanish)     0	Education (	0	0	0	0	0	0	0	0	0	0	0	0	0	
Education (Nat Sci)       0       1       0	Education (	0	0	0	0	0	0	0	0	0	0	0	0	0	
Education (Pol Sci)     0	Education (	0	٦	0	0	0	0	1	0	0	7	0	0	6	
Education (Psych)       0	Education (	0	0	0	0	2	0	0	0	0	0	0	0	2	
Education (Soc) $0$ $0$ $0$ $0$ $0$ $0$ $0$ $0$ $0$ $0$	Education (	0	0	0	0	0	0	0	7	0	0	0	0	7	
Total 38 16 26 19 42 28 39 31 5 177 0 0 4	Education	0	0	0	0	0	1	0	0	0	0	0	0	7	
		38	16	56	19	42	28	39	31	5	177	0	0	421	

Male Enrollment by Courses and Academic Classification Clemson University First Semester

Page Three													
	Fre	Freshman	Soph	Sophomore	Jun	Junior	Senior	Post					
Major Course	(Seme	(Semester)	(Seme	Semester)	(Semester	ster)	(Semester)	r) Grad	Mast	PhD	Uncl	Total	
	lst	2nd	1st	2nd	1st	2nd	1st 2nd	p					
Engineering (Non-Degree)	0	0	0		0			0	6	0	0	6	
	20	2	2		2			0	0	0	0	37	
Bio-Engineering	0	0	0		0			0	17	2	0	19	
Ceramic Engineering	œ	10	11		13			0	4	0	0	71	
Chemical Engineering	83	7	52		94			0	10	9	0	291	
Civil Engineering	92	19	20		51			2	24	က	0	364	
Electrical Engineering	132	12	29		54			n	31	9	0	449	
Engineering Analysis	∞	Н	2	-1	2	9	2 6	0	0	0	0	28	
Engineering Mechanics	0	0	0		0			0	က	0	0	က	
Engineering Technology	89	14	22		23			7	0	0	0	219	
Environmental Systems Engr	0	0	0		0			0	28	11	0	39	
Materials Engineering	0	0	0		0			0		0	0	Н	
Mechanical Engineering	121	56	80		51			7	30	က	0	430	
Systems Engineering	0	0	0		0	0		0	9	4	0	10	
Water Resources Engineering	0	0	0		0	0		0	က	0	0	က	
College Total	532	91	289	114 2	42 1	56 1	82 150	16	166	35	0	1973	
I M and T S (Non-Degree)	0	0	0	0				0	6	0	0	6	
Accounting	37	6	19	18	17	13	28 13	2	0	0	0	156	
Administrative Management	127	41	75	62				0	0	0	0	629	
Economics (BA)	56	က	7					0	-	0	0	67	
Economics	6	က	∞	10				0	10	0	0	85	
Engineering Management	0	0	0	0				0	0	12	0	12	
Financial Management	98	19	28	16				0	0	0	0	231	
Industrial Management	40	6	18	9				0	Н	0	0	145	
Management	0	0	0	0				0	19	0	0	19	
Management Science	0	0	0	0				0	0	∞	0	∞	
Textile and Polymer Science	0	0	0	0				0	0	9	0	9	
Textile Chemistry	2	က	2	0				0	2	0	0	25	
Textile Science	7	3	0	0				0	Н	0	0	∞	
Textile Technology	7		9	2	က			0	0	ó	0		
College Total	336	95		118 1	.73 1	56 1	92 120	2	94	26	0	1427	

Male Enrollment by Courses and Academic Classification Clemson University First Semester Page Four

rage Four												I		
	Freshman	hman	Sopho	Sophomore	Jur	Junior	Senior		Post					
Major Course	(Semester	ster)	(Semester)	ster)	(Seme	(Semester)	(Semester	$\overline{}$	Grad	Mast	PhD	Uncl	Total	
	İst	2nd	lst .	2nd	lst	2nd	lst	2nd						
Liberal Arts (Non-Degree)	0	0	0	0	0			0	0	က	0	0	က	
Liberal Arts	16	2	1	2	-			0	0	0	0		27	
English	10	1	7	2	11			9	0	18	0	0	71	
French	0	0	0	0	0			1	0	0	0	0	1	
German	0	0	0	0	0	0	0	0	0	0	0	0	0	
History	16	2	9	က	2			2	0	2	0	0	48	
Political Science	37	œ	17	2	14			<b>∞</b>	0	0	0	0	119	
Psychology	18	1	∞	2	8			01	Н	0	0	0	29	
Sociology	7	0	7	m	7			-	0	0	0	-	24	
Spanish	0	-1	0	0	1			2	0	0	0	0	7	
. College Total	101	18	40	20	44	33		33	1	23	0	2	364	
Nirsing (Non-Degree)	0	0	0	0	0	0	0	0	0	0	0	0	0	
	m	0	0	0	0		0	-	0	0	0	0	5	
	0		0	2	0	1	0	က	-	2	0	0	10	
College Total	· C	1	0	2	0	2	0	4	1	2	0	0	15	
Sciences (Non-Degree)	0	0	0	0	0	0		0	0	7	0	0	7	
Biochemistry	14	က	6	1	6	m		-	-	∞	7	0	55	
Botany	2	0	7	0	0	0		2	0	2	0	0	12	
Chemistry (BA)	0	0	1	-1	0	0		2	0	0	0	0	7	
Chemistry	13	0	က	0	7	7		9	0	12	13	0	28	
Geology (BA)	0	0	2	0	0	-		0	0	0	0	0	7	
Geology	4	0	7	m	က	-1		0	0	0	0	-	17	
Mathematics (BA)	2	0	0	-1	1	0		0	0	0	0	0	7	
Mathematics	32	0	14	∞	14	7		7	-1	33	6	0	137	
Medical Technology	m	-1	0	0	2	2		0	0	0	0	0	∞	
Microbiology	23	5	12	6	16	12		91	0	14	0	-1	122	
Physics (BA)	0	0	0	0	0	0		0	0	0	0	0	0	
Physics	12	1	7	1	6	0	2	1	7	11	14		63	
Pre-Dentistry	5	1	4	0	1	0	0	0	0	0	0	0	11	
Pre-Medicine	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pre-Medicine Core	62	ന	2	2	0	2	1	1	0	0	0	0	79	
Pre-Pharmacy	10	0	2	0	0	0	0	1	0	0	0	0	13	

Male Enrollment by Courses and Academic Classification Clemson University

ы	
te	
S	
еше	e
Se	ίV
	14
st	в
ir	ag
124	PJ.

rage rive														
	Fre	Freshman	Sop	Sophomore	Ju	Junior	Se	Senior	Post					
Major Course	(Sen	(Semester)	(Seme	(Semester)	(Sem	(Semester)	(Sem	(Semester)	Grad	Mast	PhD	Unc1	Total	
	lst	2nd	1st	2nd	lst	2nd	lst	2nd						
Pre-Physical Therapy	2	0	0	0	2	0	0	0	7	0	0	0	2	
Zoology	19	2	16	7	17	4	18	12	0	12	17	0	124	
College Total	203	19	81	33	81	33	63	49	4	66	55	n	723	
For & Rec Res (Non-Degree)	0	0	0	0	0	0	0	0	0	Н	0	0	Н	
Forest Management	28	7	21	2	13	18	23	42	က	17	0	0	171	
Recreation and Park Adm	77	14	24	11	38	22	24	28	0	20	0	0	225	
Wood Utilization	en en	2	ന	2	1	ന	0	9	0	0	0	0	20	
College Total	75	20	48	15	52	43	47	76	3	38	0	0	417	
Non-Degree	2	0	0	0	0	0	0	0	œ	0	0	18	28	
College Total	2	0	0	0	0	0	0	0	8	0	0	18	28	
UNIVERSITY TOTAL	1478 304	304	735	362	780	527	269	574	57	748	168	24	6454	
														l

Female Enrollment by Courses and Academic Classification

# Clemson University First Semester 1978-1979

Female Enrollment by Courses and Academic Classification Clemson University First Semester

Page Two														
	Fres	Freshman	Soph	Sophomore	Jur	Juntor	Ser	Senior	Post					
Major Course	(Seme	(Semester)	(Semester 1st 2nd	ster) 2nd	(Seme	(Semester)	(Seme	(Semester)	Grad	Mast	PhD	Uncl	Total	
Education (Non-Degree)	1	0	0	0	0	0	0	0	က	88	0	0	92	
Education	0	0	1	0	0	0	0	1	0	0	0	0	2	
Administration and Supervision	0	0	0	0	0	0	0	0	0	19	0	0	19	
Agricultural Education	0	0	1	0	-1	1	1	7	0	0	0	0	5	
Early Childhood Education	32	<b>∞</b>	24	<b>∞</b>	39	7	36	13	0	0	0	0	167	
Elementary Education	90	16	45	14	09	20	63	23	0	128	0	0	459	
Industrial Education	-	0	2	0	0	2	0	1	0	-	0	0	7	
Industrial Education (Ind Art)	-	-	7	П		0	0	-	0	0	0	0	7	
Industrial Education (Indust)	0	0	0	7	7	0	0	2	0	0	0	0	4	
Industrial Education (Voc-Tec)	0	0	7	0	0	0	0	П	0	0	0	0	2	
Personnel Services	0	0	0	0	0	0	0	0	0	77	0	0	77	
Reading	0	0	0	0	0	0	0	0	0	42	0	0	42	
Science Teaching	-	0	0	0	0	0	0	0	0	0	0	0	н	
Science Teaching (Biol Sci)	7	П	7	0	1	0	က	1	0	0	0	0	11	
Science Teaching (Chemistry)	-	0	0	0	0	0	0	0	0	0	0	0	П	
Science Teaching (Earth Sci)	0	0	0	-	0	0.	0	0	0	0	0	0	٦	
Science Teaching (Mathematics)	3	0	7	0	П		7	П	0	0	0	0	6	
Science Teaching (Physical Sc)	0	0	0	0	7	0	0	7	0	0	0	0	5	
Secondary Education	13	0	7	7	9	0	က	2	0	0	0	0	26	
Secondary Education (Econ)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Secondary Education (English)	∞	٣	œ	7	9	7	3	4	-1	4	0	0	43	
Secondary Education (History)	1	0	m	0	<b>-</b>	2	2	2	0	7	0	0	15	
Secondary Education (Math)	6	7	4	2	2	0	œ	1	0	9	0	0	34	
Secondary Education (French)	7	0	0	0	0	0	0	1	0	0	0	0	ო	
Secondary Education (German)	0	0	0	0	0	1	0	0	0	0	0	0	Н	
Secondary Education (Spanish)	0	0	0	0	0	0		2	0	0	Ó	0	ო	
Secondary Education (Nat Sci)	1	0	0	7	-	1	4	2	0	œ	0	0	18	
Secondary Education (Pol Sci)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Secondary Education (Psych)	-	-	m	0	0	2	7	2	0	0	0	0	10	
Secondary Education (Soc)	0	0	0	0	-1	0	0	-1	0	0	0	0	2	
College Total	169	32	86	31	125	41 1	26	63	4	377	0	0	1066	

Female Enrollment by Courses and Academic Classification Clemson University First Semester Page Three

	Fres	Freshman	Soph	Sophomore	Junior	ior	Senior		Post					
Major Course	(Seme	(Semester)	(Semester	ster)	(Semester	ster)	(Semester)	_	Grad	Mast	PhD	Unc1	Total	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd						
Engineering (Non-Degree)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Engineering	5	2	1	0	0	0	0	0	0	0	0	0	∞	
Bio-Engineering	0	0	0	0	0	0	0	0	0	2	0	0	2	
Ceramic Engineering	0	Н	0	0			0	0	0	0	0	0	က	
Chemical Engineering	23	Н	∞	2	6		2	5	0	0	0	0	54	
Civil Engineering	14	2	12	2	4		1	2	0	0	_	0	39	
Electrical Engineering	31	0	6	-	m	1	-	0	3	0	1	0	50	
Engineering Analysis		0	1	0	0	0	3	0	0	0	0	0	5	
Engineering Mechanics	0	0	0	0	0	0	0	0	0	-1	0	0	1	
Engineering Technology	12	1	-1	0	က	0	3	0	0	0	0	0	20	
Environmental Systems Engr	0	0	0	0	0	0	0	0	0	9	0	0	9	
Materials Engineering	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mechanical Engineering	7	1	2	2	က	<del>-</del>	0		-1	0	0	0	15	
Systems Engineering	0	0	0	0	0	0	0	0	0	7	0	0	4	
Water Resources Engineering	0	0	0	0	0	0	0	0	0	1	0	0	-1	
College Total	90	∞	34	10	23	5	0]	8	4	14	2	0	208	
	•	(	(	(				(	(	Ó	(	(	¢	
I M and T S (Non-Degree)	0	0	0	0			0	0	0	7	>	0	7	
Accounting	51	7	28	7			11	1	1	0	0	0	137	
Administrative Management	61	10	94	15			36	7	0	0	0	0	233	
Economics (BA)	9		က	0				0	0	0	0	0	14	
Economics	2	0	6	m				0	0	2	0	0	29	
Engineering Management	0	0	0	0				0	0	0	က	0	ന	
Financial Management	43	œ	29	2				œ	0	0	0	0	125	
Industrial Management	9	0	7	2				0	0	0	0	0	18	
Management	0	0	0	0				0	0	6	0	0	6	
Management Science	0	0	0	0				0	0	0	-	0	-1	
Textile and Polymer Science	0	0	0	0				0	0	0	2	0	2	
Textile Chemistry	-	7	7	-1				0	0	2	0	0	9	
Textile Science	-1	0	0	0				0	0	3	0	0	2	
	3	1	4		3	1		1	0	0	0	0	18	
College Total	177	28	124	34				7	1	18	9	0	602	

Female Enrollment by Courses and Academic Classification Clemson University First Semester Page Four

rage rour			I	I										
	Freshman	nan	Soph	Sophomore	Jul	Junior	Ser		Post					
Major Course	(Semester) 1st 2nd	ter) 2nd	(Semester) 1st 2nd	ster) 2nd	(Sem	(Semester) 1st 2nd	(Seme	(Semester) 1st 2nd	Grad	Mast	PhD	Uncl	Total	
Liberal Arts (Non-Degree)	П	0	0	0	0	0	0	0	0	2	0	0	ന	
Liberal Arts	7	2	<b>∞</b>	1	1	0	0	-	0	0	0	0	20	
English	29	2	21	4	15	12	16	∞	0	22	0	-	130	
French	4	0	က	n	4		2	2	0	0	0	0	24	
German		0	0	0	0		0	0	0	0	0	0	1	
History	6	-1	9	0	2	0	<b>∞</b>	က	0	9	0	0	35	
Political Science	13	2	6	က	18		12	က	0	0	0	Т	65	
Psychology	51	9	21	9	24		21	9	-	0	0	0	144	
Sociology	15	0	∞	9	œ		17	<b>∞</b>	7	0	0	0	73	
Spanish	ന	0	9	0	4		1	n	0	0	0	0	19	
College Total	133	13	82	23	92	39	80	34	2	30	0	2	514	
Nireing (Non-Degree)	_	_	c	c	c	_	c	_	c	2	c	c	,	
The same than believe		, ·	,	1 0	) L	) ·	> 0	<b>)</b>	> <	1 (	<b>)</b> (	، د	7	
Nursing AA		9	9T	1/	۲	9	7	7	0	0	0	-	91	
Nursing		14	59	15	71	24	51	23	က	15	0	0	374	
College Total	135 2	20	75	32	9/	30	53	25	3	17	0	-1	467	
Sciences (Non-Degree)	0	0	0	0	0	0	0	0	0	∞	0	0	<b>∞</b>	
Biochemistry	11	3	7	0		0	က	-1	0	2	ന	0	34	
Botany	2	0	0	2	1	က	0	2	0	7	0	0	20	
Chemistry (BA)	0	0	0	0	0	-1	0	0	0	0	0	0	1	
Chemistry	9	0	1	2	1	-1	2	0	0	က	-	0	17	
Geology (BA)	1	0	0	0	2	0		-	0	0	0	0	5	
Geology	2	0	2	0	0	0	0	0	0	0	0	0	7	
Mathematics (BA)	6	2	2	0	7	-1	က	2	0	0	0	0	23	
Mathematics	51	2	28	က	10	2	14	1	0	19	4	0	137	
Medical Technology	18	2	12	1	∞	က	1	0	0	0	0	0	45	
Microbiology	14	7	<sub>∞</sub>	2	∞	4	13	6	0	9	0	0	65	
Physics (BA)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physics	П	0	0	0	0	က	0	0	0	0	П	0	2	
Pre-Dentistry	2	0	0	0	0	0	0	0	0	0	0	0	2	
Pre-Medicine	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pre-Medicine Core	26	7	П	0	1	П	0	0	0	0	0	0	30	

Female Enrollment by Courses and Academic Classification Clemson University First Semester

Page Five														
	Fre	Freshman	Soph	Sophomore	Ju	Junior	Se	Senior	Post					
Major Course	(Sem	(Semester)	(Seme	(Semester)	(Sem	(Semester)	(Sem	(Semester)	Grad	Mast	PhD	Unc1	Total	
	lst	2nd	lst	2nd	lst	2nd	lst	2nd						
Pre-Pharmacy	14	0	7	0	7	0	0	0	0	0	0	0	22	
Pre-Physical Therapy	24	7	∞	2	2	7	0	0	0	0	0	0	39	
Zoology	25	~	7	1	11	0	5	2	0	7	4	0	63	
College Total	500	14	83	13	50	23	42	18	0	55	13	0	520	
For & Rec Res (Non-Degree)	0	0	0	0	0	0	0	0	0	1	0	0	1	
Forest Management	12	Н	œ	7	4	Н	0	က	0	2	0	0	32	
Recreation and Park Adm	33	13	19	10	32	15	24	12	0	9	0	0	164	
Wood Utilization	0	0	2	0	0	0	0	0	0	0	0	0	2	
College Total	45	14	29	11	36	16	24	15	0	6	0	0	199	
Non-Degree	œ		0	0	0	0	0	0	12	0	0	15	36	
College Total	∞	1	0	0	0	0	0	0	12	0	0	15	36	
UNIVERSITY TOTAL	1038	148	572	163	539	197	995	219	27	297	33	18	4017	

#### Calendar of Campus Events

- 15 -- Lecture: "The Amazing Kreskin." Exhibition of ESP powers. Sponsored by Speakers Bureau, Tillman Hall Auditorium, 8 p.m. Open to the public, no admission charge. Reception following show.
- 15 -- Deadline to apply for undergraduate make-up scholarships for the 1978-79 academic year.
- 15-27 -- Art Exhibitions: "Bill Owens--Photographs" and "John Acorn--Sculpture."
  The Owens exhibit contains 50 photographs by the West Coast photographer most known for his photographic survey of middle America. In conjunction with the photographs will be the recent laminated plywood sculptures of Acorn, chairman of Clemson's Visual Studies Department. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 8 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
  - 16 -- Seminar: "VS Basic." Sponsored by Academic Computing Support of the Computer Center, M-105 Martin Hall, 3:30 p.m. Open to the public, no charge. For more information, call 656-3466.
  - 16 -- Seminar: Distinguished Chemical Industry Business Seminar featuring Charles Schmidt, vice-president, Union Carbide Chemical Corporation.

    Sponsored by Chemistry and Geology Department, 131 Brackett Hall, 7:30 p.m. Open to the public, no admission charge.
- 17-18 -- Live Entertainment in Edgar's. Sponsored by University Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
  - 18 -- Trip to Maryland Football Game. Sponsored by University Union, details and sign up at Union Information Desk.
  - 18 -- Workshop: "The First-Time Parent: Nursing Care During the Fourth Trimester" by Lynne A. Hall, M.S.N., R.N., and Anita K. Taylor, M.S., R.N., instructors in Clemson's College of Nursing. Sponsored by College of Nursing, Continuing Education. Enrollment limited to registered nurses, preregistration required. Call 656-3079 for more information.
  - 18 -- Children's Literature Symposium. Main speaker will be children's author Elaine Konigsberg, 1968 Newbery Medal winner for her book The Mixed-Up Files of Mrs. Basil B. E. Frankweiler. Sponsored by English Department, Daniel Hall Auditorium and Strode Tower, 8:45 a.m. until mid-afternoon. Open to adults working with children and children's literature, a \$5 registration fee will be charged. Students and University faculty and staff may attend free of charge. For more information, call 656-3457.
  - 20 -- Celebration '78: Finals of the Intramural Debate Tournament. Sponsored by Clemson Forensic Union, Daniel Hall Auditorium, 7 p.m. Open to the public, no admission charge.
  - 20 -- Lecture: "Fertilizer Technology--Past, Present and Future" by Dr. G. G. Williams, director of Agricultural Development National Fertilizer Development Center TVA, Muscle Shoals, AL. Sponsored by Agronomy and Soils Department, A-203 P&AS Building, 9:05 a.m. Open to the public, no admission charge.

#### CALENDAR OF CAMPUS EVENTS (Con't.)

- 20-12/2 -- Art Exhibition: "Cincinnati Candle Works" with candle making demonstration. Sponsored by University Union, Union Gallery, 10 a.m.-4:30 p.m.

  Open to the public, no admission charge.
  - 21 -- Concert: Martha Hamilton in a program of music for the flute with Lillian Harder at the piano. Sponsored by Department of Music Chamber Music Series, Daniel Hall Auditorium, 8 p.m. Open to the public, no admission charge.
  - 22 -- Thanksgiving holidays begin after last class.
  - 24 -- Basketball: Catholic (Men), Littlejohn Coliseum, 7:30 p.m.
  - 25 -- Football: USC, here, 1 p.m.
  - 25 -- Edgar's, Union Nightclub, opens from 10 a.m. until kickoff and immediately following the game until midnight. Open to the public, no admission charge.
  - 27 -- Classes Resume.
  - 27 -- Basketball: University of Georgia (Women), Littlejohn Coliseum, 5:15 p.m.
  - 27 -- Basketball: Furman (Men), Littlejohn Coliseum, 7:30 p.m.
  - 28-29 -- Workshop: "Innovative Teaching/Learning Strategies" by Carolyn Chambers Clark, Ed.D., R.N., Nursing Education Consultant and Director of Growth Opportunities. Sponsored by College of Nursing, Continuing Education. Enrollment limited to registered nurses in nursing inservice, faculty of schools of nursing, and nurses interested in teaching patients and their families. Preregistration required. Call 656-3079 for more information.
    - 29 -- English Hour Lecture: "Burton's Use of Emblems in The Anatomy of Melancholy" by Dr. John L. Idol, Jr. Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
    - 29 -- Workshop: "Human Relations and Communication Workshop for Office Personnel."
      An opportunity for staff members to enhance and/or modify their behaviors in the direction of better communication, mutual respect, and an increased awareness of consumer problems. Sponsored by the Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.
    - 29 -- Basketball: University of Tennessee (Women), Littlejohn Coliseum, 8 p.m.
    - 30 -- Concert: University Chorus Christmas Concert. Sponsored by Music Department, Tillman Hall Auditorium, 8 p.m. Open to the public, no admission charge.

## NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

Vol. 18 No. 8

December 1, 1978





EDUCATIONAL SUPPORT--Jim White of Union Carbide Corp. in Greenville, left, is thanked by Lyle C. Wilcox, dean of the College of Engineering, and William Barlage, head of the Chemical Engineering Department, for the corporation's gift of two unrestricted grants to the college totaling \$7,000.

#### COLLEGE OF ENGINEERING RECEIVES TWO GRANTS

Union Carbide Corp. has given Clemson University's College of Engineering \$7,000 in two unrestricted grants to be used for research and student support.

E. J. White, a production manager with Union Carbide's Materials Systems Division in Greenville, made the presentation.

One gift of \$4,000 went to the Chemical Engineering Department for support of undergraduate research assistants and for faculty and student travel to professional meetings.

The other \$3,000 went directly to the College of Engineering. The gifts are

a part of Union Carbide's annual support of higher education through its college relations division. The company has plants in South Carolina in Greenville and Florence.

#### FOUNDATION BOARD OF DIRECTORS NAMED

Seven business and community leaders have been elected to positions on the Clemson University Foundation's board of directors, effective Jan. 1.

The Foundation develops private support for the University's educational programs.

Wilson C. Wearn, a 1941 Clemson graduate and president of the Greenville-based Multimedia Broadcasting Co., was elected president of the Foundation. A former electrical engineering instructor at Clemson, Wearn is president of the Greenville Chamber of Commerce.

Robert Yeargin, a 1949 Clemson graduate and president of Yeargin Construction Co., was elected vice-president. The Greenville resident is also a member of the boards of directors of the Greenville Chamber of Commerce and South Carolina National Bank.

Re-elected to the board were Spartanburg resident Harold B. Risher and Knoxville businessman Thomas Breazeale. Risher, a 1938 graduate of Clemson, is president of the fashion fabrics division of the Deering Milliken Corp. He is a former president of the Clemson Alumni Association.

Breazeale, a 1942 Clemson graduate, owns the Breazeale Insurance Agency in Knoxville. He is also past president of the Clemson Alumni Association and is a Thomas Green Clemson Associate and national councilman for the Southern states.

New members elected to the board were William H. Orders of Greenville and Charlotte businessman Charles B. Fellers. Orders, a 1948 Clemson graduate, is president of Orders Tile and Distributing Co. He is also a member of Columbia College's board of trustees.

Fellers, a 1943 Clemson graduate, has been a sales representative with the American Hospital Corp. for 31 years. He has been instrumental in steps to create a golf course at Clemson and is a member of the development board of Lenoir Rhyne College.

Wofford B. Camp, a native of Cherokee County, was made an honorary life director of the Foundation. Camp, a 1916 Clemson graduate, now lives in Bakersfield, CA, where he is known as the "Father of Cotton." He is the founder of W. B. Camp and Sons, a farming and marketing enterprise with operations in California, Washington and South Carolina. Camp this year received the national "Horatio Alger Award" along with Hank Aaron, Willie Shoemaker, George Shearing and other notables.

#### AGRICULTURAL ENGINEERING

Joe M. Bunn (Prof) and Wiley H. Henson Jr. (Ag Engr, USDA-SEA Univ of Kentucky) have published a research report, "Environmental Requirements for Storage of Baled Burley Tobacco," in the Sept.-Oct. 1978 issue of Transactions of the American Society of Agricultural Engineers.

The South Carolina Water Resources
Research Institute has awarded a
\$64,335 matching fund grant for a threeyear study of the effects of using grass
cover for treatment of beef feedlot
runoff water. Project investigators
are Richard O. Hegg (Assoc Prof),
Clyde L. Barth (Prof) and Virgil
Quisenberry (Assoc Prof, Agron & Soils).

#### CHEMICAL ENGINEERING

W. B. Barlage (Prof and Hd) presented an invited seminar Oct. 30 on "Diffusion of Solutes in Non-Newtonian Liquids Under Conditions of Known Shear Rates" in the Department of Chemical Engineering at Virginia Polytechnic Institute and State University. The seminar was part of a program, "Forefront Areas of Chemical Engineering," sponsored by a grant from E. I. duPont de Nemours & Co.

F. C. Alley (Prof) chaired Clemson's 13th Annual Seminar, "Air and Water Pollution Control," which was cosponsored Nov. 16-17 by the Departments of Chemical Engineering and Environmental Systems Engineering, and the S.C. Department of Health and Environmental Control.

V. A. Costello (former Grad Stu), S. S. Melsheimer (Assoc Prof) and D. D. Edie (Assoc Prof) published a paper, "Heat Transfer and Calorimetric Studies of a Direct Contact - Latent Heat Energy Storage System," in <a href="Thermal Storage">Thermal Storage</a> and Heat Transfer in Solar Energy Systems, F. Kreith, Ed., A.S.M.E., New York, NY (1978).

Prof. Melsheimer chaired the Student Chapters Workshop at the 71st Annual AICHE Meeting at Miami Beach Nov. 13. Serving on the panel was Don Campbell (Stu), president of the Clemson Student Chapter. Chapter counselor R. W. Rice (Asst Prof) and two other students (Mary Baker and Jim Cochrane) also attended.

The Clemson Student Chapter of the American Institute of Chemical Engineers was selected for an "Award of Excellence" for 1977-78 by the national AIChE organization. This marks the fourth consecutive year the chapter received this prestigious award under the guidance of former counselor S. S. Melsheimer.

W. F. Beckwith (Prof) presented a paper co-authored with John N. Beard Jr. (Assoc Prof) and R. L. Gross (Grad Stu) titled "Mathematical Modeling of Textile Tenter-Frame Dryers" at the 71st Annual Meeting

of the American Institute of Chemical Engineers held at Miami Beach, FL, Nov. 12-16.

William F. Beckwith (Prof) presented a paper, "A Scheme to Assist in Evaluation of Tenter Frame Dryer Performance," at the 1978 American Society of Mechanical Engineers Textile Industries Conference held at Raleigh, NC, Oct. 17-18. This paper was co-authored with John N. Beard Jr. (Assoc Prof).

#### CHEMISTRY

A. R. Pinder (Calhoun Prof) has published a review, "Pyrrolidine, Piperidine, and Pyridine Alkaloids," in <u>Specialist</u> <u>Periodical Reports</u>, 8, 37 (1978).

Prof. Pinder read a paper, "Approach to the Synthesis of Tessaric Acid" at the 30th Annual Southeastern Meeting of the American Chemical Society, Savannah, GA, Nov. 8.

Garth Spencer (Prof) presented a lecture, "Properties of Hydrous Metal Oxides and Phosphates," for chemistry students and faculty at Maryville College Nov. 2.

Papers presented at the Southeastern Regional American Chemical Society Meeting are as follows:

"Point of Zero Charge of Hydrous Zirconium Oxide," F.S. Mandel (Post Doc Assoc) and Prof. Spencer.

"Diffusion of Propane in Polycarbonate," Prof. Spencer.

Joe F. Allen (Prof) presented a seminar, "Availability and Use of Short-Lived Radioisotopes in Industry, Medicine, and Chemistry," at the Bob Jones University Oct. 26.

Prof. Allen also attended an NSF workshop on "Teaching Science to the Handicapped" at the University of Georgia Oct. 23 and 24.

#### CIVIL ENGINEERING

Benjamin L. Sill (Assoc Prof) has had a paper, "Calculation of Evaporation for Extreme Meteorological Conditions," accepted for presentation at the 1978 ASME Winter Annual Meeting in San Francisco, Dec. 10-15, and post printed in the ASME publication Advances in Heat and Mass Transfer at Air-Water Interfaces.

Subhash C. Anand (Prof) was invited by the University of Connecticut to present a talk Oct. 27 at the Applied Mechanics Colloquia sponsored jointly by the Departments of Civil Engineering and Mechanical Engineering. The title of his talk was "Mesh-Refinement and Substructuring Schemes in Elastic-Plastic Finite Element Analysis."

#### COMPUTER SCIENCE

Clemson was host for the Second Annual ACM Southeastern Region Scholastic Programming Contest Nov. 4. Twenty-one student teams from schools in the Southeast participated in the competition. Clemson's team placed first and the University of Florida was second. John C. Peck (Assoc Prof) organized and directed the contest, assisted by J. M. Westall (Asst Prof) and Edward W. Page (Assoc Prof, E&CE). Clemson's team was coached by H. C. Grossman (Asst Prof) and E. W. Leggett (Asst Prof). A. W. Madison (Asst Prof) and A. J. Turner (Asst Prof and Acting Hd) participated as judges.

#### ELECTRICAL AND COMPUTER ENGINEERING

Co-investigators Thomas E. Burke (Assoc Prof), Thomas L. Drake (Prof) and Maurice L. Wolla (Prof) have recently completed a study contract for E. I. duPont Corporation. The project, "System Analysis of Mechanized Yarn Handling," identified a number of computer-related improvements to the manufacturing facilities at duPont's Kinston, NC, plant.

John E. Bennett (Assoc Prof) has been awarded a \$99,900 contract from the

University of California's Los Alamos Scientific Laboratories to investigate means of improving models of chemical contractors for modern state estimation and optimal control techniques relating to nuclear recycle accountability studies. These studies concern the ongoing investigation of a materials management system for safeguarding special nuclear materials in a fuel-reprocessing plant.

This contract is a joint venture between Adolph L. Beyerlein (Prof) and J. F. Geldard (Assoc Prof, Chemistry) and John J. Komo (Assoc Prof), J. Kent Bryan (Assoc Prof), and John E. Bennett (Assoc Prof) of the Electrical and Computer Engineering Department.

#### ELEMENTARY AND SECONDARY EDUCATION

Robert P. Green Jr. (Vstg Asst Prof) published "U. S. History Today: Back to the Basics the Right Way" in the July/August edition of <u>The Social Studies</u>, a periodical for teachers and administrators.

Don F. Keller made a presentation to the sales force of Cheyney-Bigelow, Inc., in Asheville Sept. 12. The presentation was on "Motivation-Transactional Analysis."

Lillian B. Hart presided at the board meeting of the South Carolina Association on Children Under Six Aug. 26 in Charleston County Public Schools.

Chester R. Freeze (Prof), Edward F.
Olive (Assoc Prof) and Sam L. Buckner
(Assoc Prof) published an article,
"Senior Pre-Student Teaching Laboratory
Experiences in the Classroom," in the
Journal of South Carolina Association of
Colleges for Teacher Education, Vol.
III, Summer 1978, pp. 27-30.

Ginnie Laycock (Asst Prof) authored three chapters--"Characteristics of the Learner," "Critical Dimensions of Instructional Materials," and "Making the Match: Rationale for Selection,"-- in Individualizing Educational Materials for Special Children in the Mainstream,

published by University Park Press.

Gordon Gray (Prof) served as consultant--Special Education Program Purpose to establish a reading component in Abbeville County School District.

Thomas H. Parry (Assoc Prof) served as the leader of an experiential workshop on "Constructive Worry" as part of the Annual Convention for the Southern Association for Counselor Education and Supervision held in Nashville, TN, Oct. 2.

Barbara M. Raetsch (Asst Prof) conducted an inservice session on "Content Area Reading in the Middle School," for middle school teachers in Clinton Sept. 29.

Prof. Raetsch participated in the Annual College Reading Association convention Oct. 18-21 in Washington, DC. She was appointed a judge for next year's outstanding master's thesis award in reading.

#### ENGLISH

Robert W. Hill (Assoc Prof) published "Robert Frost's 'West-Running Brook': A Rhetorical Explication" in SCETC News-letter, 11 (Sept. 1978), 2-4. The same issue also contained the following poems: "Extemporaneous Impromptu," "Boots," "Expectant," "Whose Tongue," "Phenomenology," and "The Convex Moon."

John Idol (Assoc Prof) chaired the Tudor-Stuart Studies section of the Carolina Symposium on British Studies, Appalachian State University, Oct. 22. Prof. Idol also published "Nathaniel Hawthorne and Harriet Hosmer" in the Nathaniel Hawthorne Journal, 6 (1976), 121-128.

Roger Rollin (Lemon Prof) and Dallas Owens (Sociology) co-chaired an interdisciplinary workshop "The 'Popular' in 'Popular Culture': How Can It Be Defined and Determined?" at the annual meeting of the Popular Culture Association in the South in Nashville where they presented the results of their study on the popularity of movies.

Mark Steadman (Prof) read from his works in the Writers at Furman series, Furman University, Oct. 12.

David Tillinghast (Asst Prof) conducted a poetry workshop for the Northeast Georgia Writer's Club, Gainesville Junior College, Gainesville, GA, Oct. 28.

Richard A. Underwood (Assoc Prof) published "William Hunter: Physician" in <u>Sandlapper</u>, 11 (Oct. 1978), 46-48.

Malcolm Usrey (Assoc Prof), Dixie Hickman (Asst Prof) and Deuel Griffin (Asst Prof) judged a short story contest conducted by the Anderson Independent for elementary school children in South Carolina and North Georgia.

#### HISTORY

John G. Hoffman (Vstg Asst Prof) has an article, "John Cosin's Cure of Souls: Parish Priest at Brancepeth and Elwick, County Durham," appearing in the December 1978 issue of the <u>Durham University Journal</u>.

#### HOME ECONOMICS

Joyce H. Jenkins (Asst Prof) attended the National Technical Conference of College Educators in Home Equipment and the National Home Appliance Conference sponsored by the Association of Home Appliance Manufacturers in Denver, CO. She served as a discussion leader for one session of AHAM.

#### INTERDISCIPLINARY STUDIES

N. N. Salman (Grad Stu), B. J. Kelly (Grad Stu) and J. B. Park (Assoc Prof) attended the 31st Annual Conference on Engineering in Medicine and Biology in Atlanta Oct. 21-25.

At the conference, two papers were presented: "Electrical Stimulation on Bone Growth into Porous Metal" by

N. N. Salman, Prof. Park, G. H. Kenner (Assoc Prof) and A. F. von Recum (Prof) and "Porous Piezcelectric Implants for Bone Fixation" by B. J. Kelly, M. Grether (Grad Stu, Ceramic Engr), Prof. Park, W. W. Coffeen (Prof, Ceramic Engr), and Prof. Kenner and Prof. von Recum.

Prof. Park and A. S. Hoffman (Univ of Washington) have published a paper, "Interaction of Collagen and Smooth Muscle Cell in Aortic Biomechanics," in Annals of Bioengineering, Vol. 6, pp. 167-171 (1978).

#### **LANGUAGES**

Leonard T. Perry (Instr of Spanish and Italian) read a paper, "Larra, Apologist for Spanish Society," at the 23rd Annual meeting of the Mountain Interstate Foreign Language Conference held Oct. 12-14 at Berea College, Berea, KY.

#### MATHEMATICAL SCIENCES

Renu Laskar (Prof) gave a colloquium talk on "Domination in Graph Theory" at the Mathematics Department, University of Alabama, Tuscaloosa, Nov. 8. She also talked to the senior undergraduate and graduate students of the department about the applied math program of Clemson University.

J. V. Brawley (Prof) presented a lecture, "Probability and Statistics," to students and faculty at Riverside High School in Greer Nov. 9.

Calvin T. Long (Vstg Prof) gave two addresses at Armstrong State College in Savannah, GA, Nov. 9-10. The lectures were "Some Machinations of Leonhard Euler" and "Some Remarkable Properties of Pascal's Triangle."

John Kenelly (Prof) gave an hour long invited talk, "Grading 20,000 Examinations," at the National Council of Teachers of Mathematics Meeting at Milwaukee, WI, Nov. 9.

Prof. Kenelly served as one of the three members on a program Nov. 14 for Academic Deans and Registrars at Spartanburg. The conference was sponsored by Wofford College and the Talented and Gifted Section of the State Department of Education. The presentation was entitled "Impact of College Admissions Policies in Recruiting Able Students."

Eugene Park (Assoc Prof) presented a talk, "Newton vs. Leibnitz," at Southside High School, Greenville, Nov. 14. Prof. Park has also recently completed a series of nine workshops held for calculus teachers in the high schools of Greenville County.

#### MUSIC

Lillian Harder (Inst) presided over all piano activities at the Annual Convention of the South Carolina Music Teachers Association Nov. 2-4 at Bob Jones University, thus completing service as college piano chairman. She was elected at the Convention to a two-year term as first vice-president of the South Carolina Music Teachers Association.

Edith B. Card (Asst Prof) presented a program of Appalachian Folk Music for the Blue Ridge Art Association's Annual Membership Meeting at the Holiday Inn of Clemson Nov. 2.

#### PHYSICS AND ASTRONOMY

Beverly B. Bookmyer (Prof) participated in a meeting and lecture, "Recent Developments in Cosmology," by J. Peebles at Goddard Space Flight Center, MD, Oct. 27.

A. L. Laskar (Prof) gave a colloquium talk on "The Nonlinear Arrherins Plots in the Transport Studies in Silverhalides" at the University of Alabama, Tuscaloosa, Nov. 8.

P. B. Burt (Prof) published a paper, "Microscopic Causality and Quantized

Solitary Waves," in <u>Lett. Al. Nuovo</u> <u>Cimento</u>, 697, Aug. 1978.

#### POLITICAL SCIENCE

Harold E. Albert (Prof) gave an address, "Power--D.C., S.C., or ???," to the South Carolina Advisory Council for the Social Studies state meeting at Florence.

Prof. Albert gave an address at the opening of "Energy Week" at Mauldin High School on the topic "The Role of Geothermal Energy in Future Energy Policy."

Prof. Albert also served as Natural Resources and Environmental Administration Track Leader for the southeastern regional conference of the American Society for Public Administration meeting in Charleston Oct. 18-20.

Horace W. Fleming (Assoc Prof) and Walton H. Owens (Assoc Prof) presented a paper, "Justice William O. Douglas: Elites' Perceptions of His Performance on the U.S. Supreme Court," at the Southern Political Science Association Convention in Atlanta Nov. 9-11.

Prof. Owens also presented an additional paper, "Expanding the Pedagogical Boundaries of the Political Science Discipline: Teaching the Practical Art of Television Electioneering," at the same convention.

Michael A. Morris (Asst Prof) delivered a paper, "Brazilian Naval Interests in the South Atlantic and Beyond," at the conference of the Section on Military Studies of the International Studies Association, Charleston, Nov. 8-10.

Stephen H. Wainscott (Asst Prof) presented a paper, "Performance v. Potential in Southern School Desegregation, 1967-1972," at a panel on "Desegregation: The Continuing Struggle" at the annual meeting of the Southern Political Science Association in Atlanta Nov. 9-11.

Prof. Wainscott also was a discussant

on a panel on "Socialization, Interest Groups Transformed, and the Political Process" at the same meeting.

#### PROFESSIONAL DEVELOPMENT

John H. Marvin (Assoc Pro, Tex) is chairperson for a course, "Current Technology in Carding and Sliver Preparation," to be held at Clemson University Dec. 5-6.

Edward S. Olson (Prof, Tex) and Edwin I. Stearns (retired Hd, Tex) will cochair a seminar, "Theory and Practice of Fabric Preparation," to be held here Dec. 5-6.

Thomas B. Maertens (Instr, IM) will chair a seminar, "Basic Management Processes for the Newly-Appointed Manager," to be held here Dec. 6-8.

Claude S. Simpson Jr. (Instr, IM) will be chairperson for an on-campus course, "Technical Sales," to be held Dec. 11-12.

Edward A. Vaughn (Assoc Prof and Hd, Tex) and Prof. Edwin I. Stearns will co-chair a seminar, "Fabrics for Apparel," to be held at the Marriott Hotel, Atlanta, GA, Dec. 12-13.

Instr. Simpson will be chairperson for a course, "Names and Faces," to be held here Dec. 13.

J. Michael McDonald (Asst Prof, IM) will chair a seminar, "From Secretary to Administrative Assistant," to be held at the Clemson Holiday Inn Dec. 13.

Instr. Simpson will chair a seminar, "Project Management," to be held here Dec. 14-15.

Instr. Maertens will be chairperson for a Dec. 14-15 seminar, "Effective Personnel Selection," to be held here.

Prof. McDonald will be chairperson for a course, "Techniques in Time Management and Personal Effectiveness," to be held here Dec. 18-19.

#### RECREATION AND PARK ADMINISTRATION

Herbert Brantley (Hd) has been appointed chairman of the Program Committee for the 1979 Congress for Recreation and Parks of the National Recreation and Parks Association. The Congress will convene in New Orleans in October 1979 with more than 6,000 delegates expected to attend.

Prof. Brantley was recently elected to the Council on Accreditation, National Recreation and Park Association for a three-year term.

#### SOCIOLOGY

Papers presented by members of the Sociology Department at the Mid-South Sociological Association held in Jackson, MS, Nov. 2-4 are as follows:

Helen Clark (Asst Prof) - "Community Sociology: The Challenge of Applied Sociology."

Dallas Owens (Asst Prof) - "Social Services: Training Techniques and Program Assessment."

Ron Stover (Asst Prof) - "Longitudinal Trends in Satisfaction with Leisure and Work and Their Relationships with Life Satisfaction."

Jon Wells (Instr) - "Values and Perceived Values of Police and Citizens."

#### MINUTES OF THE UNIVERSITY PLANNING COUNCIL MEETING, OCTOBER 23, 1978

Present: C. A. Aas (GSA), N. R. Bauld (ME), D. L. Collins (Arch.), M. A. Kelly (Nurs.), T. T. Lankford (Stu. Gov.), C. L. Lane (For. Chm.), D. H. Pate (For M. A. King, Ed.), P. W. Wannamaker (Lang.)

Richard Harper (Gr. St. For.) presented a report he recently completed on a

survey and classification of the trees on campus. The Planning Council discussed the problem of students and vehicular traffic and voted to send the following recommendation to President Edwards:

"The Clemson University Planning Council wishes to go on record as recommending to the Administration that vehicular traffic moving in either direction on Highway 93 in

front of Sikes Hall be brought to a full and complete stop at the crosswalks. The Planning Council feels that providing for the safety of pedestrian traffic between the main campus and the Clemson House should be the primary consideration of any re-design of this area. The flow of vehicular traffic should not be the foremost concern. This same principal should also be applied to future planning of dormitory sites."

#### Calendar of Campus Events

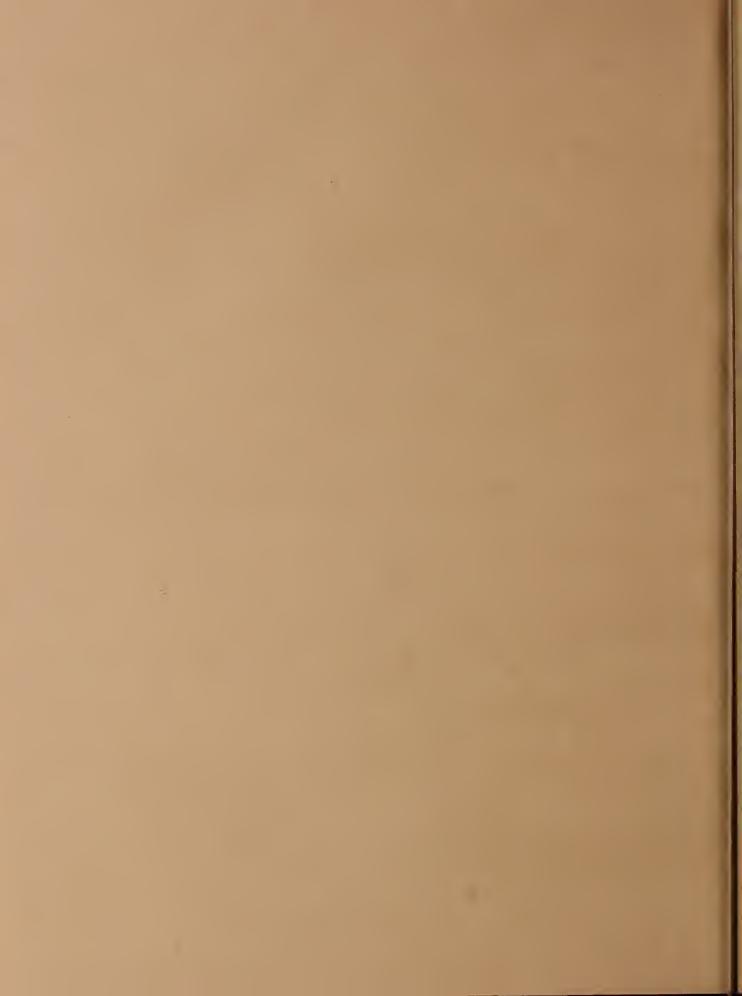
- 1-2 -- Basketball: IPTAY Invitational (Men) with Clemson, Manhattan, Kent State, and Brown. Littlejohn Coliseum, 7 and 9 p.m. each night.
- 1-2 -- Live Entertainment in Edgar's: "Pat Black." Sponsored by University Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.
- 1-2 -- Art Exhibition: "Cincinnati Candle Works" with candle making demonstration. Sponsored by University Union, Union Gallery, 10 a.m.-4:30 p.m. Open to the public, no admission charge.
  - 2 -- Declamation Contest: High school students recite poetry in a foreign language for prizes. Sponsored by Language Department, Daniel Hall, 8 a.m.-3 p.m. Participation open to high school students and teachers. Public may attend, no admission charge.
  - 2 -- Shopping Trip to Lenox Square in Atlanta. Sponsored by University Union, details and sign up at Union Information Desk.
  - 4 -- Russian Film: "The Inspector General." Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 4-15 -- Art Exhibition: "MFA and Architectural Thesis Reviews." Exhibitions reflecting the culmination of six years of study in visual arts and architecture. Consult Gallery for daily schedule. Sponsored by College of Architecture, Rudolph Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
  - 5,6 -- Applied Music Student Recital. Sponsored by Music Department, Daniel Hall Auditorium, (5) 7:30 p.m., (6) 4 p.m. Open to the public, no admission charge.
  - 7-8 -- Workshop: "Clinical Nursing Research" conducted by Florence S. Downs, Ed.D., F.A.A.N., Associate Dean and Director of Graduate Studies, University of Pennsylvania. Sponsored by College of Nursing, Continuing Education. Enrollment limited to individuals with a master's in nursing or baccalaureate in nursing with a master's in another discipline. Preregistration required. Call 656-3079 for more information.

Joseph Line 1970

#### CALENDAR OF CAMPUS EVENTS (Cont.)

8-9 -- Live Entertainment in Edgar's: "Steller Wind." Sponsored by University Union, Edgar's, 9 p.m. Proof of age and University I.D. required, 50¢ admission charge.

- 9 -- Basketball: Francis Marion College (Women), Littlejohn Coliseum, 5:15 p.m.
- 9 -- Basketball: The Citadel (Men), Littlejohn Coliseum, 7:30 p.m.
- 11 -- Examinations Begin.
- 11-12 -- Seminar: "Technical Sales." Translates technical knowledge into the language and approach a non-technical purchasing manager or executive will understand. Sponsored by Professional Development Office, call 656-2200 for more information.
- 12-13 -- Conference: "Fifth Annual Dairymen's Conference." Topics for discussion include dairy labor management, sire selection and calf rearing. Sponsored by Dairy Science Department, P&AS Building Auditorium, (12) 1-5 p.m., (13) 8-11:30 a.m. Open to all interested individuals, a registration fee will be charged.





#### NEWSLETTER/CALENDAR DEADLINES FOR DECEMBER AND JANUARY ISSUES

To meet holiday schedules, the "Newsletter" and "Calendar of Campus Events" will be prepared and published according to the following deadlines:

<u>December 1st Issue</u>: Deadline was November 20; contains calendar items for period December 1 through December 14.

<u>December 15th Issue</u>: Deadline will be December 5; will contain calendar items for period December 15 through January 14.

There will be no January 1st issue.

Regular schedule will resume with the <u>January 15 issue</u>. Deadline for this issue will be January 5.

## NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

Vol. 18 No. 9

December 15, 1978



EDWARDS ENDOWMENT CAMPAIGN PASSES \$500,000

Pledges of \$502,000, including a pacesetting gift of \$100,000 from the Self Foundation in Greenwood, were announced Nov. 20 by the chairman of a \$1 million campaign to establish The Robert Cook Edwards Endowment for Excellence in Science and Technology at Clemson University.

The campaign, named in honor of Clemson's eighth president who will retire in June 1979 after 21 years in office, is the largest capital fund-raising effort ever undertaken at the University.

Robert H. Yeargin, chairman of the board of Yeargin Construction Co. in Greenville,

is general chairman of the all-volunteer campaign organization.

Vice chairmen are Laurens attorney Paul W. McAlister; Buck Mickel of Greenville, chairman of the board of Daniel International Corp.; and James C. Self, president of Greenwood Mills. All three are life members of Clemson's Board of Trustees with McAlister serving as board chairman.

At a leadership kickoff conference for some 50 campaign volunteers, Yeargin said: "As South Carolina's primary center for higher education in science and technology...Clemson has contributed much to the life of the state and this region for almost a century. In the years ahead it will be called upon to make a

### Season's Greetings

The Christmas season, with all its joys and blessings, signals the end of one year and the beginning of another. Along with the festivity comes the opportunity to reflect on what we've accomplished and what is yet to be done.

I, personally, count my blessings for a Clemson family made up of individuals who devote themselves so unselfishly to the mission of this University. To each of you, I send my thanks for your hard work and support which make Clemson the fine institution it is. The year 1978 has, indeed, been a great one.

I hope this holiday season will be a time for sharing fellowship and happiness with family and friends. Mrs. Edwards joins me in wishing you and your loved ones a Merry Christmas and the best of everything in 1979.

Bot Cawarde

larger contribution. Its ability to do so depends, to a large degree, on increased private funding."

Yeargin cited "capabilities unique in South Carolina higher education" which Clemson provides in several areas: agriculture, architecture, civil, mechanical and electrical engineering, textiles, forestry, industrial technology, housing science, city and regional planning, industrial management, energy and environmental engineering, industrial education, and computer technology.

"With the theme 'Partner of the People,'"
Yeargin said, "this fund-raising effort
is really a commitment by the alumni,
people of the state, business and
industry and other friends of the
University to achieve a greater degree
of excellence than would otherwise be
possible."

The half-way point of \$502,000 represents 35 pledges, including those from Clemson trustees, Clemson University Foundation directors, corporations and other foundations.

McAlister said, "The prompt and generous response of these close friends, many of whom are graduates of Clemson, once again demonstrates the depth of respect for Robert Edwards and his achievements for Clemson."

McAlister also explained the endowment fund will be used in all areas of the University for such things as graduate fellowships, scholarships, professorships and visiting professorships, research and public service programs, and continuing education. Principally, the fund will enhance graduate programs throughout the University.

The campaign was authorized by a resolution passed by Clemson's Board of Trustees to be conducted through the Clemson University Foundation. George H. Aull Jr. of Charleston is president of the Foundation.

In addition to the chairman and vice chairmen, steering committee members

have been named to provide the leadership in the campaign. The members include:

GREENVILLE--Louis P. Batson Jr., vice president, Louis P. Batson Co.; Thomas C. Berry, vice president, Southern Division, Duke Power Co.; and Wilson C. Wearn, president, Multimedia, Inc.

ORANGEBURG--William W. Dukes Jr., vice president and general manager, Applied Engineering Co., and Reeves Gressette Jr., president, Gressette Pest Control Co.

ELSEWHERE IN SOUTH CAROLINA--George H. Aull Jr., senior vice president, Wilbur Smith & Associates, Charleston; Francis L. Bell Sr., vice president personnel, Springs Mills, Lancaster; Charles W. Bussey Jr., president, Laurens Glass Co., Laurens; Calhoun Lemon, chairman of the board, Cooper Motor Lines, Barnwell; Thomas B. McTeer Jr., president, McTeer Real Estate Co., Columbia; Alex M. Quattlebaum, chairman, Harllee Quattlebaum Construction Co., Florence; Billy G. Rogers, president, Dillon Insurance Agency, Dillon; D. Leslie Tindal, agriculturalist, Pinewood; and E. Craig Wall Sr., chairman of the board, Canal Industries, Inc., Conway.

OUT OF STATE--J. Garner Bagnal, treasurer and president, Forest Products, Statesville N.C.; Henry C. Coleman, retired chairman and president, Sun Bank of Daytona Beach, Daytona Beach, Fla.; James E. Cushman, president, Cushman Corp., Atlanta, Ga.; Howard D. Nottingham, president, H. D. Nottingham & Associates, Architects & Engineers, McLean, Va.; and Philip H. Prince, senior vice president personnel, American Express Co., New York City.

FROM CLEMSON UNIVERSITY—Walter T. Cox, vice president for student affairs; Frank J. Jervey, honorary campaign chairman; J. Banks McFadden, director of intramurals; Michael M. Ozburn, student body president; William F. Steirer Jr., president, Faculty Senate; Stanley G. Nicholas, vice president for development (ex officio member); and Samuel M. Willis, dean, University Extension (ex officio member).



SCHOLARSHIP HONORS DUNKELBERG -- Mrs. Dorothy Dunkelberg, widow of longtime agricultural engineering faculty member George Dunkelberg, looks on as Jim Strom (right), director of planning and corporate relations, accepts an endowed scholarship honoring her husband from Professor Clarence Hood. The scholarship was established by members of the Scuth Carolina section, American Society of Agricultural Engineers, at their annual meeting on campus. It is the second such scholarship presented by ASAE in the past two years.

#### FACULTY CLUB TO ELECT BOARD OF GOVERNORS

The newly-formed Clemson University Faculty Club will hold a 12 noon meeting Friday, Jan. 19 in the Clemson House to elect its board of 8 governors. The board of governors will be responsible for planning day-to-day operations as well as future expansion.

Organization of the club began last spring with a challenge grant of \$5,000 provided by the Alumni Association. That grant has since been matched by dues from approximately 230 members. Annual dues are \$25.

Located in the lower level of the Clemson House in the area of the old Tiger Tavern, the Faculty Club will serve primarily as a luncheon club, though its arrangement and decor will be such that it can serve as a bar in the late afternoon and provide space for receptions and other functions in the evening. Renovation of the old tavern area will begin early next year.

All interested faculty and university staff are invited to attend the Jan. 19 meeting, but only those having paid their annual dues can vote or make nominations. The meeting will be held in the Clemson Room and lunch will be available.

Anyone wishing to join the Faculty Club can pay the annual dues at the Development Office in Sikes Hall.

(The by-laws of the Faculty Club are published on page 10 in this issue of the Newsletter.)

#### INFORMATION SESSION TO BE HELD FOR RETIRING STATE EMPLOYEES

South Carolina State employees at Clemson University who anticipate retiring after July 1979 are invited to attend a brief information session concerning retirement benefits and planning on Tuesday, Jan. 9, at 9:30 a.m. in Daniel Auditorium.

Representatives from the S. C. Retirement System, Social Security Administration, and Clemson University Insurance Office will briefly present important facts concerning retirement, and will answer any questions from those interested.

Employees already scheduled for retirement by June 1979 have been given individual appointments for conferences with the S. C. Retirement System representative.

#### OFFICE PERSONNEL INVITED TO ATTEND HUMAN RELATIONS AND COMMUNICATION WORKSHOP

The Counseling Center will again offer its comprehensive workshop involving human relations and communication skills from 8:15 a.m. to noon Jan. 31 in 200 Tillman Hall.

This workshop is intended to enhance and/ or help modify the behaviors of office staff members in the direction of better communication, mutual respect, and increased awareness of consumer problems. The center stresses that the focus of the workshop is to learn and to practice new skills in human relations and personal interaction.

Enrollment is limited, so please reserve your place now by calling 2451.

#### ACCOUNTING AND FINANCE

Mike Sibley (Assoc Prof) and John Domonkos (Cleveland State Univ) have received word that their paper, "The Pricing of Ordinary Savings Deposits and Bank Response to a Change in Deposit Rate Ceilings," has been accepted for publication in <u>Business and Economic Perspectives</u> and will appear in the forthcoming issue.

#### **BIOCHEMISTRY**

G. L. Powell (Assoc Prof) was chairman of the morning session at the Annual Southeastern Regional Lipid Conference at Long Beach, NC, Sept. 28. Prof. Powell and J. E. Churchich (Univ Tennessee) presented a paper, "Interaction of the Fluorescent Analogue Palmitoyl-(1,N etheno) CoA with Mitochondrial Malate Dehydrogenase and Phospholipid Vesicles," and A. V. Caggiano

(Grad Stu) and Prof. Powell presented a paper, "Site Specific Binding of Fatty Acyl-CoA by Citrate Synthase," Sept. 29.

Prof. Powell visited the group of cardiologists and surgeons at St. Vincent's Hospital led by Dr. Jerome Kay (Los Angeles) during the last weeks in October.

D. C. Speckhard (Asst Prof) and associates from Ohio State, Perry A. Frey, Bryan H. Ikeda, Grace Ramos Gauino and Shan S. Wong, published a paper, "Escherichia coli Pyruvate Dehydrogenase Complex. Site Coupling in Electron and Acetyl Group Transfer Pathways," in the Journal of Biological Chemistry, vol. 253, p. 7234, 1978

Prof. Powell gave a seminar, "Fatty AcyJ-CoA Binding to Citrate Synthase: A Regulatory Phenomenon," to the Department of Biochemistry, Medical University of South Carolina, Nov. 16 and a seminar, "Spin Labeled Cardiolipin as a Probe for Specific Lipid Protein Interactions in the Membrane Enzyme Cytochrome Oxidase," to the Department of Pharmacology, MUSC, Nov. 17.

- J. M. Shively (Prof and Hd) performed collaborative research with Dr. E. Bock at the University of Hamburg, West Germany, Aug. 10-Sept. 15.
- J. W. Brunson (former Grad Stu), Prof. Shively, Kathleen Stralka, G. L. Decker and J. W. Greenawalt published a paper, "Intracytoplasmic Membrane Production in Escherichia coli Ollla: Nutritional Parameters," in Current Microbiology, Vol. 1 (1978), pp. 123-128.

Prof. Shively presented the following seminars while in Europe in August and September:

"Carboxysomes, Ribulose Bisphosphate Carboxylase, and the Fixation of CO<sub>2</sub> by Thiobacillus neapolitanus," at State University, Groningen, Holland, at the University of Warwick, Coventry, England, and at the University of Liverpool, Liverpool, England.

Prof. Shively and G. C. Cannon (Grad Stu) presented a paper, "Carboxysomes and the Regulation of Ribulose Bisphosphate Carboxylase in <u>Thiobacillus neapolitanus</u>," a poster session, at the XII International Congress of Microbiology, Munich, Germany.

Prof. Shively, J. L. Pruitt (Stu), G. C. Cannon (Grad Stu) and K. F. Allen (Mgr. of Labs) presented a poster session, "Improved Isolation and Partial Characterization of the Carboxysomes of Thiobacillus neapolitanus," at the XII International Congress of Microbiology, Munich, Germany.

#### COUNSELING CENTER

Lucile Reddick (Counselor), William Wells (Psychologist) and Fred Steele (Director) attended the Southeastern Conference of Counseling Center Personnel meeting held in Staunton, VA, Oct. 18-20.

Dr. Wells and Dr. Teresa Gonzales (Psychologist, James Madison University) presented a paper, "Counselor Communication With The Deaf Student," at the meeting.

The next annual conference convention will be hosted by the Clemson University Counseling Center in October 1979. This convention will bring approximately 300 college counselors to the campus for a three-day meeting.

#### **ECONOMICS**

Richard McKenzie (Prof) presented papers at the Southern Economics Association, Nov. 8-10, entitled "Fiscal Illusion and the Impact of Education on Government Size" and "The Non-Rational Domain and the Limits of Economic Analysis."

Prof. McKenzie will also give a convocation speech at the University of Nebraska Dec. 30 and a seminar to the faculty of the University of Nebraska on the same date entitled "The Wage Fund Pay System and Departmental Discord in Academe."

Prof. McKenzie spoke Dec. 1 on "Political

Economy in Principles of Economics" before the conference of community college economics instructors sponsored by the Joint Council on Economic Education.

Joseph Prinzinger (Asst Prof) presented a paper, "An Evaluation of the Now Account Phenomenon," at the Southern Economic Association meeting in Washington, DC, Nov. 9.

Holley H. Ulbrich (Assoc Prof) spoke to the Clemson Women's Center Nov. 16 on "Working Women and Their Impact on the Economy."

Bruce Yandle (Prof) and Jim Proctor (former Grad Stu) have a publication, "Effect of State Usury Laws on Housing Starts: Comments," in the <u>Journal of Financial and Quantitative Analysis</u>, Sept. 1978, pp. 549-557.

Prof. Yandle led a workshop for economics faculty and graduate students at the University of South Carolina Nov. 1. The topic of the workshop was "Policy Analysis of Federal Regulations."

Hugh Macaulay (Alumni Prof) presented a paper, "Economic Aspects of Citizen Suits," at the annual meeting of the Southern Economic Association in Washington Nov. 9-10. He was also a discussant of two other papers.

Prof. Yandle and Prof. Macaulay have been named adjunct scholars of the American Enterprise Institute.

Rodney H. Mabry (Assoc Prof) chaired the session on "Economics of Crime" at the Annual Meeting of the Southern Economics Association in Washington, DC, Nov. 8-11. He also participated as a discussant in the "State and Local Finance" session.

Prof. Mabry made a presentation Nov. 21 to the Special Legislative Subcommittee for Financing County and Municipal Government on the possibility of authorizing a local option income tax in South Carolina. The presentation was an outgrowth of a paper prepared on the subject by Prof. Mabry for the subcommittee.

Russell Shannon (Prof) published an article, "No Business with Byssinosis?" in the November 1978 issue of <u>The Clemson</u> University Textile Marketing Letter.

#### ELEMENTARY AND SECONDARY EDUCATION

Elizabeth B. Galloway (Prof), formerly member-at-large of the South Carolina State Elementary Committee and Commission of Southern Association of Colleges and Schools, has been elected college representative for the State Commission and Regional Commission.

Virginia Stanley (Asst Prof) presented a speech on "The Literary Qualities Lacking in Nancy Drew" at the Clemson Reading Conference.

#### **ENGLISH**

Sterling Eisiminger (Asst Prof) published "Epitaphs and the Composition Class" in The English Journal, 67 (Nov., 1978), 71-2.

Robert W. Hill (Assoc Prof) published "Of All Possible," a poem, in <u>The Southern</u> Review, 14 (Autumn 1978), 758-9.

A paper, "Adlerian Criticism: The Dynamics of Power in Literature," by John J. McLaughlin was presented at the South Central Modern Language Association meeting in Houston Oct. 19.

Roger Rollin (Lemon Prof) read "Self Created Artifact: The Speaker and the Reader in <u>The Temple</u>" at a meeting entitled "Too Rich to Clothe the Sun": A Celebration of George Herbert, held at the University of Michigan, Dearborn, Oct. 19-21.

Eight members of the Department of English were on the program of the South Atlantic Modern Language Association, Atlanta, Nov. 9-11: Sterling Eisiminger (Asst Prof) read "The Consequence of Error" in the Advanced Writing Discussion Circle; Bruce Firestone (Asst Prof) read "William Faulkner and Hollywood" in the Films Section; Claud B. Green (Prof and Dean of

Undergraduate Studies) served on the Nominating Committee of SAMLA-SEASA: Louis Henry (Assoc Prof) served as secretary of SAMLA-SEASA; Robert Hill (Assoc Prof) served on the Nominating Committee of the Freshman English Section and presided in the SAMLA Golden Anniversary Special Fiction Reading Section; John Idol (Assoc Prof) read "Untangling the Skein of Names: Exercises in Shared Composition" in the Freshman English Section; Jerome H. Mandel (Prof) read "Art in the Opening of Deor" in The Old English Discussion Circle; and Malcolm Usrey (Assoc Prof) chaired the Children's Literature Section.

Prof. Hill gave a poetry reading at the Colleton County Memorial Library, Walterboro, under the auspices of the S. C. Committee for the Humanities, Nov. 21.

#### ENVIRONMENTAL SYSTEMS ENGINEERING

Thomas J. Overcamp (Assoc Prof) has been elected to the Board of Directors of the Carolinas Air Pollution Control Association.

Prof. Overcamp served on a proposal review panel for the U. S. Department of Energy's Faculty Development Program.

#### FORESTRY

D. H. Van Lear (Prof) presented a paper, "Alternative Methods of Regenerating White Pine in South Carolina," at a symposium on Management of Interior Pines in the South at Asheville, NC. S. K. Cox (For Aid) co-authored the paper.

D. L. Ham (Asst Prof) presented a paper, "Construction Damage to Trees," at the 70th Annual Meeting of the American Phytopathological Society held at Tucson, AZ.

The Southeastern Forest Experiment Station, U.S. Forest Service was granted \$22,488 for the investigation of "Mulching as a Remedial Treatment for Soil Compaction Around Trees in Urban Areas."

Research is to be conducted under the supervision of Prof. Ham and B. A. Dunn (Assoc Prof).

R. Johnson (Grad Stu) and Prof. Dunn coauthored the paper "Characteristics Associated with Campsite Use Intensity: Assessment of Physical and Ecological Impacts" at the 1978 Congress for Recreation and Parks held at Miami, FL.

Prof. Dunn also presented the paper "Recreation Activity Participation as a Function of Personal Distance Characteristics."

Gene Wood (Assoc Prof at the Belle W. Baruch Forest Science Institute located in Georgetown) spent a two-week period, Oct. 15-29, on a cooperative study with the Southeastern Wildlife Disease Study Group in Puerto Rico and in the Virgin Islands. The group investigated wild swine populations and their threat for introducing African Swine Fever into the United States.

R. E. Schoenike (Assoc Prof), Prof. Van Lear, and J. D. Benson (Res For) coauthored a paper, "Comparison of Shortleaf, Loblolly, and Putative Hybrid Pines in the Piedmont of South Carolina," published in <u>Silvae</u> <u>Genetica</u> 26 (5-6).

#### **HISTORY**

Victor H. Matthews (Vstg Asst Prof) has had his book, Pastoral Nomadism in the Mari Kingdom, ca. 1830-1760 B.C., published by The American Schools of Oriental Research.

#### INDUSTRIAL MANAGEMENT

Paul F. Peterson (Instr) presented a paper, "The Relationship of the Occupational Health Nurse and the Occupational Safety Program," at the Nursing Section of the Southeastern Occupational Health Conference held at the Hyatt Hilton on Hilton Head Island Nov. 7-11.

Earl W. Arp (Assoc Prof) presented a paper, "A Retrospective Assessment of

Solvent Exposure and the Relationship to Lymphatic Leukemia," at the Southeastern Occupational Health and Safety Conference, Hilton Head, Nov. 9. Co-authors were Pamela Wolf (Georgetown Univ) and Edward Hunt (Univ of North Carolina).

Gene C. Uselton (Prof) and Peggy W. Uselton (Instr) presented a co-authored paper at the Southern Economic Association/Southern Finance Association National meeting in Washington, DC, Nov. 9. The paper dealt with "Public Policy toward General Aviation."

J. Michael McDonald (Asst Prof) presented a paper, "Stability of the LPC Categorization of Leaders," at the Southern Management Association annual meeting in New Orleans, LA, Nov. 15-18. The co-author was Elmore Alexander (Memphis State Univ).

Jean Woodruff (Instr) was a featured speaker Nov. 9 at "Careers Night," sponsored by American Association of University Women for local female high school students and spoke on nontraditional careers for women in industrial management.

John K. Butler Jr. (Asst Prof) presented a paper, "How to Make a Worker Enthusiastic About His Job," Oct. 30 at Brick Makers' Plant Operators Forum. The meeting was hosted by the Ceramic Engieering Department.

Prof. Butler presented a paper, "Relationships of Value-Fulfillment to Job Satisfaction: A Classification of Values," Nov. 17 at the Southern Management Association.

#### MATHEMATICAL SCIENCES

S. M. Lukawecki (Prof) has been appointed to an ad hoc panel by the Mathematical Association of America to develop a Calculus Readiness Test. Prof. Lukawecki met with the MAA Panel in Washington, DC, Nov. 18 and 19.

At the SIAM Fall Meeting in Knoxville, TN, Oct. 30-Nov. 3, the SIAM Education

Committee convened to discuss a planned nationwide sampling of career experiences of mathematical sciences alumni in nonacademic employment. T. G. Proctor (Prof), chairman, and C. V. Aucoin (Prof) attended the meeting. The trustees of SIAM asked Prof. Aucoin to form a mathematical sciences undergraduate and graduate education consultants bureau for SIAM and to coordinate the activities of the group.

J. K. Luedeman (Assoc Prof) and graduate students David Lubbers and Hidaeki Kaneko gave invited talks. Prof. Luedeman's paper was entitled "Semigroups for Which Every Totally Irreducible S-System is Injective"; Lubber's was on "The Hankel Autocorrelation"; and Kaneko's was "Schauder Decomposition in Sobolev Space."

Calvin T. Long (Vstg Prof) traveled to the University of Missouri at St. Louis Nov. 27 and 28 to present two colloquium talks. His presentations were "On the Factorization of Sets of Integers" and "Some Machinations of Leonhard Euler."

Prof. Luedeman has recently presented talks to the following local high school mathematics classes. In Oakway on Nov. 27 he talked to the class on "What Mathematics is Like at Clemson University." On Dec. 5 and 6 he presented a talk to the Seneca High School algebra and trigonometry classes on "The Mathematics Needed for College Mathematics" and to the Seneca calculus class on "Advanced Placement Calculus."

Fred Morgan (Asst Prof) accompanied members of the Math Club to the University of Maryland, College Park, where they met with members of the Math Club there. They discussed problems that the clubs were having and possible solutions.

Prof. Aucoin attended the Conference Board of Mathematical Sciences meeting in Washington, DC, Dec. 3 where he was elected to the Executive Council of the CBMS. He was asked to write a paper for the Conference Board of Mathematical Sciences Newsletter describing the Clemson mathematical sciences graduate

programs.

On Dec. 4, Prof. Aucoin participated in a panel presentation on the interface between mathematics and computer science to the Association of Computer Machinery. His topic was "Computer Science and Graduate Education in Applied Mathematics."

Prof. Luedeman taught a CPR Basic Life Support Course to the faculty and graduate students of the Mathematical Sciences Department Nov. 13-21.

#### MUSIC

Edith B. Card (Asst Prof) presented a lecture/demonstration Nov. 16-17 on the Appalachian dulcimer at the Hartsville Elementary Schools. The presentations were sponsored by the S. C. Arts Commission.

#### NURSING

Cynthia Belcher (Asst Prof) has been elected to serve as chairperson of the South Carolina Nurses Association Council on Education.

Aileen Prevost (Assoc Prof) has been elected a member of the SCNA Council on Education.

Judith Chodil (Dir of Continuing Education and Assoc Prof) has been elected to the SCNA Council on Continuing Education.

#### PHYSICS AND ASTRONOMY

P. B. Burt (Prof) gave a seminar Nov. 20 at the University of Georgia entitled "Collapsons: New Nonlinear Waves."

R. L. Chaplin (Prof) with K. N. Chang, M. S. Cook and K. M. Hamlyn (Former Grad Students) published a paper, "Modern Thermocouple Experiment," in Am. J. Phys. 46, 1180 (1978).

#### PLANT PATHOLOGY AND PHYSIOLOGY

N. D. Camper (Prof) visited the Department of Plant Pathology and Weed Science at Mississippi State University Nov. 8 and presented a seminar, "History and Current Status of Plant Tissue Culture."

The following papers have been published from the Herbicide Physiology Laboratory: "Degradation of Nitralin by Rhizoctonia solani" by Prof. Camper and Kathryn Ellers (Res Tech), Weed Res. 18: 99-103; "Degradation of Fluometuron by Rhizoctonia solani" by R. W. Rickard (Grad Stu) and Prof. Camper, Pesticide Biochem. and Physiol. 9: 183-189.

The following professors attended the national meeting of the American Phytopathological Society in Tucson, AZ, Oct. 29-Nov. 3: O. J. Dickerson (Prof & Hd), R. W. Miller (Assoc Prof), G. C. Kingsland (Assoc Prof), M. R. McLaughlin (Vstg Asst Prof), and E. I. Zehr (Assoc Prof). Prof. Zehr chaired the Chemical Control Committee. Prof. Kingsland chaired the Epidemiology Section. Papers presented are as follows:

Prof. McLaughlin presented two papers in the poster session: "Detection and Differentiation of Bean Yellow Mosaic Virus and Clover Yellow Vein Virus by ELISA," co-authored by O. W. Barnett (Prof) and P. B. Gibson (USDA); "The Fate of Southern Bean Mosaic Virus (Cowpea Strain) in the Vector, Cerotoma trifurcata (Forst.)," co-authored by G. M. Milbrath, formerly at the University of Illinois, now at Department of Agriculture, Salem, OR, and R. M. Goodman of the University of Illinois.

Prof. Kingsland presented two papers:
"Aspergillus flavus in Corn Field Soil
and on Corn Roots in South Carolina" and
"Effect of Maize Dwarf Mosaic Virus Infection on Yield and Stock Strength of
Corn in the Field in South Carolina."

#### TEXTILES

C. W. Roberts (Prof) was co-chairman and presiding officer for a Nov.9 Symposium

on Textile Dyestuffs, South Eastern Regional meeting, American Chemical Society, Savannah, GA.

Hassan Behery (Assoc Prof) presented a paper, "An Engineering Approach for Evaluation of Fabrics for Uniforms," at the Airline Uniforms Conference held at Scottsdale, AZ, Oct. 29-Nov. 1.

John J. Porter (Prof) chaired the Session for Energy and Ecology at the National meeting of the American Association of Textile Chemists and Colorists in Anaheim, CA, Nov. 1-2.

#### ZOOLOGY

Gayle Pittman Noblet (Asst Prof) and Thomas C. Gore (Grad Stu) attended the 53rd annual meeting of the American Society of Parasitologists in Chicago, IL, Nov. 5-7, and presented a paper, "Physiological Factors Affecting the Periodicity of Leucocytozoon smithi Gametocytes."

James E. Schindler (Assoc Prof), J. B. Waide (Asst Prof) and the following graduate students, M. C. Waldron, J. J. Hains, S. P. Schreiner, M. L. Freedman, S. L. Benz, D. R. Pettigrew, L. R. Schissel and P. J. Clark, presented two papers entitled "A Microcosm Approach to the Study of Biogeochemical Systems: 1. Theoretical Rational, " and "A Microcosm Approach to the Study of Biogeochemical Systems: 2. Responses of Aquatic Laboratory Microcosms to Physical, Chemical and Biological Perturbations" at the Microcosms in Ecological Research Symposium sponsored by the Savannah River Ecology Laboratory of the University of Georgia Nov. 8-10.

John P. Wourms (Assoc Prof) and William C. Hamlett (Grad Stu) published an abstract, "Secretion of an Adhesive Extracellular Matrix by Cement Glands of Larval Angelfish," in J. Cell Biology 79 (2, pt 2): 154A.

C. S. Henderson (Univ of Missouri), W. T. Swank (Coweeta Hydro Lab), Prof. Waide, and C. C. Grier (Univ of Washington) published a paper, "Nutrient Budgets of

Appalachian and Cascade Region Water-sheds: A Comparison," in <u>Forest Science</u> 24: 385-397 (1978).

D. D. Huff (Oakridge National Lab.),
W. T. Swank, C. A Troendle (Rocky Mountain Station), C. S. Henderson, Prof.
Waide, and T. Haynes (US Forest Service)
presented a paper, "Element Cycle and
Water Budget Analyses Applied to Forest
Management in the Eastern United States,"
at this year's Society of American Foresters meetings held in St. Louis, MO.

## BYLAWS OF THE FACULTY CLUB OF CLEMSON UNIVERSITY

#### 1. Name

The name of this organization shall be the Faculty Club of Clemson University.

## 2. Purpose

The purpose of the Faculty Club shall be to encourage and promote an informal forum of communication among all groups of the University community that will strengthen the understanding and concern for Clemson University, and its many facets.

## 3. Membership

#### 3.1 Membership Eligibility.

Categories of membership shall be the following:

3.1.1 MEMBER: Those eligible for membership shall be the President of the University, the Vice Presidents of the University, the Deans of Undergraduate Studies, Graduate Studies, and Univer-

sity Extension, all academic deans, directors, and department heads, the teaching, research, and extension faculty, adjunct and visiting faculty, the professional librarians, all executive administrative staff, all University personnel, members of the Board of Trustees, members of the Board of Visitors, University Chaplains, widows and widowers of former members, and all active alumni of the University.

Membership may be continued into retirement.

3.1.2 <u>HONORARY MEMBER</u>: Invitation for honorary membership may be extended by the Board of Governors to friends of the University, distinguished visitors, and persons who have attained high distinction in education, research, and public life and who may or may not be members of the University.

## 3.2 Right to Vote and Hold Office.

- 3.2.1 All members have full voting rights and are eligible to serve on the Board of Governors.
- 3.2.2 Honorary members may attend meetings of the Club Membership, but they cannot vote or serve on the Board of Governors.

#### 3.3 Election of Members.

- 3.3.1 Membership shall be extended automatically to those eligible under 3.1.1 upon filing an application with the Membership Committee Chairperson of the Faculty Club Board of Governors, payment of the appropriate membership initiation fee, and payment in advance of the appropriate annual membership dues.
- 3.3.2 Honorary Membership shall be extended through the following procedure:
  - (a) Individuals may be nominated

for Honorary Membership by any member of the Faculty Club. Such nominations shall be directed to the Membership Committee Chairperson of the Faculty Club Board of Governors and must include a brief statement as to why the nominee should be granted Honorary Membership.

(b) Honorary Membership shall be granted upon the unanimous approval of the members of the Faculty Club Board of Governors present and voting.

#### 3.4 Termination of Membership.

Membership may be terminated in the following ways (in no case will dues paid in advance be refunded):

- 3.4.1 A member may notify the Faculty Club Membership Committee Chairperson of his resignation.
- 3.4.2 Membership shall be subject to forfeiture for failure to comply with the Bylaws or operational rules of the Faculty Club. All decisions as to noncompliance shall be made by a three-fourths vote of the members of the Faculty Club Board of Governors present and voting but no decision shall be made without written notice to the member involved and an opportunity provided for the member to appear for explanation.
- 3.4.3 Membership shall be withdrawn automatically when the eligibility under which the member was elected ceases to exist. Withdrawal shall occur at the end of the year for which the member has paid advance dues and during which membership eligibility ceases.

## 3.5 Reinstatement of Membership.

- 3.5.1 One whose membership has been terminated by resignation may seek reinstatement under 3.3, at any time.
- 3.5.2 One whose membership was terminated by forfeiture may seek reinstatement under 3.3, one year from the date of forfeiture. Such requests for reinstatement must be approved by three-fourths of the members of the Board of Governors.

- 3.5.3 One whose membership is withdrawn because of loss of eligibility may seek reinstatement under 3.3, whenever eligibility is re-established in accordance with 3.1.
- 3.6 Those members absent from Clemson for a period of 6 months or longer may request a leave of absence during which time their dues will be waived.

## 4. Membership Payments

#### 4.1 Initiation Fee and Annual Dues.

To become a member of the Faculty Club initiation fees and annual dues are required in the amounts set by the Board of Governors and approved by a simple majority of the voting membership at the annual meeting of the membership.

### 4.2 Terms.

Both initiation fees and annual dues shall be paid in the manner established by the Board of Governors. Dues for new members will be pro rated based on the quarter in which they are elected. A membership year will run from September 1 through August 31.

#### 4.3 Other.

Any matter related to initiation fees or dues, not covered by these Bylaws, will be determined by majority action of the members of the Faculty Club Board of Governors present and voting.

#### 5. Annual Meeting

#### 5.1 Business to be Conducted.

An annual meeting of the membership chaired by the Chairperson of the Board of Governors shall be called by the Board of Governors within one week of the beginning of the fall semester to amend the Bylaws, to approve initiation fees and dues, to elect new members to the Board of Governors and to conduct any other business which may be brought before the membership.

#### 5.2 Quorum.

A quorum of the membership shall consist of a simple majority of those active members of the Faculty Club.

#### 6. Board of Governors

### 6.1 Composition and Tenure.

The Board of Covernors shall be drawn from the membership and shall consist of eight persons elected by the voting members at the annual membership meeting. These board members shall serve staggered three-year terms. Terms will run from October 1 to September 30. Vacancies that occur before the terms of office are completed shall be filled by majority vote of the Board of Governors until the next annual membership meeting when a new election can be held. Under no circumstances will an individual serve more than five consecutive years as a Board member. For the first year of its operation, the Board of Governors will be elected from those eligible at a called organizational meeting. A procedure for staggering the terms of office shall be worked out by the Board of Governors prior to the first annual meeting following the organizational meeting.

#### 6.2 Officers.

There shall be three officers of the Board: a chairperson, secretary, and treasurer. These officers must be members of the Board. They shall serve one-year terms from October 1 through September 30 and may succeed themselves. Nominations of officers will be made by Board members during a September meeting and the officers will be elected by majority vote of the members of the Board present and voting at the same meeting.

#### 6.3 Meetings.

The Board shall meet at least once monthly at meeting times set by the Chairperson. Special meetings may be called by the Chairperson upon the request of any Board member.

## 6.4 Organization.

- 6.4.1 Standing Committees. There shall be four standing committees of the Board of Governors.
  - (a) Activities
  - (b) Facilities
  - (c) Membership
  - (d) Operations (to include food service)
- 6.4.2 Members of the Board will be assigned responsibility for chairing specific committees by the Chairperson with concurrence of a majority of the Board. These Board members may further select members of the Faculty Club who are not members of the Board, to serve as committee members in performing their duties.

#### 6.5 Quorum.

A quorum of the Board of Governors shall consist of five of the eight members.

#### 6.6 Duties and Powers.

The Board of Governors is responsible for all operations of and within the Faculty Club and shall have those duties and powers enumerated in these Bylaws or specified by the Faculty Senate. Specific duties include:

- 6.6.1 Chairperson of the Board The Chairperson shall preside at all
  meetings of the Board and the membership
  or shall appoint a Board member to
  preside in his absence, shall appoint
  chairpersons to be responsible for
  specific activities necessary for the
  operation of the Faculty Club, shall
  coordinate the operations of the Faculty
  Club and shall perform such other
  functions normal to an office of this
  type.
- 6.6.2 Secretary The Secretary shall keep the minutes of all meetings of the Board and membership, shall announce such meetings, shall keep records of all transactions of the Board other than financial, shall be responsible for suitable publicizing of all functions and activities of the

Faculty Club including the preparation of brochures and pamphlets, and shall perform such other functions normal to an office of this type.

- 6.6.3 <u>Treasurer</u> The Treasurer shall be responsible for recording and controlling the financial transactions of the Faculty Club and shall perform such other functions normal to an office of this type.
- 6.6.4 Activities Committee This committee shall be responsible for all special social functions and other activities sponsored by the Faculty Club.
- 6.6.5 <u>Facilities Committee</u> This committee shall be responsible for all activities related to the physical facilities of the Faculty Club including interior design and furnishings.
- 6.6.6 Membership Committee This committee is responsible for directing membership drives, processing membership applications, maintaining records of those eligible for membership, maintaining membership records and providing membership cards to members.
- 6.6.7 Operations Committee This committee is responsible for the regular ongoing operations of the Faculty Club including regular provision of food service.

## 7. Amendments

## 7.1 Method of Proposing.

Any member of the Board of Governors or any fifteen members of the Faculty Club may propose amendments to these Bylaws. Proposed amendments must be submitted in writing to all members at least one week before the annual meeting of the membership.

## 7.2 Voting.

A simple majority of those members attending the annual meeting shall be required to amend the Bylaws.

### 8. Operation Rules

The Board of Governors shall develop operating rules for the Faculty Club. These rules will be established and modified by a two-thirds vote of the Board of Governors.

### 9. Parliamentary Authority

The rules contained in the current edition of Robert's Rules of Order shall govern meetings of the Faculty Club Board of Governors and the annual membership meeting except when they are inconsistent with these Bylaws or with special rules of order the Board or membership adopts.

## OPERATIONAL RULES OF THE FACULTY CLUB OF CLEMSON UNIVERSITY

1. These rules apply to all members of the Faculty Club, their guests, and any other users of the facilities and services of the Faculty Club.

# 2. Eligibility for Use of the Faculty Club

- 2.1 A member of the Faculty Club is eligible for the use of all of its facilities and services.
- 2.2 A spouse of a member of the Faculty Club is eligible for the use of all of its facilities and services.
- 2.3 A member's immediate family may use the facilities of the Faculty Club when accompanied by that member or the member's spouse.
- 2.4 Guests accompanying a member or the member's spouse may use the facilities of the Faculty Club. Individuals who are eligible for membership in the Faculty Club may not be guests.
- 2.5 Prospective members may use the facilities and services of the Faculty Club. A prospective member is an individual who is eligible for Faculty Club membership and who holds a valid Prospective Member's Card. Such cards will be issued only once to those

eligible and will be valid for two weeks from date of issue.

2.6 University or University related groups, upon written request to and subsequent approval of the Faculty Club Board of Governors, may use the facilities of the Faculty Club and may make special arrangements with the food service operator for catering service providing such use does not interfere with the regular dining service. The Chairperson of the Board may approve the use of the Faculty Club by such groups in the event that time does not permit consideration of a request by the Board. However, such action must be reviewed by the Board at its next meeting and a decision made as to whether such approval will be continued.

#### 3. Hours of Operation

The normal hours of operation will be established by the Board of Governors.

#### 4. Privileges Not Available

No gatherings for which admission is charged may be held in the Faculty Club except as the Board of Governors may approve.

#### 5. Behavior and Dress

- 5.1 Those using the facilities and services of the Faculty Club shall be expected to behave in a manner befitting the surroundings and to exercise reasonable care in avoiding abuse of the furnishings.
- 5.2 Members of the Faculty Club are responsible and liable for the actions of their guests and other visitors they sponsor.

#### 6. Miscellaneous

6.1 No furnishings or other property of the Faculty Club may be removed from the premises except by permission of the Board of Governors or their designated representatives.

- 6.2 Only the Board of Governors or their designated representatives may accept gifts to the Faculty Club.
- 6.3 No exhibits, displays or announcements may be placed on the premises of the Faculty Club without permission of the Board of Governors.

## 7. Modification of the Operational Rules

These rules may only be modified as provided for in the Bylaws of the Clemson University Faculty Club.

# MINUTES OF THE UNIVERSITY AUDIO VISUAL COMMITTEE MEETING, OCTOBER 26, 1978

Present: W. A. Shain, W. H. Durham, A. C. Groseclose, R. G. Halfacre, D. W. Blair, J. A. Stockham, S. Forsbery, T. F. Collins.

Chairman Owens called the meeting to order at 12:25 p.m.

The minutes of the Sept. 28, 1978, meeting were approved after the open house-equipment display activity name was changed from "A Communications Carnival" to "Communications Carnival."

Chairman Owens reported that T. E. Burke had agreed to chair the Instructional Packages Sub-Committee, and W. A. Shain had agreed to chair the Equipment Display Sub-Committee. He discussed the four sub-committees and passed out sheets containing details of the duties of each sub-committee. A sign-up list was handed out so that members could indicate a preference for sub-committee assignments.

W. H. Durham suggested that a date be set for the Communications Carnival. After a brief discussion, it was decided that the Carnival should be held on the following dates:

March 6, 1979 Noon to as late as possible
March 7, 1979 Until 4:30 p.m.

Allen Groseclose suggested that a banner advertising the event might be erected in Harcombe.

After deciding that the next meeting would be Nov. 30, 1978, the meeting was adjourned.

Respectfully submitted,

T. F. Collins, Secretary

MINUTES OF THE COUNCIL OF ACADEMIC DEANS MEETING, OCTOBER 27, 1978

The Council of Academic Deans met Oct. 27 in the Architecture Library, Lee Hall. Dean Hurst called the meeting to order at 9 a.m. with the following in attendance: Dean Anderson, Dean McClure, Dean Landrith, Dean Wilcox, Dean Box, Dean Trevillian, Dean Cox, Dean Labecki, Ms. Janie Dillon (for Dean Vogel), Dean Green, Dean Schwartz, Dean Willis, and Dr. Steirer.

Mr. Walter D. Stone, director of the Physical Plant, addressed the deans briefly to let them know that he would be arranging individual meetings with them in order to get acquainted and to determine what their problem areas are. He stated further that after determining what their needs are, he can base his priorities accordingly.

The recommendations made by the Undergraduate and Graduate Councils at their Sept. 8 and Oct. 6 meetings relative to additions, deletions, and changes in courses and/or curricula, were approved by the Council of Academic Deans.

In addition to the courses and curricula items, the Council of Deans considered three items that were adopted by the Graduate Council Oct. 6.

1. A "Draft Report of Committee to Study Cooperative Education Plan for Graduate Students" was considered and approved by the deans. A statement on this subject will appear in <a href="The Graduate School">The Graduate School</a> Announcements.

- 2. A draft report on Advisory Committees for graduate students was presented which outlined the composition of an Advisory Committee and listed the duties and responsibilities of the major advisor and research advisor. The deans expressed concern over the stipulation that, "in cases where a student conducts research under the direction of a faculty member who is based off-campus or whose departmental interaction is limited, both a Major Advisor (oncampus, full-time faculty member) and a Research Advisor (off-campus or parttime faculty member generally with an adjunct title) must be appointed." There was much discussion, and some of the deans felt it was too restrictive to require that the major advisor be on campus. Dean Hurst felt that enough questions were raised to justify delaying action. Dean Schwartz asked Deans Anderson, McClure, Wilcox and Box to meet with him to discuss the statement.
- 3. The last item for consideration was a "Committee Report from the Ad Hoc Committee to Study Post-Baccalaureate Status." This report defines what a post-baccalaureate student is and outlines the requirements for their admission to Clemson. This report was approved by the deans, and a statement will appear in <a href="The Graduate School">The Graduate School</a> Announcements and the Clemson University Announcements.

Dean Hurst distributed Faculty Senate Resolution FS-78-10-4 which states that the Faculty Senate endorses the "Withdrawal from Class Policy" proposed by the Council of Academic Deans at their Sept. 18 meeting, with the exception that the time allowed for withdrawal be changed from seven weeks to four weeks. This change from seven to four weeks was viewed by some of the deans as a major change, and after much discussion it was decided that Dean Green should present it to the Undergraduate Council at its Nov. 3 meeting.

Dean Hurst distributed a Student Government Policy Position on the Confidentiality of Student Records. He asked the deans to discuss it with their administrators, and asked Dr. Steirer to take it up with the Senate, and for them to report back to Dean Hurst the responses they receive.

Dean Hurst distributed Student Senate Resolution R-78-79-20, "Policy for Syllabus Handouts." After a general discussion regarding what a syllabus actually is, Dean Landrith stated that there was a syllabus developed by a committee for use in his college, and he will send copies to Deans Green and Schwartz and to anyone else who requests them.

Dean Willis announced that plans have been made for a luncheon Nov. 20, 1978, to launch the "Robert C. Edwards Endowment for Excellence in Science and Technology" campaign and that invitations will be extended to the deans.

Dean Willis referred to Section IV, Subject D, in the Personnel Manual which states that approval of the appropriate Vice President is required before any overtime work may be authorized. He stressed that Dean Hurst must approve, in advance, any overtime to be worked in the academic area.

Dean Willis reminded the deans that when they submit requests for reclassifications or new positions, the accompanying Organizational Charts should show the requested changes, in red, so that the change can be noted and the papers moved on.

Dean Willis distributed copies of correspondence between Dr. Howard R. Boozer, executive director of the S. C. Commission on Higher Education, and Mr. Louis O. Bryson, Sr., director of the Post-Secondary Education Division, Office for Civil Rights, Atlanta, GA. Mr. Bryson's letter to Dr. Boozer indicates that his office "is preparing on-site reviews of selected institutions in South Carolina to determine if vestiges of the former dual system of higher education continue to exist." Dr. Boozer had responded by providing information relative to the statesupported institutions that had been

requested by Mr. Bryson.

Dean Anderson stated that Darryl Roberts had been in touch with him to talk about conducting a survey to determine how many persons would be interested in a Cardiopulmonary Resuscitation (CPR) training course. They would like to have persons trained all over the campus who could act in an emergency until an ambulance could arrive. It was suggested that the deans discuss it with their department heads. Mr. Roberts can obtain instructors to offer the courses at night if sufficient interest is shown.

The meeting was adjourned at 10:45 a.m.

Respectfully submitted,

Annette H. Kesler

## MINUTES OF THE FINE ARTS COMMITTEE MEETING, NOVEMBER 28, 1978

The University Fine Arts Committee met at 3:30 p.m. on Tuesday, Nov. 28, 1978, in the first-floor lounge of Strode Tower, John Butler, presiding, with all members present except Messr. Mabry, Davis and Joy.

Budget reports for current and preceding academic years were presented for the University Concert Series and the various series (lecture, foreignlanguage films) supported by Fine Arts Committee allocations.

Dean H. M. Cox moved that, in the event Fine Arts Committee money pledged to support films or lecturers lapses near the end of the academic year, such money should be apportioned as an honorarium among the various performers who have donated their services that year to the Chamber Music Series, and who are not members of the Clemson University faculty or staff. The motion was approved unanimously.

A discussion of the cost of Concert Series tickets ensued. It was the consensus of the committee that ticket prices should remain the same. A discussion of possible attractions for the 1979-80 Concert Series ensued.

The meeting was adjourned at 5 p.m.

MINUTES OF THE VENDING MACHINE COMMITTEE MEETING, NOVEMBER 28, 1978

Present: James T. Roberts, Chairman, Walter T. Cox, Victor Hurst, John Newton, Mike Ozburn, Joe Dickey for William Stierer, Jr.

The meeting was called to order at 1:40 p.m. The Chairman reported a balance of \$61,813.44 was available as of Oct. 31, 1978. Receipts for the fiscal year ending June 30, 1978 were \$14,552.36. Clemson's share of sales has been increased from 6% to 9%. Therefore, revenue for the current fiscal year is estimated at approximately \$24,000.

The following requests were approved:

Faculty Senate - Reception for		
Board of Trustees	Ś	475.00
	Y	473.00
Department of Languages - Drama		
contest, Dionysia 1979		950.00
Declamation Contest		500.00
College of Nursing - Christmas		
Wassail, Parents Day,		
Honors Day and Graduation		
Reception		475.00
	\$2	.400.00

The Committee also approved a motion to allocate up to \$50,000 to Student Government for 1979-80 for student organizations.

The meeting adjourned at 2:00 p.m.

James T. Roberts Chairman

## Calendar of Campus Events

December 15-31

- 16 -- Basketball: USC-Spartanburg (Women), Littlejohn Coliseum, 5:15 p.m.
- 16 -- Basketball: Western Carolina (Men), Littlejohn Coliseum, 7:30 p.m.
- 20 -- General Faculty Meeting, Tillman Hall Auditorium, 10 a.m.
- 20 -- Workshop: "Human Relations and Communications Workshop for Office Personnel."
  An opportunity for staff members to enhance and/or modify their behaviors in the direction of better communication, mutual respect, and an increased awareness of consumer problems. Sponsored by the Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.
- 21 -- Mid-Year Graduation, Littlejohn Coliseum, 11 a.m.
- 21 -- Army Commissioning Exercises, Daniel Hall Auditorium, 9:15 a.m. Open to the public, no admission charge.
- 22 -- All residence halls close at 8 a.m.
- 22 -- End Co-Op Work Period No. 18.

#### January 1-14

7 -- All residence halls open at 10 a.m.

#### CALENDAR OF CAMPUS EVENTS (Con't.)

- 8 -- Begin Co-Op Work Period No. 19.
- 8-29 -- Art Exhibition: "S.E.C.C.A. Award Winners." Award winning paintings, sculpture, drawings, prints and photographs. Sponsored by College of Architecture, Rudolph Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
- 8-29 -- Art Exhibit: "Paris Review Posters." Series of silk-screened and lithographed posters commissioned by <u>The Paris Review</u>. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
  - 9 -- Registration, All Students.
- 10-11 -- Basketball: Clemson Lady Tiger Invitational, Littlejohn Coliseum, 6 and 8 p.m. each night.
  - 11 -- Classes begin on regular schedule.
  - 13 -- Basketball: University of Maryland (Women), Littlejohn Coliseum, 5:15 p.m.
  - 13 -- Basketball: Wake Forest (Men), Littlejohn Coliseum, 7:30 p.m.



### PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

ADDENDUM

to the

CLEMSON UNIVERSITY NEWSLETTER

December 15, 1978

Minutes

of the

Faculty Senate Meeting

October 17, 1978

Minutes

of

The Educational Council Meeting

November 6, 1978

#### MINUTES OF THE FACULTY SENATE

October 17, 1978

The Senate Chamber

## 1. Call to Order

A quorum was declared and the meeting was called to order by President Steirer at 3:35 p.m.

## 2. Approval of Minutes

The minutes of the September 19 meeting were approved with the following additions under Section 3. Special Reports: in paragraph 1 the addition of the word "scholarships," in the list of allocations of the annual income from the Robert Cook Edwards Endowment for Excellence in Science and Technology; in paragraph 2 the addition of the word "active" to describe Alumni who will have access to the Faculty Club.

## 3. Committee Reports

a. <u>Admissions and Scholarship Committee</u> - Senator Edie, Chairman, reported that the Admissions and Scholarship Committee met on October 3. Mr. Marvin Carmichael, Director of Financial Aid, and Dr. Jim Strom, of the Office of the Vice President for Development attended and discussed student aid and scholarships.

Dr. Strom handles the agreement preparation for setting up endowed and annual scholarships. The University tries to make new scholarships as unrestricted as possible so the maximum number of students can benefit from them. If faculty are contacted by individuals or companies who wish to establish endowed or annual scholarships, Dr. Strom will assist in preparing the necessary agreements and having them approved and signed by the appropriate University/Clemson University Foundation officer.

The Office of Financial Aid annually publishes a brochure of available financial aid for students (a copy is mailed to each department head). A copy of this brochure can be obtained from the Office of Financial Aid in Sikes Hall. The brochure is also mailed to every high school guidance counselor in the state.

Mr. Carmichael pointed out that any student who wishes to be considered for any scholarship, grant or loan <u>must</u> apply. One form must be filled out while the needs analysis must be completed <u>only</u> if the student wants a needs related scholarship or loan.

Last year about \$187,000 in scholarships were awarded. This amounted to 350 to 400 scholarships. More scholarships will be available next year. Five Poole Scholarships are awarded each year. Last year the Alumni Association established the Alumni Merit Scholarship Program and about 27, \$250 Alumni Merit Scholarships were awarded. Next year the Alumni Association is doubling its financial commitment to this excellent program and from 60 to 70 Alumni Merit Scholarships will be awarded.

The number of scholarships have at least doubled in the last three years. A \$1500 Faculty and Staff Merit Scholarship also exists. This scholarship is funded by our donations.

Other committee business:

- 1. The committee has completed tabulation of the final exam questionnaire. The results should be ready next month.
- 2. The committee is still collecting letters from department heads defining major courses in their program. This information is for establishing a minimum major GPR for graduation.
- 3. The committee discussed the proposed withdrawal policy and resolution FS-78-9-6 and these will be discussed under old business.
- 4. The committee prepared two resolutions for consideration under new business.

The next committee meeting will be at 3:30 p.m. on November 7 in the library classroom.

b. Policy Committee - Senator West, Chairman, reported as follows:

The Constitution of the Faculty of Clemson University revisions have been made by the Faculty Senate Policy Committee, and the committee recommends that the revised constitution be acted upon as part of the November, Faculty Senate Meeting.

Copies of the revised constitution will be circulated at the October meeting of the Faculty Senate. The work sheet that the Policy Committee developed to show how the constitution might apply to on-going Faculty concerns are being prepared for distribution to the Faculty Senate after October 20, 1978.

Dean Hurst has prepared a list of administrative positions in the academic area for which it would be necessary to create search committees in order that the positions might be filled. The Policy Committee has this list under study, and should be able to report any recommendations for Senate action by the November meeting of the Senate. The list was prepared by Dean Hurst at the request of the Policy Committee during the study of the need for revision of the Policy Statement dealing with Faculty Participation in the Selection of Academic Administrators. I anticipate that the list will give the necessary information for a rewrite of this policy statement.

c. Research Committee - Senator Fennell, Chairman, reported that the Research Committee met on Wednesday, October 4, at 3:30 p.m. in Room E202 Martin Hall. Discussion centered on a College of Agricultural Sciences thesis policy which had been referred for further study to the Research Committee by the Senate Representative to the Graduate Council [See page 3, September 19 minutes]. A resolution concerning this policy will be presented to the Senate under New Business.

Responses from College Deans to questions about consulting policy are being reviewed by the Committee.

The Committee requests that the status of the Research Committee in the proposed Faculty Constitution be reviewed.

During the ensuing discussion questions were raised about secretarial allocation in grants, and how research money is distributed throughout the University. One Senator stated that the administration is very cooperative and releases copious amounts of data on the distribution of research money, but the information is very difficult to assimilate.

d. Welfare Committee - Senator Burt, Chairman, stated that the Welfare Committee had not had a meeting. Academic Year and Calendar Year Subcommittee reports are due this month. The final report on the retirement system is due soon. The Faculty Ad Hoc Committee on Compensation will meet Tuesday, October 24 at 1:30 in 114 Kinard Laboratory, and the Welfare Committee will meet at 3:30 p.m. the same day in the Library Classroom.

Senator Fennell asked if there had been any reports on the Tenure Policy. A comment was made that USC had recently changed the minimum time for granting tenure from six to seven years; however, they do have the prerogative of granting immediate tenure if circumstances so warrant. (by comparison - Clemson policy requires a minimum of four continuous years of service.)

- e. Ad Hoc No reports
- f. University Councils and Committees No reports

## 4. President's Report

- a. The meeting with the USC faculty leaders took place on Friday, October 13 in Columbia. The four Clemson representatives—Baron, Adkins, Dickey, and myself—agreed that it was a fruitful session which initiated a continuing dialogue aimed at sharing data and tactics on welfare issues such as retirement and fringe benefits. Additionally, much of the dialogue focused on problems of university governance. It became readily apparent that the USC faculty possesses all of the legislative authority that the Senate has indicated it would like to possess, so that there was much to learn.
- b. The Athletic Council met on October 9 and discussed a number of routine items. Of most interest to the Faculty Senate is a development that meets many of the objections that the Senate has maintained about the Athletic Council. The faculty members are meeting to outline agenda items before Council sessions. With bowl ticket priorities set, other ticket priorities under study by a committee headed by Billy Edge, and ticket prices stable, not many problems unique to faculty members exist right now, but the determination to deal with such problems when they do arise is being established.

HEW's recent interpretations of Title IX indicate that the emphasis has moved from equal numbers to equal funding. By this interpretation, the revenue-making sports are no longer separated from the others. It is easy to see that such an interpretation, if continued and enforced, would change the nature of college athletics. On another issue, Clemson will continue to support the establishment of the so-called "super conference."

- c. The results of the poll taken to ascertain whether policy holders who are nine-months' employees wish to have the group life insurance based on twelve-months' earnings are in. Few faculty members (faculty members composing that category) bothered to vote and since all non-votes were registered as "no" votes, the option will not take effect. I am sure that the option idea can be raised again, but the Senate should only do so if, through the Welfare Committee, it is prepared to work to see that it is accepted. Of those voting, 75 voted "Yes" and 43 voted "No." This total of 118 represents less than half of the 243 eligible.
- d. The committee on monitoring the faculty evaluation system has begun its work. It is too early to say much about the committee's work, but the data have been collected and are being evaluated. The system will remain the same for this year.
- e. The report of the Section 504 Self-Evaluation Steering Committee compiled by Darryl Roberts and myself has been at least partly implemented. A committee, on which the Senate President serves ex officio, has been formed to advise handicapped students, to serve as consultants and resource experts for teachers of handicapped students, and to assist faculty in any way possible. The members of the Handicapped Student Advisory Committee are listed below:

Dr. George R. von Tungeln -- College of Agricultural Sciences Professor Gordon W. Patterson -- College of Architecture

Dr. William O. Corder -- College of Education

Dr. Cecil O. Huey, Jr. -- College of Engineering

Professor Ann E. James -- College of Forest and Recreation Resources

Dr. Thomas N. Schapp -- College of Industrial Mgmt. and Textile Science

Dr. Carol Furry -- College of Liberal Arts

Professor Mary G. Robinson -- College of Nursing

Dr. Ralph P. Ashworth -- College of Sciences

Mr. L. R. Wood - R. M. Cooper Library

Dr. William F. Steirer -- President, Faculty Senate

Mr. Bill Pace -- Housing Office

Dr. William H. Wells -- Counseling Center (CHAIRPERSON)

- f. Nothing has been done about rewriting the retirement policy for the University. I am remaining in contact with Dean Hurst on this matter and am sure that the Faculty Senate has not been ignored.
- g. Professor Corinne Sawyer has been granted the three hours of additional release time that the Faculty Senate requested in FS 78-9-3.
- h. The story printed in <u>The Tiger</u> of October 6 concerning student records is accurate, but incomplete. No serious problems, legal or ethical, are thought to exist, but the Council of Academic Deans will take up the subject at their October 27 meeting. Any Faculty Senators who have any thoughts on this subject should let me know.

During the ensuing discussion the following points were made: Item c. The poll can be conducted again if the Faculty so desires, and if approved can become effective February 1. The Faculty Senate in April did support the concept of additional insurance for academic-year faculty based on a prorated twelve-month salary.

Item h. Dean Hurst sees no problem concerning student records. We are in full accord with the law.

The Steering Committee for the Robert Cook Edwards Endowment for Excellence in Science and Technology will begin its activities next month. President Steirer has been appointed as the only faculty member on this committee.

The Presidential Screening Committee has blocked off the upcoming weekend to determine the most highly qualified candidates and to request their philosophies. The Screening Committee operates under the rules of total confidentiality with no public statements being made.

Senator Baron asked President Steirer to expand on Item a. and explain what legislative authority USC faculty have. President Steirer stated that USC faculty establishes all policy dealing with the academic side of the university and has the power to see that it is implemented. In response to Senator Coulter's question "Does our Administration know about this?," President Steirer promised that he will ask Dean Hurst if he knows about it and what he thinks about it. President Steirer further stated that this power was at least partially put into the hands of the Faculty by sympathetic administrators. Senator Burt stated that USC has Department Chairmen instead of Department Heads a situation which was changed within the last four years. Senator Baron observed that the USC Faculty supported the change; whereas, the Clemson Faculty has not been able to convince the administration of the value of this change.

## 5. Old Business

a. Constitution - Senator West reviewed the Revision of The Constitution of the Faculty of Clemson University. He specifically pointed out that twenty-five percent (25%) of the Faculty shall constitute a quorum (which would be 250 + faculty members). He urged the Senators to consult with their collegues and work in earnest on this important document. The Policy Committee is distributing a work sheet to help in making revisions.

Senator Fennell requested that Senator West review the reasons why the Research Committee was eliminated. Senator West responded that most faculty are interested in research, and it did not need to be singled out as an entity unto itself and can be handed across all committees. Senator Fennell protested that it serves as a watchdog committee even though it is relatively inactive.

Senator Snipes moved that under Article II, the Faculty Senate, Section 5, Committees, there be a #6 entitled Research Committee. Senator Howard seconded the motion.

A rather spirited discussion followed during which Senator Fennell stated that the University Research Council had no continuity and research problems can be handled by the Research Committee. Senator Burt stated that he had been told that the Research Committee had never done anything and he asked what its function had been. Senator Hood reported that it was responsible for the Copyright Policy. Senator Grubb suggested that it be handled under the new committee -- Academic Affairs. Vice President Dickey stated that he was in favor of research; however, we have no standing committees that deal specifically with teaching and extension. It was his opinion that it should be combined within another committee. Senator Whitten was of the opinion that the name is not important; what is done is important. At this point Senator Snipes called for the question. The vote to call the question passed unanimously. The vote in favor of adding the Research Committee failed by voice vote.

Senator West reported that the following faculty members have affixed their signatures to the Revision of the Constitution of the Faculty of Clemson University:

William E. West Joseph F. Dickey Daniel B. Smith Edwin M. Coulter Horace W. Fleming David Fiste Keith McDowell William Baron Stephen S. Melsheimer John H. Walker

[Secretary's Note: I have in my files the document bearing the original signatures.]

b. Withdrawal Policy - Senator Edie moved that the Faculty Senate go on record favoring the maintaining of support of FS-76-11-1 and stress that the time of withdrawal should be seven weeks instead of six weeks. The motion was seconded by Senator Burt.

During the ensuing discussion, Senator Coulter stated that it hardly seemed worth the effort to change from seven to six weeks and that it should be shortened to three weeks; however, he would be satisfied with four weeks. Senator Coulter moved to amend the motion and change the withdrawal period to four weeks. Senator Edie accepted the amendment; however, Senator Burt as seconder would not accept.

Senator Worm requested that the seven be changed to a four, and at that point Senator Edie withdrew the original motion and Senator Burt withdrew his second. Senator Worm then proposed the following resolution:

FS-78-10-4 - Withdrawal from Class Policy

Whereas, the Faculty Senate wishes to go on record as favoring continued support of FS-76-11-1.

Whereas, the Withdrawal From Class Policy proposed by the Academic Deans is essentially that proposed in FS-76-11-1,

Be it resolved, that the Faculty Senate endorse this proposal with the exception that the time allowed for withdrawal be changed from seven weeks to four weeks.

The motion was seconded by Senator Coulter.

A discussion followed: Senator Baron wanted an explanation as to why the change to four weeks. Senator Coulter's reasoning was that a month is ample time for a student to decide whether or not he wishes to stay in a course or bail out. He thinks the change should be substantive and seven to six is insignificant; whereas, seven to four is significant. Senator Baron could still see no reason for changing the policy backwards. An overriding concern seemed to be that standards needed to be raised and such action had to start somewhere.

Senator Howard expressed concern that many courses require a lot of time spent on a one on one basis and much time can be wasted if a student drops at a later date. Dr. Skelton stated that a lot of courses are closed, and that students are denied entrance to a course which later has vacant seats caused by drops. Senator Baron countered that time for dropping still would not solve that problem. Senator Fleming was of the opinion that late dropping disrupted courses when students are paired up as teams. Senator Young stated that he is in favor of the resolution because there are 15 effective teaching weeks and one-fourth of that time is enough to decide to drop. Senator Worm expressed concern that the policy would only affect undergraduates and that another policy might be required for graduate students. It was decided that it covered students, both undergraduate and graduate. At this time Senator Coulter moved the question, Senator Edie seconded, and the motion to call the question passed by voice vote. The motion to approve FS-78-10-4 withdrawal from Class Policy passed by voice vote.

Senator Edie moved for the defeat of the introduction of FS-78-9-6 -Grade Distribution (Refer to page 8 of the minutes of September 19, 1978). The motion was seconded by Senator Baron. Senator Coulter, who originally introduced the resolution, apologized that he had to leave before the last meeting was over, and he did not have an opportunity to explain it. He is disturbed over the manner in which the grades are collected and distributed and feels that it produces meaningless statistics, he is not attacking the distribution of grades per se, but he is attacking the report because it is fallacious. Senator Burt wanted to know where it is false. Senator Coulter explained how his seemingly high grades were reported with no accompanying explanation as to the type of course, or the grade to hour ratio. Senator Howard stated that another way to interpret the report is that Senator Coulter must be an excellent teacher. Senator Fleming expressed the opinion that the report should be sent to the affected faculty member. Senator Edie stated that if publication of grades does make a faculty member go back and think about the grades given then it serves a purpose. Senator Grubb stated that grade information is available anyway to department heads. Senator Coulter stated that the report is not structurally sound, and that it creates false impressions. Senator Howard called the question, Senator Burt seconded and the motion to call the question was approved by voice vote. The voice vote on motion to defeat SF-78-9-6 could not be determined so President Steirer called for a division of the house. The results were: 13 votes Aye and 11 votes No. so the motion to defeat carried.

#### d. Other Old Business

Senator Schindler stated that he wishes to call for reconsideration of FS-78-9-4 (Refer to page 7 of the minutes of September 19, 1978). He was a dissenting voter at the last meeting and he explained that he voted against the motion because of the lateness of the hour. He realizes now

that the Honors Common Room was not intended to be used to promote depth of knowledge but to provide a place to exchange ideas and to develop wider perspectives. Senator Schindler moved for reconsideration and approval. Senator Grubb seconded. During the ensuing discussion Senator Edie stated that we need a way to attract superior students. Vice President Dickey stated that elitism should not be an issue, rather we should be interested in having a place where the good students with common interests can get together for discussions; afterall, we have a dormitory set aside for athletes. Senator Coulter called the question, Senator Worm seconded and the motion to call the question was approved.

#### FS-77-9-4 Honors Common Room

Whereas an active honors program both encourages scholarship in the student body and allows faculty to better teach gifted undergraduate students and

Whereas the honor students at Clemson University have requested that an honors common room be established

Be it therefore resolved that the Faculty Senate of Clemson University supports the request for a common room in which honor students can meet, study and exchange ideas with invited faculty.

[The motion for reconsideration and approval of FS-78-9-4, Honors Common Room, was passed by voice vote.]

## 6. New Business

- a. Senator Edie moved for approval of FS-78-10-1. The motion was seconded by Senator Whitten. Senator Coulter objected to resolutions being put in this form. He argued that both this resolution and FS-78-10-2 should be placed in the form of letters of endorsement and not in the forms of resolutions. President Steirer stated that Senate recommendations have always taken the form of resolutions but that he would entertain a motion for setting up an ad hoc committee with Senator Coulter as chairman. Senator Coulter moved to table FS-78-10-1; however, Senator Edie withdrew both resolutions and Senator Whitten as seconder concurred.
- b. Senator Fennell introduced the following resolution and moved its acceptance:

FS-78-10-3 - Thesis research in College of Agricultural Sciences

Whereas, the administration of the College of Agricultural Sciences has initiated the policy that thesis research for M.S. and Ph.D. candidates must be associated with an approved Experiment Station project, regardless of the source of support of the student,

Whereas, this policy restricts graduate student research and hampers research in areas of current faculty expertise,

Whereas, this policy infringes upon the academic freedom of faculty to pursue ideas without conformity to any orthodoxy of content and method,

Be it resolved that the Faculty Senate considers such policy to be in direct violation of the academic freedom policy as stated in the Faculty Manual, and further

Be it resolved that the University Administration rescind this policy of the College of Agricultural Sciences.

The motion was seconded by Senator Whitten. During the ensuing discussion it was brought out that the resolution originally was submitted to the Research Committee by the Graduate Council Representative. The Research Committee reported that it discussed this policy for a long period of time. The Committee determined that such a policy could deter student and faculty research and is in violation of Academic Freedom as defined in the Faculty Manual (viz. page 33. "A university can fulfill its mission only when its faculty members have academic freedom to pursue knowledge without fear of pressure from sources inside or outside the institution." and "The faculty member is entitled to full freedom in research and in the publication of the results,..."; page 34. "The University is a marketplace of ideas, and it cannot fulfill its purposes of transmitting, evaluating, and extending knowledge if it requires conformity with any orthodoxy of content and method").

Senator McDowell asked what the policy is and if it is in writing. Senator Fennell answered in the affirmative and read a letter outlining the policy. The College of Agricultural Sciences Senators were asked their opinion, and they stated that they had met with their College Administration to express their concern with the policy and had lost the battle as they could not persuade them to rescind the policy. Resolution FS-78-10-3 was approved unanimously by voice vote.

c. Senator Edie made the following motion:

That President Steirer be requested to appoint an  $ad\ hoc$  committee (with Senator Coulter to serve as Chairman) to study the mechanism of submitting resolutions which would differentiate the "bread-and-butter" appreciation-type resolutions from those substantive types that request administrative action.

The motion was seconded by Senator Grubb and was approved unanimously by voice vote. President Steirer asked for volunteers and Senator Worm responded.

d. Senator Fennell presented a newspaper article from The Virginia Gazette, Williamsburg, Va. October 11, 1978, entitled "New Data Dramatizes Weakness of William and Mary Faculty Salaries" in which the following statements were published:

"We're low compared to the state, we're low compared to our peer group, we're low compared to the nation, and we're losing ground compared to the public as a whole...William and Mary professors, associate professors, and assistant professors make less than those at any other doctoral granting Virginia institution except full professors at Old Dominion University... Compared to public institutions across the nation that grant doctoral degrees, William and Mary salaries are \$2,300 less than the national average for professors; \$1,300 less for associate professors; and \$900 less for assistant professors. Nationally, William and Mary salaries rank below the 20

percentile in all three faculty ranks....In comparing William and Mary professors' salaries to the 21 benchmark institutions with compensation, only Clemson University and the University of Montana rank lower than William and Mary. In comparing salaries without compensation, Clemson, the University of Montana, Illinois State University, the University of Idaho, and the University of Vermont and State College are ranked lower than William and Mary."

The full list of peer group institutions used to base William and Mary faculty salaries are as follows:

- 1. University of North Carolina, Greensboro
- 2. University of Alabama, Birmingham
- 3. University of Delaware
- 4. University of Louisville, Kentucky
- 5. Clemson University (South Carolina)
- 6. University of South Carolina (main campus)
- 7. University of Georgia at Athens
- 8. Northern Illinois University
- 9. State University of New York at Albany
- 10. Portland State University (Oregon)
- 11. University of Nevada, Reno
- 12. University of Rhode Island
- 13. State University of New York at Binghamton
- 14. University of Akron, Ohio
- 15. University of Wisconsin, Milwaukee
- 16. Illinois State University
- 17. Indiana-Purdue University at Indianapolis
- 18. University of Montana
- 19. University of Idaho
- 20. University of New Hampshire
- 21. University of Vermont and State Agricultural College
- 7. The meeting adjourned at 5:25 p.m.

Respectfully submitted,

T. R. Adkins, Jr.

Secretary

Senators absent:

Agricultural Sciences

- S. G. Turnipseed (T. E. Skelton, substituting)
- B. R. Smith

Engineering

- J. L. Prince
- J. C. Hester (S. S. Melsheimer, substituting)



Clemson University Clemson, South Carolina

#### MINUTES

of the meeting of

#### THE EDUCATIONAL COUNCIL

November 6, 1978

Present:	Robert C. Edwards, presiding Luther P. Anderson Melvin E. Barnette Benton H. Box H. Morris Cox Walter T. Cox Janie C. Dillon B. E. Gilliland J. W. Gordon Gourlay Claud B. Green	Geraldine Labecki Harold F. Landrith Melvin C. Long Harlan C. McClure Joseph B. McDevitt Stanley G. Nicholas Arnold E. Schwartz William F. Steirer, Jr. Wallace D. Trevillian K. N. Vickery
	Claud B. Green	K. N. Vickery
	Darrell A. Hickman	S. M. Willis
	Victor Hurst	E. N. Tyndall, Secretary

#### 1. Minutes

The minutes of the meeting of August 7, 1978, were approved as submitted.

## 2. Academic Matters by Colleges:

Statement and Recommendations: The Dean of the University recommended the following:

## A. COLLEGE OF AGRICULTURAL SCIENCES

## (1) New Undergraduate Courses:

AgEc	413	Rural Property Appraisal	3 cr (3,0)
AgM	472	Seminar	1 cr (1,0)
Agron	425	Seed Science & Technology	3 cr (2,2)
PS	400	Avian Physiology	4 cr (3.3)

(COII	cinded .		ELLOE OF AGRICULTURAL SCIENCES)	
(2)	Undergra	aduate C	ourse Change:	
	AgEc	460	Agricultural Finance (Title & description change)	3 cr (3,0)
(3)	Curricu	lum Revi	sion: Effective, Fall 1978	
			Agricultural Mechanization & Business	
(ATT	ACHMENT 1	), pages	31 & 32	
(4)	New Gra	duate Co	urses:	
	AgEc	613	Rurai Property Appraisal	3 cr (3,0)
	Agron	625	Seed Science and Technology	3 cr (2,2)
	FdSc	805	Food Rheology	2 cr (2,0)
	FdSc	806	Chemistry of Food Colors and Pigments	2 cr (2,0)
	FdSc	807	Food Colloids	2 cr (2,0)
	FdSc	808	Food Flavors	2 cr (2,0)
	PS	600	Avian Physiology	4 cr (3,3)
(5)	Graduat	e Course	Change:	
	AgEc	660	Agricultural Finance (Title & description change)	3 cr (3,0)
	В. С	OLLEGE O	F EDUCATION	
(1)	New Und	ergradua	te Courses:	

InEd	106	Drafting for Industrial Education - I	2 cr (0,6)
InEd	107	Drafting for Industrial Education - II	2 cr (0,6)
InEd	206	Advanced Drafting and Design	2 cr (1,3)
InEd	424	School Safety	3 cr (3,0)

## (2) Undergraduate Course Change:

InEd	101	Introduction to Industrial Education	1 cr (1,0)
		(Credit change)	

(continued . . . COLLEGE OF EDUCATION)

(3)	New	Graduate	Courses:

Ed	850	Public School Administration	3 cr (3,0)
Ed	856	Introduction to School Building Planning	3 cr (2,2)
InEd	624	School Safety	3 cr (3,0)

#### (4) Graduate Course Deletions:

Ed	851	Organization and Administration of the Elementary School	3 cr (3,0)
Ed	852	Organization and Administration of the	3 cr (3,0)

#### (5) Curriculum Revision: Effective, Fall 1979

B. S. in Agricultural Education

## (ATTACHMENT 2) p. 33

Education for Industry Option

#### (ATTACHMENT 3) p. 34

Industrial Art's Education Option

#### (ATTACHMENT 4) p. 35

Vocational-Technical Education Option

## (ATTACHMENT 5) p. 36

# (6) Change in Minimum Number of Hours Required for the Master Education Degree

Number increased from 30 to 36 semester hours, effective after Spring Semester of 1979.

#### C. COLLEGE OF ENGINEERING

#### (1) New Undergraduate Courses:

ChE	403	Unit Operations Theory III	3 cr (3,0)
ET	488	Human Factors Technology	3 cr (2,3)
ME	420	Alternative Energy Sources and their Utilization	3 cr (3,0)

(continued . . . COLLEGE OF ENGINEERING)

304

361

ET

ET

(6011)	cinued.		LINEGE OF ENGINEERING)		
(2)	Undergra	aduate C	ourse Changes:		
	CE	453	Advanced Structural Analysis (Description change)	3 cr	(3,0)
	CE	460	Physical Oceanography (Department change)	3 cr	(3,0)
	CE	461	Oceanographical Engineering (Department change)	3 cr	(3,0)
	E&CE	404	Semiconductor Devices (Credit change)	3 cr	(3,0)
	ChE	201	Introduction to Chemical Engineering (Change in laboratory hours)	3 cr	(2,2)
	ChE	210	Process Modeling and Numerical Methods (Title and description change)	3 cr	(3,0)
	ChE	302	Unit Operations Theory II (Prerequisite change)	3 cr	(3,0)
	ChE	421	Process Development, Design, & Optimi- zation of Chemical Engineering Systems I (Prerequisite changes)		(2,3)
	EG	105	Engineering Drawing (Title and description change)	2 cr	(1,3)
	EG.	109	Engineering Graphics (Title & description change)	2 cr	(1,3)
	EG	110	Engineering Design Graphics (Title & description change)	2 cr	(1,3)
	ESE	470	Water Resources Engineering (Department and number change)	3 cr	(3,0)
	ET	207	Survey of Industrial Engineering Technology (Title, description, & department change)	3 cr	(3,0)
	ET	301	Manufacturing Processes	3 cr	(2,3)

(Title, prerequisite, & department change)

Industrial Application of Statistics 3 cr (3,0)

Methods and Standards

(Department change)

(Department change)

3 cr (2,3)

## (COLLEGE OF ENGINEERING)

(continued Undergraduate Course Changes)					
	ET	403	Process Planning & Value Analysis (Title, department, & description change)	3 cr	(3,0)
	ET	404	Advanced Methods & Standards (Prerequisite, title, & department change)		(2,3)
	ET	405	Plant Layout and Material Handling (Department change)	3 cr	(2,3)
	IE	306	Advanced Manufacturing Processes (Prerequisite, title, & description change		(2,3)
	ME	410	Mechanical Processing of Materials (Prerequisite change)	3 cr	(3,0)
	ME	429	Thermal Enviromental Control (Title change)	3 cr	(3,0)
(3)	Undergra	aduate Co	ourse Deletions:		
	IE	207	Survey of Industrial Engineering	3 cr	(3,0)
	IE	301	Manufacturing Processes	3 cr	(2,3)
	IE	304	Methods and Standards	3 cr	(2,3)
	IE	361	Industrial Application of Statistics	3 cr	(3,0)
	IE	403	Process Planning	3 cr	(3,0)
	IE	404	Advanced Methods Engineering	3 cr	(2,3)
	IE	405	Plant Layout and Material Handling	3 cr	(2,3)
	WRE	450	Water Resources Engineering	3 cr	(3,0)
	WRE	460	Physical Oceanography	3 cr	(3,0)
	WRE	461	Oceanographical Engineering	3 cr	(3,0)

## (4) Program in Computer Engineering at the Bachelor Level

Proposal submitted by the College of Engineering, September 27, 1978.

## (5) Program in Computer Engineering at the Masters Level

Proposal submitted by the College of Engineering, September 27, 1978.

(continued . . . COLLEGE OF ENGINEERING)

(Department change)

(continued COLLEGE OF ENGINEERING)							
(6)	New Grad	uate Cou	rses:				
	E&CE	702	Electric Motor Control	3	cr	(3,0)	
	E&CE	809	Semiconductor Materials	3	cr	(3,0)	
	E&CE	840	Physics of Semiconductor Devices	3	cr	(3,0)	
	E&CE	893	Selected Topics in Electrical & Computer Engineering	1-3	cr	(1-3,0)	
	ESE	833	Air Pollution Control Systems	3	cr	(3,0)	
	MatE	820	Deformation Mechanisms in Solids	3	cr	(3,0)	
	MatE	822	Chemical Metallurgy	3	cr	(3.0)	
	ME	610	Mechanical Processing of Materials	3	cr	(3,0)	
	ME	620	Alternative Energy Sources & their Utilization	3	cr	(3,0)	
	ME	629	Thermal Environmental Control	3	cr	(3,0)	
	SE	893	Special Topics in Systems Engineering	1-3	cr	(1-3,0)	
	ME	841	Advanced Mechanical Engineering Design I	3	cr	(3,0)	
(7)	Graduate	Course	Changes:				
	CE .	653	Advanced Structural Analysis (Description change)	3	cr	(3,0)	
	CE	660	Physical Oceanography (Department change)	3	cr	(3,0)	
	CE	661	Oceanographical Engineering (Department change)	3	cr	(3,0)	
	CE	815	Transportation Safety Engineering (Title and description change)	3	cr	(3.0)	
	CE	865	Hydrology I (Department change)	3	cr	(3,0)	
	CE	866	Hydrology II (Department, description & prerequisite change)	3	cr	(3,0)	
	CE	871	Coastal Hydrodynamics (Department change)	3	cr	(3,0)	
	CE	872	Marine Pollution Control	2	cr	(2,0)	

(COLLEGE OF ENGINEERING)

(cont	inued	<u>Gra</u>	duate Course Changes;			
	E&CE	890	Special Problems in Electrical & Computer Engineering (Title & description change)	1-3	cr	(1-3,0)
	ESE	670	Water Resources Engineering (Department and number change)	3	cr	(3,0)
	ESE	850	Stream and Estuarine Analysis (Department and number change)	3	cr	(3,0)
	ESE	852	Ecological Models (Number change)	3	cr	(2,3)
	ESE	856	Pollution of the Aquatic Environment (Number change)	3	cr	(3,0)
	ESE	857	Pollution of the Aquatic Environment Laboratory (Number change)	1	cr	(0,3)
	ESE	875	Water Resources Planning (Department change)	3	cr	(3,0)
	ESE	876	Water Resources Systems (Department change)	3	cr	(3,0)
	ME	842	Advanced Mechanical Engineering Design II (Title, prerequisite, & description change		cr	(3,0)
	SE	860	Dynamic Programming (Description & prerequisite change)	3	cr	(3,0)
	SE	885	Design and Analysis of Simulation Models (Prerequisite change)	3	cr	(3,0)
	SE	888	Applied Queueing Theory and Markov Processes (Title change)	3	cr	(3,0)
	SE	890	Special Problems in Systems Engineering (Credit, title, and description change)	1-3	cr	(1-3,0)
(8)	Graduate	Course 1	Deletions:			
	ESE	846	Pollution of the Aquatic Environment	3	cr	(3,0)
	ESE	847	Pollution of the Aquatic Enviornment Laboratory	1	cr	(0,3)
	ESE	860	Ecological Models	3	cr	(2,3)
	ME	843	Advanced Mechanical Engineering Design II	3	cr	(3,0)

#### (COLLEGE OF ENGINEERING)

(	(COLLEGE OF ENGINEERING)								
(	(continued Graduate Course Deletions:								
	W	TRE	650	Water Resources Engineering	3	cr	(3,0)		
	W	TRE	865	Hydrology I	3	cr	(3,0)		
	W	RE	866	Hydrology II	3	cr	(3,0)		
	W	RE	871	Coastal Hydrodynamics	3	cr	(3,0)		
	W	RE	870	Stream and Estuarine Analysis	3	cr	(3,0)		
	W	RE	872	Marine Pollution Control	2	cr	(2,0)		
	W	RE	875	Water Resources Planning	3	cr	(3,0)		
	W	RE	876	Water Resources Systems	3	cr	(3,0)		
	W	RE	881	Special Problems	1-4	cr	(1-4,0)		
	W	RE	883	Selected Topics	1-3	cr	(1-3,0)		
	W	RE	891	Masters Thesis Research - Credit to be a	ırranş	ged			
	W	RE	660	Physical Oceanography	3	cr	(3,0)		
	W	RE	661	Oceanographical Engineering	3	cr	(3,0)		
	D	. COL	LEGE OF	FOREST AND RECREATION RESOURCES					
(	1) <u>N</u>	ew Under	graduate	e Course:					
	F	or	423	Lectures in Forestry	2-4	cr	(2-4,0-3)		
(	2) <u>N</u>	New Graduate Courses:							
	F	or	623	Lectures in Forestry	2-4	cr	(2-4,0-3)		
	R	PA	820	Recreation Resource Policy Issues and Processes	3	cr	(3,0)		

#### (3) Graduate Course Change:

Data Processing in Forestry Problems 3 cr (2,3) 801 (Prerequisite change)

#### Ε. COLLEGE OF INDUSTRIAL MANAGEMENT AND TEXTILE SCIENCE

#### (1)New Undergraduate Courses:

Accounting Information Systems 3 cr (3,0) Acct 422

## (continued . . . New Undergraduate Courses)

Acct	430	Governmental & Institutional Accounting	3 cr	(3,0)
Fin	307	Principles of Real Estate	3 cr	(3,0)
Fin	408	Commercial Bank Management	3 cr	(3,0)
Fin	410	Research in Finance	1-3 cr	
Econ	430	Mathematical Economics	3 cr	(3,0)

### (2) Undergraduate Course Changes:

Acct	201/H201	Principles of Accounting (Number change)	3 cr (3,0)
Acct	202/H202	Principles of Accounting (Number change)	3 cr (3,0)
Fin	306/н306	Corporation Finance (Number change)	3 cr (3,0)
Text	333	The Textile Arts (Description change)	3 cr (2,3)
Text	428	Textile Research (Description change)	1-3 cr

## (3) New Graduate Course:

Acct 630 Governmental and Institutional Accounting 3 cr (3,0)

## (4) Curriculum Revision: Effective, Fall 1979

B.S. in Accounting

## (ATTACHMENT 6) p. 37

B.S. in Financial Management

## (ATTACHMENT 7) p. 38

#### B.A. in Economics

(a) Delete Footnote #3 which reads: Two courses from the same science area, excluding physical science, are required.

Replace with this statement: <sup>3</sup>Two courses, totaling eight hours, from the same science area are required.

B.S. in Economics Options - Management Science & Mathematical Sciences-Statistics

#### (ATTACHMENT 8) p. 39

B.S. in Textile Chemistry & B.S. in Textile Science

## (ATTACHMENT 9) pages 40-42

## (COLLEGE OF INDUSTRIAL MANAGEMENT AND TEXTILE SCIENCE)

## (continued . . . Curriculum Revision: Effective, Fall 1978)

## Bachelor of Textile Technology

## (ATTACHMENT 10) p. 43

#### F. COLLEGE OF LIBERAL ARTS

(1)	New Undergraduate Courses:	

Eng1	320	Principles of State Design	3	cr	(2,3)
Engl	360	Introduction to Speech Communication	3	cr	(3,0)
Eng1	485	Advanced Acting	3	cr	(2,3)
Engl	486	Advanced State Direction	3	cr	(2,3)
Engl	487	Advanced State Design	3	cr	(2,3)
Hum	309	Studies in Humanities	3	cr	(3,0)
Psych	408	Human Factors Psychology	3	cr	(3,0)

#### (2) Undergraduate Course Changes:

Engl	308	Principles of Acting (Credit & description change)	3 cr (2,3)
Eng1	309	Directing for the Stage (Credit, title, & description change)	3 cr (2,3)
Engl	310	Introduction to the Theatre (Description change)	3 cr (3,0)
Engl	311	Theatre Laboratory (Description change)	1 cr (0,3)
Engl	314	Technical Writing (Title & description change)	3 cr (3,0)

#### (3) Undergraduate Course Deletion:

Engl	105	Fundamentals	of	Oral	Communication	3	cr	(3,0)

#### (4) Curriculum Revision: Effective, Fall 1979

Minor Concentration in History

#### Change description in catalog to read: (a)

<sup>&</sup>quot;A minor concentration in History requires Hist 101, 102, and 15 additional credits drawn from 300-400 level history courses including at least one 400-level course."

(continued . . . COLLEGE OF LIBERAL ARTS)

## (5) Curriculum Revision: Effective, Fall 1979

## Dramatic Arts Minor Concentration in English

The Dramatic Arts minor concentration will require Engl. 310, Introduction to the Theatre, and 15 additional semester hours to be arranged as follows:

## Group I. Dramatic Literature (3 hours)

Engl.	405,	Shakespeare 3 cre	edits
Engl.	413,	Classical Drama 3 cre	edits
Engl.	416,	Modern Drama 3 cre	edits
Engl.	446,	Tudor-Stuart Drama 3 cre	edits

# Group II. Production (9 hours, 6 of which must fulfill one sequence)

- A) Engl. 308, Principles of Acting Engl. 485, Advanced Acting
- B) Engl. 309, Directing for the Stage Engl. 486, Advanced Stage Direction
- C) Engl. 320, Principles of Stage Design Engl. 487, Advanced Stage Design

#### Group III. Elective (3 hours)

To be selected from any of the above courses for which the prerequisites have been met.

Engl. 311, Theatre Laboratory, is also recommended although it will not be counted towards fulfilling the requirements for a Dramatic Arts minor concentration.

## (6) Music 210 Section at Charleston in First Summer Session 1979

The Department of English proposes to offer a section of Music 210 on the campus of the College of Charleston and at live concerts sponsored by the Spoleto Festival 1979.

## (7) Curriculum Revision: Effective, Fall 1979

#### Speech Minor Concentration

The Speech minor concentration will require Engl 360, Introdution to Speech Communication, and 12 additional semester hours to be arranged as follows:

(COLLEGE OF LIBERAL ARTS)

(continued . . . Curriculum Revision: Effective, Fall 1979)

Group I. Performance (3 to 6 hours) Engl 301, 303, and 305.

Group II. Theory (3 to 6 hours) Engl 302, 307, and 313

Group III. Electives (3 hours) Engl 232, 306, 362, 363, or any Speech course not used to fulfill the group require-

ments.

## (8) Curriculum Revision: Effective, Fall 1979

## Major Concentration in Psychology

(a) Change to read: "The recommended program of study for a major concentration in Psychology consists of the required courses in the Bachelor of Arts curriculum, Psych 201, 263, 265, 363, and 20 additional credits drawn from 300- and 400-level Psychology courses. Zool 470 may be included in lieu of one of the 300 or 400 level Psychology courses. One of the following must be included: Psych 332, 341, and 344, or451. Additional approved electives are added as needed to meet theminimum of 130 semester hours required for graduation."

## (9) Clemson in Paris - Winter 1978-79

The Department of Languages proposes to conduct a three week session in Paris, France, December 17, 1978 to January 10, 1979.

French 202 Intermediate French 3 cr (3,0)

Prerequisite: French 201 (or permission of the Head of the Language Department.)

#### (10) Curriculum Revision: Effective, Fall 1979

#### Bachelor of Arts

(a) Delete Footnote #2 which reads: A two-semester sequence of the same science (astronomy, biology, chemistry, geology, physical science, or physics).

Replace with this statement: <sup>2</sup>A two-semester sequence of the same natural science (astronomy, biology, chemistry, geology, physical science, or physics) totaling at least eight semester credits, including the appropriate laboratory course.

3 cr (3,0)

6 cr (3,9)

6 cr (3,9)

#### G. COLLEGE OF NURSING

(1)	New Unde	ergradua	te Courses:	
	Nurs	441	Nursing Problems Related to Clients Coping with Cancer	4 cr (2,6)
(2)	Undergra	aduate Pi	rerequisite Changes:	
	Nurs	310	Perspectives in Nursing Intervention	3 cr (3,0)
	Nurs	312	Nursing of the Acutely & Chronically Distressed	5 cr (2,9)
	Nurs	314	Nursing in the Home	3 cr (2,3)
	Nurs	413	Complex Nursing Intervention I	4 cr (1,9)
	Nurs	414	Complex Nursing Intervention II	4 cr (2,6)
	Nurs	419	The Multiproblem Family	3 cr (2,3)
	Nurs	421	History & Philosophy of Nursing	3 cr (3,0)

## (3) Curriculum Revision: Effective, Fall 1979

Baccalaureate Degree in Nursing

Current Research in Nursing

## (ATTACHMENT 11) pgs. 44-45

Nurs

Nurs

Nurs

(4)

422

New Graduate Courses:

835

840

Nurs	831	Adult Nursing I	6 cr (3,9)
Nurs	832	Adult Nursing II	6 cr (3,9)
Nurs	833	Rehabilitative Nursing I	6 cr (3,9)
Nurs	834	Rehabilitative Nursing II	6 cr (3,9)

Child Health Nursing I

Gerontological Nursing I

Nurs	836	Child Health Nursing II	6 cr (3,9)
Nurs	837	Maternal-Infant Nursing I	6 cr (3,9)
Nurs	838	Maternal-Infant Nursing II	6 cr (3,9)

Nurs 841 Gerontological Nursing II 6 cr (3,9)

## (5) Graduate Course Deletion:

Nurs 830 The Clinical Specialty in Nursing 6 cr (3,9)

## (6) Policy on Repeating Nursing Courses

The College of Nursing proposed that students enrolled in each program offered be allowed to repeat a nursing course one time only.

#### H. COLLEGE OF SCIENCES

## (1) New Undergraduate Courses:

Math	360	Intermediate Mathematical Computing	3 cr (3,0)
CompSc	450	Theory of Computation	3 cr (3,0)
CompSc	470	Software Development Methodology	3 cr (3,0)

## (2) Undergraduate Course Changes:

Math	460	Introduction to Numerical Analysis I (Number & department change)	3 cr (3,0)
Math	461	Introduction to Numerical Analysis II (Number & department change)	3 cr (3,0)
Micro	407/H407	Food and Dairy Microbiology (Number change)	4 c4 (3,3)
Micro	415/H415	Microbial Genetics (Prerequisite change)	4 cr (3,3)

#### (3) Undergraduate Course Deletions:

CompSc 409	Introduction to Numerical Analysis I	3 cr (3,0)
CompSc 410	Introduction to Numerical Analysis II	3 cr (3,0)
Micro 405/H405	Food and Dairy Microbiology	4 cr (3,0)

## (4) New Graduate Courses:

CompSc	650	Theory of Computation	3 cr (3,0)
CompSc	670	Software Development Methodology	3 cr (3,0)

## (COLLEGE OF SCIENCES)

(cont	inued	<u>New</u>	Graduate Courses)		
	CompSc	840	Design and Analysis of Algorithms	3 cr	(3,0)
	Math	807	Applied Multivariate Analysis	3 cr	(3,0)
	Math	901	Probability Theory I	3 cr	(3,0)
	Math	902	Probability Theory II	3 cr	(3,0)
(5)	Graduate	Course (	Changes:		
	Bot	861	Plant Cell Biology (Prerequisite change)	3 cr	(3,0)
	CompSc	828	Theory of Programming Languages (Description & department change)	3 cr	(3,0)
	Math	660	Introduction to Numerical Analysis I (Number & department change)	3 cr	(3,0)
	Math	661	Introduction to Numerical Analysis II (Number & department change)	3 cr	(3,0)
	Micro	607	Food and Dairy Microbiology (Number change)	4 cr	(3,3)
	Micro	615	Microbial Genetics (Prerequisite change)	4 cr	(3,3)
(6)	Graduate	Course I	Deletions:		
	CompSc	609	Introduction to Numerical Analysis I	3 cr	(3,0)
	CompSc	610	Introduction to Numerical Analysis II	3 cr	(3,0)
	Math	828	Theory of Programming Languages	3 cr	(3,0)

## (7) <u>Curriculum Revision</u>: <u>Effective</u>, Fall 1979

B.S. Degree in Chemistry

## (ATTACHMENT 12) p. 46

## (8) Curriculum Revision: Effective, Fall 1979

Microbiology

## (ATTACHMENT 13) p. 47

Microbiology - Molecular Biology Option

(ATTACHMENT 14) p.48

(continued . . . . COLLEGE OF SCIENCES)

- (9) Program in Computer Science at the Bachelor Level
  Proposal submitted by the College of Sciences
- (10) Program in Computer Science at the Masters Level
  Proposal submitted by the College of Sciences
- (11) Catalog Changes:

Page 141 - Footnote - include Math 100, 104, & 105

Page 146 - Mathematical Sciences Minor - last line delete "or Computer Science"

Page 147 - Footnote - include Math 100, 104, & 105

- I. COOPERATIVE EDUCATION PLAN FOR GRADUATE STUDENTS
- 1. A minimum of two work periods should be required for each student. The work periods may be consecutive or may be alternated with study sessions. The student's first semester and last semester should be spent as a student on campus.
- 2. The Director of Cooperative Education and the graduate student's major advisor should work together to insure that the type of work that the student undertakes as part of his cooperative education assignment is of a high quality and will serve as an enrichment to his overall graduate work.
- 3. Each graduate student planning to participate in the cooperative education program should file his GS Form 2 (Graduate Degree Curriculum) during his first semester of enrollment in graduate school to ensure that he/she can schedule the required courses for his/her graduate program without conflicts with the work sessions.
- 4. The following statement should be placed in The Graduate School Announcements:

Cooperative Education Program.

The Cooperative Education Program is a planned program in which graduate students at the University combine periods of academic study and periods of related work with a participating business, industry, agency, or organization. A minimum of two work periods is required and the work periods normally take place after the student's first semester on campus.

(continued . . . COOPERATIVE EDUCATION PLAN FOR GRADUATE STUDENTS)

The Cooperative Education program is offered to students enrolled in academic departments or programs in the Colleges of (note - colleges need to be contacted to determine if they wish to participate) etc.

All graduate students desiring to enter the program are requested to schedule an interview with officials in the Office of Cooperative Education where application forms and additional information are available.

#### J. POST-BACCALAUREATE STATUS

A student may be accepted by the Graduate School as a post-baccalaureate studen; if he or she applies to a specific graduate degree program but does not have the appropriate academic background. Such a student must be recommended by the appropriate department or program chairperson and must fully meet all other requirements for admission to the particular degree program with respect to grade point ratio and standardized test scores. A student in this category who is denied admission bevause of failure to meet the minimum requirements has access to the same appeal procedures as does any other student applying to the Graduate School.

Applicants will be classified as post-baccalaureate students if they are not qualified to take at least one graduate course per semester which can be included in the minimum hours required for the graduate degree. Additionally, any student required to complete more than eighteen semester hours of undergraduate credits will be classified as post-baccalaureate. Until such time that the required number of undergraduate credit hours is less than or equal to eighteen and the student is qualified to take, each semester, a graduate course which can be included in the minimum hours required for the graduate degree, he or she will remain classified as post-baccalaureate. A department or a student may request post-baccalaureate status even though the above criteria are satisfied.

At the time a post-baccalaureate student becomes eligible for calssification as a graduate student, the decision as to eventual admission status (full-status or provisional) will be made according to criteria utilized by the department and the Graduate School for all other applicants to the particular degree program. The post-baccalaureate student is expected to maintain a B average and receive no grade lower than C in order to qualify for admission to a graduate program.

Post-baccalaureate students may enroll in the same number of credits per semester as any undergraduate student but shall not enroll in graduate courses or receive a graduate assistantship. No degree or certificate shall be awarded to students in a post-baccalaureate status

(continued . . . POST-BACCALAUREATE STATUS)

and such students who subsequently desire to obtain an additional baccalaureate degree must apply through the Office of Admissions and Registration. The applicability of credits earned toward the undergraduate degree will be determined by the policy pertaining to transfer students. Tuition and fees for post-baccalaureate students shall be those applicable to undergraduates with the exception of the application fee and admissions deposit.

A student possessing an undergraduate degree or a graduate degree and who wishes to enroll in specific undergraduate courses for reasons other than future admission to the Graduate School shall not be classified as post-baccalaureate and shall be governed by policies established by the Office of Admissions and Registration.

Action: Approved

E. N. Tyndall, Secretary

## AGRICULTURAL MECHANIZATION & BUSINESS

## FRESHMAN

First Semester		Second Semester	
Math 105 Algebra & Trigonometry* Biol 103 General Biology 1 Biol 105 General Biol Lab I Ch 101 General Chemistry Engl 101 English Composition	5 (5,0) 3 (3,0) 1 (0,3) 4 (3,3) 3 (3,0) 16	Agric 104 Intro to Plant Sci Agric 103 Intro to Animal Ind Biol 104 General Biology II Biol 106 General Biol Lab II Ch 102 or 112 General Chemistry Engl 102 English Composition	3 (2,3) 3 (2,3) 3 (3,0) 1 (0,3) 4 (3,3) 3 (3,0) 17
	SOPHMOI	RE	
AgEc 202 Agric Economics AgM 205 Prin of Farm Shop EG 109 Engr Graph Commu English Requirement* Phys 207 General Physics Elective	3 (3,0) 3 (2,3) 2 (0,6) 3 (3,0) 4 (3,2) 3	AgEc 302 Mgt of Agric Enterp AgM 206 Agric Mechanization English Requirement* Phys 208 General Physics Social Science Elective***	
	JUNIOR		
Acct 201 Prin of Accounting AgM 303 Calc of Mech Agric AgM 406 Mech & Hydr Systems Agron 202 Soils Social Science Elective*** Elective	3 (3,0) 2 (2,0) 3 (2,3) 3 (2,2) 3 (3,0) 3 17	AgEc 456 Prices AgEc 351 Adver and Merchand AgM 301 Soil & Water Conser Engl 301 Public Speaking Agriculture Elective*** Elective	3 (3,0) 3 (3,0) 3 (2,3) 3 (3,0) 3 3 18
	SENIOR		
AgEc 309 Econ of Agric Mkt or AgEc 402 Econ of Agric Prod AgM 452 Farm Power AgM 460 Farm & Home Utilities Economics Elective**** Elective	3 (3,0) 3 (3,0) 3 (2,3) 3 (2,3) 3 4 16	AgM 404 Farm Structures AgM 408 Equip Sales & Serv Agricultural Elective**** Economics Elective**** AgM 472 Seminar Elective	3 (2,3) 3 (3,0) 3 1 (1,0) 3
		TOTAL SEMESTER HOURS =	134

(continued . . . ATTACHMENT 1)

## Agricultural Mechanization and Business

- \* Eligible students may enroll in Math 106 in lieu of Math 105.

Effective: Fall 1979

- \*\*\* To be selected from Ed 302, Hist 101, 102, 172, 173, Phil 201, 325, PolSci 101, Psych 201, RS 301, 401, Soc 201.
- \*\*\*\* Electives to be selected in consultation with adviser.

#### B.S. IN AGRICULTURAL EDUCATION

Effective: Fall 1979

First Semester		Second Semester
AGRIC 104 Intro to Plant Sci BIOL 103 Gen Biology I BIOL 105 Gen Biology Lab I CH 101 General Chemistry ENGL 101 Engl Composition MATH 102 Intro to Math Anal*	3 (2,3) 3 (3,0) 1 (0,3) 4 (3,3) 3 (3,0) 3 (3,0)	AG ED 100 Orient & Field Exper 1 (0,2) AGRIC 103 Intro to Animal Ind 3 (2,3) BIOL 104 Gen Biology II 3 (3,0) BIOL 106 Gen Biology Lab II 1 (0,3) CH 102 or 112 Gen Chemistry 4 (3,3) ENGL 102 Engl Composition 3 (3,0) ELECTIVE 16
	SECOND	YEAR
AG EC 202 Agric Economics AG ED 201 Introl to Ag Educ AGM 205 Prin of Farm Shop ENGL Requirement** PHYS 207 General Physics	3 (3,0) 3 (2,3) 3 (2,3) 3 (3,0) 4 (3,2)	AGM 206 Agric Mechanization 3 (2,3) AGRON 202 Soils 3 (2,2) ENGL Requirement** 3 (3,0) FOR 305 Elements of Forestry 2 (2,0) FOR 307 Elem of For Lab 1 (0,3) SOC SCI ELECTIVE*** 3 (3,0) ELECTIVE
	16	16
AGM 301 Soil and Water Cons	THIRD 3 (2,3)	YEAR  AG EC 302 Mgt of Agric Ents 3 (2,3)
ENT 301 General Entomology Approved AGRIC ELECTIVE Approved AG EC ELECTIVE MINOR***	3 (2,3) 3 (3,3) 3 (6	OR AG EC 402 Econ of Agric Prod 3 (3,0) AGRON 452 Soil Fert and Mgt 2 (2,0) AGRON 453 Soil Fert Lab 1 (0,3) AN SC 301 Feeds and Feeding 3 (3,0) MINOR****
	18	ELECTIVE $\frac{3}{18}$
	FOURTH	YEAR
HORT 407 Landscape Design PL PA 401 Plant Pathology MINOR*** ELECTIVE	3 (2,3) 3 (2,3) 3 7	AG ED 300 Supv. Field Exper II 1 (0,3) AG ED 401 Methods in Ag Educ 3 (2,3) AG ED 406 Directed Teaching 6 (0,18) AG ED 423 Curriculum 2 (2,0) AG ED 425 Teaching Ag Mech 2 (1,3) ED 302 Ed Psychology 3 (3,0)
	r	TOTAL SEMESTER HOURS = 134

<sup>\*</sup>Students scoring statisfactorily on the Mathematics Test, Level II (Standard) may elect to schedule other mathematics courses or electives in lieu of Math 102. Those students ineligible for Math 102 will take Math 105.

<sup>\*\*</sup>To be selected from English as follows:

<sup>(1</sup>st Semester) 202, 203 204, 205, 206, 207, 208 or 209; (2nd Semester) 231, 301, or 304.

<sup>\*\*\*</sup>To be selected from History 101, 102, 172, 173; Philosophy 201, 235; Political Science 101; Psychology 201; Rural Sociology 301, 401; Sociology 201.

<sup>\*\*\*\*</sup>See class advisor for available minors and course requirements.

#### EDUCATION FOR INDUSTRY OPTION

## FRESHMAN YEAR

First Semester			Second Semester			
INED 102 EG 109 ENGL 101	Intro to InEd Woodworking Engr Graphical Com Engl Comp Trigonometry ELECTIVE	1 (1,0) 2 (1,3) 2 (0,6) 3 (3,0) 2 (2,0) 4 (3,3) 15	INED 105 ENGL 102 <sup>2</sup> SOC SCI <sup>1</sup> SCIENCE <sup>4</sup> ELECTIVE		Machining Prac Engl Comp ELECTIVE ELECTIVE	3 (1,6) 3 (3,0) 3 (3,0) 4 (3,3) 2
		SOPHOMOR	E YEAR			
3 <sub>LIT</sub> REQUISOC 201	Basic Metal Proc UIREMENT Soc. Perspective CTIVE	3 (1,6) 3 (3,0) 3 (3,0) 4 (3,3) 3 (3,0) 1	INED INED ECON PSYCH ELECTI	204 208 201 201 VE	Graphic Arts Electricity Prin of Econ Gen Psychology	3 (1,6) 3 (2,3) 3 (3,0) 3 (3,0) 6
		JUNIOR Y	EAR			
INED 325 ECON 301 ED 302	Dwell Mat & Constr Ind Org & People Econ of Labor Ed Psychology Intro to Ind Mgt	2 (1,2) 3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) $\frac{3}{17}$	ENGL IE IM PSYCH <sup>4</sup> ELECTI		Public Speaking Job Eval & Wage Incer Personnel Mgt. Industrial Psych	3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 6 (6,0)
SENIOR YEAR						
INED 422 IM 408	Train Progs Hist & Phil of InEd Work Simp & Stand Textile Processes	3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) $\frac{6}{18}$	INED INED SOC APPROV	405 496 351 ED EL	Pub Relations Indus Soc	3 (3,0) 3 (3,0) 3 (3,0) 8 17

## TOTAL CREDITS - 135

Science Electives to be selected from Astronamy, Chemistry, Physics, Geology, Biology or Physical Science. At least two fields must be represented.

Social Science electives to be selected from History, Sociology, Economics, Psycholog Political Science, Religion, Philosophy, or Geography.

 $<sup>^{3}</sup>$ To be selected from the following: ENG 202, 203, 204, 205, 206, 207, 208, 209

<sup>&</sup>lt;sup>4</sup>See Class Adviser for electives.

NOTE: One summer (400 clockhours) of field experience is required of each student following the completion of his sophomore year.

#### INDUSTRIAL ARTS EDUCATION OPTION

#### FRESHMAN YEAR

First Semester		Second Semes	ster	
INED 102 Woodworking 2 ED 100 Orientation 1 EG 109 Engr Graphical Com 2 ENGL 101 Engl Comp 3 MATH 104 Trigonometry 2	(3, 3)	INED 103 INED 105 EG 110 ENGL 102 SCIENCE 4Elective	Woodworking II Machining Prac Engr Graphics Engl Comp ELECTIVE	2 (1,3) 3 (1,6) 2 (0,6) 3 (3,0) 4 (3,3) 2
	SOPHOMOR	E YEAR		
INED 205 Power Technology 3 3LIT REQUIREMENT 3 1SCIENCE ELECTIVE 4	(1,6) (2,3) (3,0) (3,3) (3,0)	INED 204 INED 208 INED 313 MUSIC 210 2 SOC SCI 4 ELECTIVE	Graphic Arts Electricity Arts & Crafts Music Appreciation ELECTIVE	3 (1,6) 3 (2,3) 3 (1,6) 3 (3,0) 3 (3,0) \frac{2}{17}
	JUNIOR Y	EAR		
INED 414 Electron for Teachers 3 2ED 302 Ed Psychology 3 SOC SCI ELECTIVE 3	(3,0) (3,0) (3,0)	INED 416  ED 458 ENGL 301 2 SOC SCI 4 ELECTIVE	Man & Operation of Indus Edu Labs Health Educ Public Speaking ELECTIVE	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	SENIOR Y	EAR		
INED 441 Comp Lab Field Exp 2 ED 498 Tchg. Sec. Sch. Read 3	(3,0)	INED 405 INED 425 INED 402 ED 335	Course Org & Eval Teaching Ind Sub Directed Teaching Adol Grow & Dev	3 (3,0) 3 (3,0) 6 (0,18) 3 (3,0) 15
	TOTAL SE	MESTER HOURS	=	135

<sup>&</sup>lt;sup>1</sup>Science Electives to be selected from Astronamy, Chemistry, Physics, Geology, Biology, or Physical Science. At least two fields must be represented, one of which must be in the biological sciences.

<sup>&</sup>lt;sup>2</sup>Social Science electives to be selected from History, Sociology, Economics, Geography, Psychology, Political Science, Religion, or Philosophy. At least two fields must be represented, with six, but not more than six, hours in one field.

 $<sup>^{3}</sup>$ To be selected from the following: ENG 202, 203, 204, 205, 206, 207, 208, 209

<sup>&</sup>lt;sup>4</sup>See Class Adviser for electives.

#### VOCATIONAL-TECHNICAL EDUCATION OPTION

First Semester	FRESHMAN YEAR Second Semester	
INED 101 Intro to InEd INED 102 Woodworking I ED 100 Orientation EG 109 Engr Graphical Com ENGL 101 Engl Comp MATH 104 Trigonometry SCIENCE ELECTIVE 4 ELECTIVE	1 (1,0) INED 105 Machining Prac. 2 (1,3) EG 110 Engr Graphics 1 (1,0) ENGL 102 Engl Comp 2 (0,6) SCIENCE ELECTIVE 3 (3,0) SOC SCI ELECTIVE 4 (3,3) 1 16	3 (1,6) 2 (0,6) 3 (3,0) 4 (3,3) 3 (3,0) 1
INED 203 Basic Metal Proc 3INED 205 Power Techonology LIT REQUIREMENT SCIENCE ELECTIVE 2SOC SCI ELECTIVE 4ELECTIVE	SOPHOMORE YEAR  3 (1,6) INED 204 Graphic Arts  3 (2,3) INED 208 Electricity  3 (3,0) ENGL 301 Public Speaking  4 (3,3) MUSIC 210 Music Appreciation  3 (3,0) ELECTIVE	3 (1,6) 3 (2,3) 3 (3,0) 3 (3,0) 1 (1,0)

SUMMER
INED 350 Ind. Cooperative Experience - 6

				JUNIOR	YEAR				
INED	302	Dwell Mat & Const	2	(1,2)	INED	416	Man & Oper of InEd	3	(2,2)
		Ed Psychology	3	(3,0)			Labs		
<sup>2</sup> SOC SCI		ELECTIVE	3	(3,0)	ED	458	Health Educ	3	(3,0)
4ELECTIV	Έ		4	(4,0)	<sup>2</sup> soc so	CI	ELECTIVE	3	(3,0)
ELECTIV	Έ	(Area of Spec)	3	(3,0)	ELECT	IVE	(Area of Spec)	3	(3,0)
					<sup>4</sup> ELECT	IVE		3	
			15					15	

# INED 450 InEd. Cooperative Experience - 6

SENIOR YEAR	
INED 422 Hist & Phil of InEd 3 (3,0) INED 405 Course Org/Eval	3 (3,0)
INED 441 Comp Lab Field Exp 2 (1,3) INED 425 Teaching Ind Subj	3 (3,0)
ED 498 Tchg. Sec. Sch. Read.3 (1,4) INED 402 Directed Teaching	6 (0,18)
AAH 303 Evol of Vis Arts I 3 (3,0) ED 335 Adol Grow & Dev.	3 (3,0)
ELECTIVE (Area of Spec) 4 (4,0)	
15	15

#### TOTAL CREDITS - 135

Science Electives to be selected from Astronamy, Chemistry, Physics, Geology, Biology or Physical Science. At least two fields must be represented, one of which must be in the biological sciences.

<sup>2</sup>Social Science Electives to be selected from History, Sociology, Economics, Geography Psychology, Political Science, Religion, or Philosophy. At least two fields must be represented, with six, but not more than six, hours in one field.

 $<sup>^{3}</sup>$ To be selected from the following: ENG 202, 203, 204, 205, 206, 207, 208, 209

<sup>&</sup>lt;sup>4</sup>See Class Adviser for electives.

132

Effective: Fall 1979

#### BACHELOR OF SCIENCE IN ACCOUNTING

## FRESHMAN YEAR

First Semester	Second Semester			
ENGL 101 English Composition 3 (3,0) MATH 106 Calcu of One Var I 4 (4,0) ECON 201 Principles of Econ 3 (3,0) SOC 201 Sociological Perspec 3 (3,0) Science Elective* 4 (3,3)	ENGL 102 English Composition 3 (3,0)  MATH 108 Calcu of One Var II 4 (4,0)  ECON 202 Prin. of Econ 3 (3,0)  Science Elective* 4 (3,3)  ELECTIVE 3  17			
SOPHOMOR	E YEAR			
ACCT 201 Princ. of Acct. 3 (3,0) Literature Requirement** 3 (3,0) MATH 231 Math of Life Insu. 3 (3,0) History Elective 3 (3,0) SOC 351 Industrial Soc. 3 (3,0)  15  JUNIOR Y	ACCT 202 Prin. of Acct. 3 (3,0) Literature Requirement** 3 (3,0) MATH 301 Stat. Theory & Meth.I 3 (3,0) COMPSC 205 Elem. Comp. Prog. 3 (3,0) IM 201 Intro. to Ind. Mgt. 3 (3,0) ELECTIVE 116			
ACCT 301 Inter. Acct. 3 (3,0) FIN 306 Corp. Fin. 3 (3,0) ECON 314 Inter. Econ. Theory 3 (3,0) ENGL 301 Public Speaking 3 (3,0) LAW 312 Commercial Law 3 (3,0) ELECTIVE 3 (3,0)	ACCT 302 Inter. Acct. 3 (3,0) ACCT 303 Cost Accounting 3 (3,0) ENGL 304 Advanced Comp. 3 (3,0) LAW 313 Commercial Law 3 (3,0) IM 308 Principles of Market. 3 (3,0)			
SENIOR Y	EAR			
ACCT 305 Income Taxation 3 (3,0) ACCT 410 Budget. & Exec. Cont. 3 (3,0) ACCT 411 Advanced Acct. 3 (3,0) ACCT 415 Auditing 3 (3,0) MgtSc 414 Statistical Analy. 3 (3,0) Approved Elective*** 3  18	ACCT 405 Adv. Federal Taxes 3 (3,0) ACCT 407 Accounting Research 1 (1,0) IM 402 Oper. Plan. & Contr. 3 (3,0) IM 415 Manag. Dec. Making 3 (3,0) Approved Elective***  ELECTIVE 3  3  16			

\*Science elective includes any natural or physical science.

\*\*To be selected from the following: Engl. 202, 203, 204, 205, 206, 207, 208, 209
\*\*\*Approved electives consist of (1) the 300 and 400 level of courses (for which the student is eligible) offered by the Department of Accounting and Finance and (2) only such other courses as the senior class advisers or the Department Head may approve as documented by a signed approval to be retained in the Department file for the individual student.

TOTAL SEMESTER HOURS =

NOTE: Students who enter the degree program in Accounting after the 1975-76 academic year are required to earn a grade of C or higher in all prerequisite accounting courses in order to be eligible for enrollment in the next higher-level accounting course.

Math 100 & Math 105 (Math 105 was formerly 103 and 104) credits may  $\underline{\text{NOT}}$  be counted in computing the minimum number of credit hours required for graduation with a B.S. in Accounting degree.

#### B. S. IN FINANCIAL MANAGEMENT

#### FRESHMAN YEAR

First Semester		Second Semester
ENGL 101 English Composition MATH 101 Finite Probability* ECON 201 Prin. of Economics IM 201 Intro. to Ind. Mgt. POLSC 101 Amer. Nat'l. Govt. ELECTIVET	3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 116	ENGL 102 English Composition 3 (3,0) MATH 102 Intro. to Math Analy* 3 (3,0) ECON 202 Prin. of Economics 3 (3,0) PSYCH 201 General Psychology 3 ELECTIVE: 4
	SOPHOMO	RE YEAR
ACCT 201 Prin. of Accounting Literature Requirement** MATH 203 Elem. Stat. Infer.* SOC 201 Sociological Perspec	3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 4 16	ACCT 202 Prin. of Accounting 3 (3,0) COMPSC 205 Elem. Comp. Prog. 3 (3,0) Lieterature Requirement** 3 (3,0) History Elective 3 (3,0) PSYCH 301 Ind. Psy./SOC 351 Ind. Soc. 3 (3,0) ELECTIVE† 3 (3,0)
	JUNIOR	YEAR
ACCT 301 Inter. Accounting ECON 314 Inter. Econ Theory ECON 302 Money and Banking ENGL 304 Advanced Comp. FIN 306 Corporation Finance LAW 312 Commercial Law	3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 18	ACCT 302 Inter. Accounting 3 (3,0) ACCT 303 Cost Accounting 3 (3,0) IM 308 Prin. of Marketing 3 (3,0) FIN 308 Fin. Insti. & Markets 3 (3,0) LAW 313 Commercial Law 3 (3,0)
	SENIOR	YEAR
ACCT 305 Income Taxation ACCT 410 Budget. & Exec. Con. FIN 310 Prob. in Fin. Mgt. IM 402 Oper. Plan & Cont. Required Elective***	3 (3,0) 3 (3,0) 3 (3,0) 3 (3,0) 6 18	ENGL 301 Public Speaking 3 (3,0) FIN 404 Seminar in Finance 3 (3,0) IM 415 Business Policy 3 (3,0) Required Elective*** 6
		EMESTER HOURS = 132

TOTAL SEMESTER HOURS = 132

\*Credits earned in Math 106, 108, 301 may be substituted for Math 101, 102, 203 and elective credits. (See adviser.)

\*\*To be selected from the following: ENGL 202, 203, 204, 205, 206, 207, 208, 209. 
\*\*\*Twelve credits must be completed from the following courses: ACCT 405, 415, ECON 305, 306, 412, FIN 307, 402, 408, 410, MGT SC 310.

†Six elective credits must be in nonbusiness areas.

NOTE: Students who enter the degree program in Financial Management after the 1975academic year are required to earn a grade of C or higher in all prerequisite accouning courses in order to be eligible for enrollment in the next higher-level account;
course.

Math 100 and Math 105 credits may not be used for elective credit toward the require ments for graduation with a B.S. in Financial Management.

## BACHELOR OF SCIENCE IN ECONOMICS

## Options

## Management Science (p. 122 catalog)

Acct	303	Cost Accounting	3 (3,0)
Acct	305	or Income Taxation	
Law	312	<u>or</u> Commercial Law	
MgtSc	311	Introduction to Econometrics	3 (3,0)
MgtSc	413	Management Science I	3 (3,0)
Quantit	ative E	Elective <sup>5</sup>	6
			15

 $<sup>^{5}</sup>$ To be selected from the following: Mgt. Sc. 414, IM 404, Econ 430.

## Mathematical Sciences (p. 122 catalog)

## Statistics Option

Math	108	Calculus of One Var. II	4 (4,0)
Math	206	Calculus of Several Variables	4 (4,0)
Math	405	Stat. Theory and Math II	3 (3,0)
Math	411	Linear Algebra	3 (3,0)
		or	
Econ	430	Math Economics	
Math	452	Linear Programming	3 (3,0)
			17

# BACHELOR OF SCIENCE IN TEXTILE CHEMISTRY & TEXTILE SCIENCE

## FRESHMAN YEAR

First Semester	,	Second Seme	ester	
CH 101 General Chemistry ENGL 101 English Composition HISTORY ELECTIVE <sup>1</sup> MATH 106 Cal. of One Var. I TEXT 122 Intro. to Textiles ELECTIVE	4 (3,3) 3 (3,0) 3 (3,0) 4 (4,0) 2 (1,3) 17	ENGL 102 MATH 108	General Chemistry <sup>2</sup> English Composition Cal. of One Var. II Phys. with Cal. I	4 (3,3) 3 (3,0) 4 (4,0) 3 (2,2) 2

To be selected from the following: HIST 101, 102, 172, 173.

## TEXTILE CHEMISTRY

## SOPHOMORE YEAR

First	Semester		Second	Seme	ster		
CH CH MATH PHYS PHYS Litera ELECTI	223 Organic Chemistry 225 Organic Chemistry La 206 Calcu. of Sec. Var. 221 Phys. with Cal. II 223 Physics Lab. I ture Requirement	3 (3,0) b 2 (0,6) 4 (4,0) 3 (2,2) 1 (0,3) 3 (3,0)	CH CH MATH PHYS PHYS ELECTIV	224 226 208 222 224	Engineering Math. I Phys, with Cal. III	2 4 3	(3,0) (0,6) (4,0) (2,2) (0,3)
ELECTI	V E	17			ī	6	
		JUNIOR Y	EAR_				
СН	331 Physical Chemistry	3 (3,0)	СН	332	Physical Chemistry	3	(3,0)
ECON	200 Economic Concepts	3 (3,0)	ENGL	314	Comm. Skills for Engrs	3	(3,0)
TC	315 Intro. to Polymer		TC	316	Chemical Preparation		- 17
	Science & Engineer.				of Textiles		(2,3)
TC	317 Polymer & Fiber Lab	1 (0,3)	TEXT	306	Yarn Formation		(3,0)
ELECTI	VE	$\frac{6}{16}$	ELEC1 IV	/E <sup>2</sup>	1	8	

 $<sup>^{2}</sup>$ Textile Science majors substitute CH 102.

ecember 15, 1978 (continued . . . ATTACHMENT 9)

B.S. in Textile Chemistry & Textile Science

Effective: Fall 1979

## SENIOR YEAR

First Semester	Second	Semester	
TC 457 Dyeing & Finish. I 3 TC 459 Dyeing & Fin. Lab I 1 TEXT 313 Fabric Formation 3 TEXT 321 Fiber Science 3 ELECTIVE 6 16	(0,3) TC (3,0) TEXT ELECTI	458 Dyeing & Finish. II 460 Dyeing & Fin. Lab II 322 Properties of Textile Structures VE <sup>2</sup>	1 (0,3)

TOTAL SEMESTER HOURS =

132

6

18

### TEXTILE SCIENCE

Effective: Fall 1979

See page for Freshman Year.

#### SOPHOMORE YEAR

First Semester	Second Semester
MATH 206 Calcu. of Sev. Var. 4 (4,0) PHYS 221 Phys. with Cal. II 3 (2,2) PHYS 223 Physics Lab I 1 (0,3) TC 303 Textile Chemistry 3 (3,0) TC 305 Textile Chemistry Lab 1 (0,3) Literature Requirement 3 (3,0) ELECTIVE 1 16	ECON 200 Economic Concepts 3 (3,0)  MATH 208 Engineering Math. I 4 (4,0)  PHYS 222 Phys. with Cal. III 3 (2,2)  PHYS 224 Physics Lab. II 1 (0,3)  TC 304 Textile Chemistry 3 (3,0)  TC 306 Textile Chemistry Lab 1 (0,3)  ELECTIVE   1 16
JUNIOR Y	EAR
TEXT 301 Fiber Processing I 3 (2,2) TEXT 311 Fabric Development I 3 (2,2) TEXT 321 Fiber Science 3 (2,2) ELECTIVE 8	ENGL 314 Comm. Skills for Engrs3 (3,0) TEXT 302 Fiber Processing II 3 (2,2) TEXT 312 Fabric Development II 3 (2,2) TEXT 322 Properties of Textile Structures 3 (2,2)

ELECTIVE

17

To be selected from the following: ENGL 202, 203, 204, 205, 206, 207, 208, 209.

 $<sup>^2</sup>$ Class advisors have lists of approved electives and will suggest sequence of courses.

(continued . . . ATTACHMENT 9)

## B. S. in Textile Chemistry and Textile Science

Effective: Fall 1979

132

## SENIOR YEAR

First Semester	Second Semester	
TC 315 Intro. to Polymer '	TC 457 Dyeing & Finishing I	
Science & Engineer. 3 (3	3,0) TC 459 Dyeing & Fin. Lab. I	1 (0,3)
TC 317 Polymer & Fiber Lab 1 (	0,3) TEXT 414 Nonwoven & Knitted	
TEXT 403 Fiber Processing III 3 (2	2,2) Structures	3 (3,0)
TEXT 411 Fabrics Develop. III 3 (2	2,2) ELECTIVE <sup>2</sup>	9
ELECTIVE <sup>2</sup> 6		
$\overline{16}$	$\overline{1}$	.6

<sup>&</sup>lt;sup>1</sup>To be selected from the following: ENGL 202, 203, 204, 205, 206, 207, 208, 209

TOTAL SEMESTER HOURS =

 $<sup>^2\</sup>mathrm{Adv}$  isors have lists of approved electives and will suggest sequences of courses

## -- ATTACHMENT 10 --

Effective: Fall 1979

## BACHELOR OF TEXTILE TECHNOLOGY

First Semester	FRESHMAN	YEAR Second Semes	ster	
HISTORY ELECTIVE 3 MATH 102 Intro. to Math. Anal. 3 TEXT 122 Intro. to Textiles 2	(3,0) (3,0) (3,0) (1,3) (3,3)	ENGL 102 MATH 101 SOC 201 BASIC SCIENC ELECTIVE	English Composition Finite Probability Socio. Perspective CE	3 (3,0) 3 (3,0) 3 (3,0) 4 (3,3) 3
	SOPHOMOR	E YEAR		
MATH 203 Elem. Stat. Infer. 3 TEXT 301 Fiber Processing I 3 TEXT 305 Basic Fibers 3	(3,0) (3,0) (2,2) (3,0) (3,0)	ECON 200 PSYCH 201 TEXT 302 TEXT 324 ELECTIVE	Economic Concepts General Psychology Fiber Processing II Textile Statistics	3 (3,0) 3 (3,0) 3 (2,2) 3 (3,0) 3
	JUNIOR Y	EAR		
ECON 301 Economics of Labor 3 TEXT 311 Fabric Development I 3 TEXT 403 Fiber Processing III 3 ELECTIVE <sup>3</sup> 6 15			Personnel Management Fabric Development I Textile Marketing	
	SENIOR Y	EAR		
TEXT 314 Dyeing & Finishing 3	(3,0) (3,0) (2,2) (2,2)	LAW 312 TEXT 322 TEXT 414  TEXT 428 ELECTIVE 3	Commercial Law Prop. of Text. Struct Nonwoven & Knitted Structures Textile Research	$\begin{array}{c} 3 & (3,0) \\ 3 & (2,2) \end{array}$ $\begin{array}{c} 3 & (3,0) \\ 3 & (3,0) \\ 3 & 4 \\ \hline 16 & \\ \end{array}$
	TOTAL SE	MESTER HOURS	=	128

To be selected from the following: HIST 101, 102, 172, 173.

 $<sup>^{2}</sup>$ To be selected from the following: ENGL 202, 203, 204, 205, 206, 207, 208, 209.

 $<sup>^3</sup>$ Advisers have lists of approved electives and will suggest sequences of course.

#### BACCALAUREATE DEGREE IN NURSING

## FRESHMAN YEAR

First				Second	Seme	ster		
BIOL BIOL CH ENGL MATH	105 101 101	Gen. Biology Lab I <sup>2</sup> 1 Gen. Chemistry 4	(3,0) (0,3) (3,3) (3,0) (3,0)	BIOL BIOL CH ENGL MATH	104 106 102 102 101	General Biology II <sup>2</sup> Gen. Biology Lab.II <sup>2</sup> General Chemistry English Composition Finite Probability	1 4 3	(3,0) (0,3) (3,3) (3,0) (3,0)
NURS	100	Orientation $\frac{1}{15}$		HISTOR	Y ELE			(3,0)
			SOPHOMOF	RE YEAR				
BIOCH MICRO			(3,3) (3,3)	MATH NURS	203 207	Elem. Stat. Inference Dynamics of Human	3	(3,0)
PSYCH ZOOL		Gen. Psychology 3 Human Anatomy &	(3,0)	NURS	209	Relations Nursing Skills Lab		(2,3) $(0,3)$
Litera	ture		(3,3) (3,0)	PSYCH SOC ZOOL	321 201 221	Develop. Psychology Sociol. Perspective Human Anatomy and		(3,0) (3,0)
		18				Physiology II	$\frac{4}{17}$	(3,3)
			JUNIOR Y	<u>'EAR</u>				
NURS NURS		Human Values in Nurs. 3 Nurs. Dur. Alterations	(3,0)	NURS	310	Perspectives in Nursing Intervention	3	(3,0)
NURS		in Life Patterns 5	(2,9) (2,3)	NURS	312	Nursing of Acute & Chronically Distresse		, , ,
NUTR SOC	451	Human Nutrition 3	(3,0) (3,0)	NURS SOC	314 311	Nursing in the Home The Family <sup>3</sup>		(2,3) $(3,0)$
		17		ELECTIV	VE <sup>4</sup>	·	$\frac{3}{17}$	
			SENIOR Y	EAR				
NURS	413	Complex Nursing Intervention I 4	(1,9)	NURS	414	Complex Nursing Intervention II	4	(2,6)
NURS NURS ELECTI ELECTI	421 VE <sup>4</sup>		(2,3)	NURS PSYCH NURSING		Cur. Research in Nurs Social Psychology	3	
			TOTAL SE	EMESTER I	HOURS	=	L34	

 $<sup>^{1}</sup>$ To be selected from the following: ENGL 202, 203, 204, 205, 206, 207, 208, 209

 $<sup>^2</sup>$  BIOL 110 and 111 may be taken in lieu of BIOL 103, 104, 105, 106. (See Description section.)

 $<sup>^{3}\</sup>mathrm{SOC}$  309 may be taken in lieu of SOC 311.

(continued . . . ATTACHMENT 11)

## Baccalaureate Degree in Nursing

## NOTE:

- 1. NURS 207 and 209 are open to students enrolled in the Baccalaureate program only. These courses are offered first summer session for incoming special students with permission of the Dean of the College of Nursing.
  - 2. A minimum grade of C is required in each nursing course.
- 3. The physical, biological, and social sciences and mathematics courses scheduled for the freshman and sophomore years are prerequisite to nursing courses numbered 300 and above. A grade of C or above is required in each biological science course (BIOCH 210, MICRO 305, ZOOL 220, 221) scheduled for the sophomore year as described in the curriculum plan of the Baccalaureate degree program.
- 4. A minimum grade-point ratio of 2.0 is required for registration in nursing courses numbered 300 and above.

Electives to be selected from the following: Humanities, literature, music, philosophy, religion; courses must be numbered 201 and above.

 $<sup>^{5}</sup>_{\rm Select}$  free electives from courses numbered 201 and above.

<sup>&</sup>lt;sup>6</sup>Select from the following: NURS 426, 431, 432, 434, 435, 437, 438, 439, 440, 44

## BACHELOR OF SCIENCE IN CHEMISTRY

## FRESHMAN YEAR

First Semes	ter		Second	Seme	ster		
ENGL 101 : MATH 106 (	English Composition Calculus of One Var	4 (3,3) 3 (3,0) 4 (4,0) 4 (3,1)	CH ENGL MATH PHYS GER	112 102 108 122 102	General Chemistry English Composition Cal. and Lin. Algebra Physics with Calcu. I Elementary German <sup>2</sup>	3 a 4	
		SOPHOMOI	RE YEAR				
CH 225 (MATH 206 (PHYS 221 PHYS 223 )	Organic Chemistry Lab Calculus of Sev. Var. Phys. with Cal II Physics Lab. I	4 (4,0) 3 (2,2) 1 (0,3) 3 (3,0)	CH CH MATH PHYS PHYS Litera	224 226 208 222 224 ature	Organic Chemistry Lab Engineering Math I Phys with Cal. III	2 4 3 1	(3,0) (0,6) (4,0) (2,2) (0,3) (3,0)
		JUNIOR	YEAR				
CH 315 CH 331 CH 339 CH	Quantitative Anal Lab Physical Chemistry	3 (3,0) 1 (0,3) 3 (3,0) 4	CH CH CH ELECTI	332 340 411 WE3	Physical Chemistry Physical Chem. Lab. Instrumental Analysis	1	(3,0) (0,3) (2,6)
,		SENIOR	YEAR				
CH 402 Career Requ ELECTIVE <sup>3</sup>		3 (3,0) 6 7 6	Career ELECTI	_	irements #	4 12 16	
		TOTAL S	EMESTER	HOURS	= :	130	

 $<sup>^2\</sup>mathrm{Students}$  planning to take biology courses register for BIOL 110 and BIOL 111 in the Freshman year and delay GER 101-102 until the Junior year.

MICROBIOLODY

### FRESHMAN YEAR

First	Semester		Second	Seme	ster		
BIOL CH ENGL MATH	110 Prin. of Biology I 101 General Chemistry 101 English Composition 106 Cal. of One Var. I	5 (4,3) 4 (3,3) 3 (3,0) 4 (4,0)	CH ENGL	112 102	Prin. of BIology II General Chemistry English Composition Microbes and Human	4	(4,3) (3,3) (3,0)
		. (1)-/			Affairs Requirement <sup>2</sup>	$\frac{1}{3-4}$ $\frac{3-4}{6-17}$	(1,0)

## SOPHOMORE YEAR

CH	223 Organic Chemistry	3	(3,0)	BIOCH	301	Molecular Biology	3	(3,0)
СН	227 Organic Chem. Lab.	1	(0,3)	CH	224	Organic Chemistry	3	(3,0)
MICRO	305 General Microbiology	4	(3,3)	CH	228	Organic Chem. Lab	1	(0,3)
	ture Requirement			Litera	ture	Requirement 1	3	(3,0)
Mathem	atics or Sci. ELECTIVE <sup>3</sup> 3	-4		Mathem	atics	or Sci. EĻECTIVE <sup>3</sup>	4-3	
Social	Science ELECTIVE	3		Microb	iolog	y ELECTIVE <sup>4</sup>	3	
							17-16	
	1.7	7.0						

#### 17-18

## JUNIOR YEAR

ENGL 301 Public Speaking	3 (3,0)	GEN 305 Intro. Mol. Gen.	4 (3,3)
MICRO 401 Adv. Bacteriology	4 (2,6)	MICRO 412 Bacterial Physiology	4 (3,3)
Physics FLECTIVE <sup>5</sup>	3-4	Physics ELECTIVE <sup>5</sup>	4
ELECTIVE <sup>4</sup>	6-7	Social Science ELECTIVE	3
		ELECTIVE <sup>4</sup>	_3
	17		18

#### SENIOR YEAR

Social Science ELECTIVE	3	MICRO 411 Path. Bacteriology	4 (3,3)
ELECTIVE <sup>4</sup>	14-13	ELECTIVE <sup>4</sup>	12
	17-16		16

TOTAL SEMESTER HOURS = 134

413, MICRO 400, 403, 407, 410, 413, 414, 415, 416, 491, PL PA 456, PS 458, ZOOL 403, 456.

 $^{5}$ To be selected from the following course sequences: either PHYS 207, 208, or 122, 221, 223.

NOTE: This curriculum provides a minimum of 22 open approved electives. Military science or aerospace studies may be elected if desired.

<sup>&</sup>lt;sup>1</sup>To be selected from the following: ENGL 202, 203, 204, 205, 206, 207, 208, 209. <sup>2</sup>MATH 108 is required for the Microbiology-Molecular Biology option. Microbiology majors may select from COMP SCI 205, EX ST 301, MATH 108, 301.

<sup>&</sup>lt;sup>3</sup>To be selected from EX ST 301, GEOL 101, MATH 108, or any course at the sophomore level or above the offered by the College of Sciences, excluding microbology.

<sup>4</sup>A minimum of 15 credits must be selected from the following courses: BOT 411,

#### MICROBIOLOGY - MOLECULAR BIOLOGY OPTION

See Microbiology curriculum for Freshman Year.

## SOPHOMORE YEAR

First Semester	Second Semester				
CH 223 Organic Chemistry 3 (3,0) CH 227 Organic Chem. Lab. 1 (0,3) MICRO 305 General Microbiolgy 4 (3,3) Mathematics Requirement 3 3 Literature Requirement 3 (3,0) Social Science ELECTIVE 3 17	BIOCH 301 Molecular Biology 3 (3,0) CH 224 Organic Chemistry 3 (3,0) CH 228 Organic Chem. Lab 1 (0,3) GEN 305 Intro. Mol. Gen. 4 (3,3) Literature Requirement 3 3 (3,0) Microbiology ELECTIVE 2 3 17				
JUNIOR YEAR					
ENGL 301 Public Speaking 3 (3,0) MICRO 401 Adv. Bacteriology 4 (2,6) MICRO 414 Basic Immunology 3 (2,3) Physics ELECTIVE 4 4-3 ELECTIVE 5 3-4	CH 330 Intro. to Phys. Chem. 3 (3,0)  or  PHYS 417 Intro. to Biophys. 3 (3,0)  MICRO 411 Path. Bacteriology 4 (3,3)  MICRO 412 Bacterial Physiology 4 (3,3)  Physics ELECTIVE 4  ELECTIVE 5  3 18				
SENIOR YEAR					
BIOCH 423 Prin. of Biochemistry 3 (3,0) MICRO 415 Microbial Genetics 4 (3,3) MICRO 416 Intro. Virology 3 (3,0) Social Science ELECTIVE 3 ELECTIVE 5 3 16	BIOCH 424 Prin. of Biochemistry 3 (3,0) MICRO 491 Special Problems 2 (0,6) Social Science ELECTICE 3 ELECTIVE 8				
TOTAL S	EMESTER HOURS = 134				

 $<sup>^{1}</sup>$ To be selected from the following: ENGL 202, 203, 204, 205, 206, 207. 208, 209.

To be selected from the following courses: BOT 411, 413; MICRO 400, 403, 407, 410, 413; PL PA 456; PS 458; ZOOL 403, 456.

 $<sup>^{3}</sup>$ To be selected from COMP SC 205, EX ST 301, MATH 301.

<sup>&</sup>lt;sup>4</sup>To be selected from the following course sequences: Either PHYS 207, 208 or 122, 221, 223.

 $<sup>^{5}</sup>$ Should include one of the following courses: CH 313, 317, COMP SC 205, EX ST 30

NOTE: Recommended electives in addition to those listed above are BIOCH 425, 426, BIOE 401, MATH 206, PHYS 471, 473, ZOOL 459.

This option provides 17 semester hours of open approved electives. Military science or aerospace studies may be elected if desired.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

Vol. 18 No. 10

January 15, 1979

Carl Carle

JAN 1 - 107



# MID-YEAR COMMENCEMENT HELD FOR 579 GRADUATES

Clemson University President Robert C. Edwards said at mid-year commencement Dec. 21 that America's commitment to provide guarantee of access to higher education is no guarantee of excellence in higher education.

Edwards told 579 graduates that "one of our greatest achievements as a nation has resulted from applying the principle of access to the area of education."

He said this achievement resulted from the country's attention to "the need to redress social injustice" by "alleviating the injustices that fall upon a person who is born in poverty, or belongs to a minority, or who remains uneducated."

But he emphasized that the nation must be responsible not only for guaranteeing access to higher education, but also for guaranteeing the quality of higher education.

Edwards said: "Excellence in instruction and in library and laboratory facilities requires funding different from and other than the funds necessary to give a student access to this excellence. Financing access to a mediocre educational program is not what any of us want. And yet to avoid such a catastrophe all of us must be vigilant in our efforts to make sure that quality and excellence as well as access will be the characteristics of higher education in our nation."

Edwards told the graduates the quality of their education at Clemson was "dependent upon the fact that you had

access to it, but it also depended upon our ability to assure the quality of the program in which you were enrolled. It is our intention to do everything that we can to maintain and increase that excellence."

Edwards conferred 579 degrees, including 175 masters and 14 Ph.D.'s. Clemson also awarded its 40,000th degree and its first Ph.D. in engineering management to a woman, Evelyn Ann Thomchick of Virginia Beach, Va.

## FACULTY CLUB TO ELECT BOARD OF GOVERNORS

The newly-formed Clemson University Faculty Club will hold a 12 noon meeting Friday, Jan. 19 in the Clemson House to elect its board of 8 governors. The board of governors will be responsible for planning day-to-day operations as well as future expansion.

All interested faculty and university staff are invited to attend the meeting, but only those having paid their annual dues can vote or make nominations. The meeting will be held in the Clemson Room and lunch will be available.

Anyone wishing to join the Faculty Club can pay the annual dues at the Development Office in Sikes Hall.

# NOMINATIONS FOR ALGERNON SYDNEY SULLIVAN AWARD INVITED

The Scholarships and Awards Committee invites all faculty and staff members to submit nominations for the non-student recipient of this year's Sullivan Award, which will be presented on Honors and Awards Day, April 11, 1979.

The Algernon Sydney Sullivan medallion is a valuable and artistic memorial established by the Southern Society of New York in honor of its first president. It is awarded each year by the University to two members of the graduating class and to one other person who has some interest in, association with, or relation to the institution, official or otherwise, of a nature as to make this form of recognition appropriate. The recipients of this award shall be chosen in recognition of their influence for good, their excellence in maintaining high ideals of living, their spiritual qualities, and their generous and disinterested service to others.

Nominations should be sent to Corinne Sawyer, 416 Strode Tower, by Monday, Feb. 12, 1979.

Non-student recipients of the Sullivan Award for the past ten years have been: 1969 - Inez Watson; 1970 - George Hubert Aull; 1971 - Gaston Gage; 1972 - Gertrude Bailey; 1973 - Josephine Stribling Lazar; 1974 - Everett Laitala; 1975 - Kenneth Notley Vickery; 1976 - Lehman M. Bauknight, Jr.; 1977 - Robert M. Jones; 1978 - Robert Cook Edwards.

# AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

G. J. Wells (Asst Prof) and Paul R. Johnson (North Carolina State Univ) presented a paper, "The Impact on Wheat Import Patterns from the Entrance of the United Kingdom into the European Economic Community," at the 48th annual conference of the Southern Economic Association in Washington, DC.

Departmental CRD specialist faculty, E. D. Wynn (Assoc Prof), M. L. Wise (Asst Prof), R. S. Pomeroy (Vstg Instr), L. H. Langley (Instr) and A. L. Padgett (Asst Prof) coordinated and participated in a joint meeting between the Lower Savannah Region to discuss programs of both agencies and areas of possible cooperation and coordination to serve residents of the region.

#### AGRICULTURAL ENGINEERING

Darrell L. Roberts (Assoc Prof) and Richard A. Spray (Assoc Prof) participated in a workshop on "Causes and Prevention of Grain Elevator Fires and Explosions" at Texas A&M University in mid-November.

Papers presented at the Winter Meeting of the American Society of Agricultural Engineers in Chicago, IL, Dec. 19-21 were:

"Orchard Fruit Handling System" by C. E. Hood (Prof), C. M. McHugh (Assoc Prof, Emer Engr Graphics), E. T. Sims Jr. (Prof, Hort), T. R. Garrett (Instr) and R. E. Williamson (Assoc Prof).

"Microprocessor-Based Data Acquisition and Control Hardware for the SPAR System" by J. L. Dunlap (Instr Spec), J. M. McKinion (USDA-SEA-AR, MS), J. E. Parsons (USDA-SEA-AR, SC), C. J. Rhene (USDA-SEA-AR, CA), J. R. Lambert (Prof) and D. N. Baker (USDA-SEA-AR, MS).

"Insulation Analysis for Home Energy Reduction" by R. A. Spray (Assoc Prof), F. H. Hedden (Assoc Prof) and H. A. Hughes (VPI and SU).

"Effect of Family Water Use Scheduling on Solar Water Heater Performance" by D. K. Gupta (Grad Stu), W. H. Allen (Assoc Prof) and J. O. Newman (USDA-SEA-AR, SC).

Prof. Lambert also participated in a short course, "Introduction to Microcomputer Interfacing," sponsored by ASAE Dec. 17. Prof. Lambert co-authored the instruction manual for the short course with Edward W. Page III (Assoc Prof, ECE).

#### AGRONOMY AND SOILS

The following Agronomy staff members presented papers at the 70th Annual Meeting of the American Society of Agronomy held Dec. 3-8 in Chicago:

Ahamed Hegab (Res Assoc) presented

"Nitrogen Transformations and Movement through Lakeland Sand following Application of Liquid Dairy Waste." Co-authors were V. L. Quisenberry (Assoc Prof), J. S. Rice (Assoc Prof) and R. O. Hegg (Assoc Prof, Ag Engr).

Prof. Rice presented "Variation among Several Forage Grasses for Plant Water Characteristics." Co-authors were E. A. Moore (Grad Stu) and Prof. Quisenberry.

Prof. Quisenberry presented "Soil-Water Extraction by Soybeans under Different Row Spacings." Co-authors were J. H. Palmer (Assoc Prof) and G. E. Miles (Asst Prof, Ag Engr). Prof. Quisenberry also chaired a session in the Environmental Quality Section entitled "Land Application of Waste and Waste Waters."

Prof. Palmer presented "Showdown '78 - A Unique Approach to Crop Production Meetings through Extension-Agribusiness Cooperation."

- H. L. Musen (Prof) presented "Response of Soybeans to Deep Tillage Methods as Affected by Profile Characteristics." Co-authors were Prof. Quisenberry and R. W. Weathers (Ag Sci Assoc).
- U. S. Jones (Prof) presented "Atmospheric Deposition of Sulfur as Related to Soil Fertility in South Carolina." Co-authors were M. G. Hamilton (Assoc Prof, Hort) and J. B. Pitner (Supt and Prof).

James D. Maxwell (Assoc Prof) presented "Response of Soybean Cultivars to Inoculation with Rhizobia Strains." Co-author was H. D. Skipper (Assoc Prof).

M. L. Garland (Grad Stu) presented "Breeding for Resistance to Peanut Root-Knot Nematode in Soybeans." Co-author was Prof. Maxwell.

#### CHEMICAL ENGINEERING

S. S. Melsheimer (Assoc Prof) attended the ASME Winter Annual Meeting in San Francisco, CA, Dec. 10-15, and presented a paper, "Heat Transfer and Calorimetric Studies of a Direct Contact-Latent Heat Energy Storage System." The paper was co-authored by D. D. Edie (Assoc Prof) and V. A. Costello (former Grad Stu).

#### CHEMISTRY

R. A. Abramovitch (Prof and Hd) presented an invited lecture in the Department of Chemistry at Texas A&M University
Nov. 27. He spoke on the topic of
"Pyridine N-Oxides." On Nov. 29 he presented a seminar at the University of Texas in Austin on the topic of
"Novel Heteroaromatic Rearrangements."
On Dec. 1 he participated in the Sulfur Symposium in connection with the Southwest Regional Meeting of the American Chemical Society in Corpus Christi. He gave a plenary lecture on the topic of
"1,2-Benzisothiazoles 1,1-Dioxides and Related Compounds."

Prof. Abramovitch presented a seminar on "Electron Deficient Reactive Intermediates" at the University of North Carolina in Charlotte Oct. 25.

Prof. Abramovitch and his research group attended the Southeast Regional Meeting of the American Chemical Society in Savannah, GA, Nov. 8-10, at which they presented the following papers:

Prof. Abramovitch, M. Inbasekaran (Ohio State) and V. Sanjivamurthy (Res Assoc) - "The Direct Amination of Aromatic Compounds."

Prof. Abramovitch, A. Miller (Vstg Instr), T. Radzikowska (Poland) and P. Tomasik (Poland) - "A Remarkably Facile [3,5]-Shift of 1-Aryloxy-1, 2-dihydropyridines. A Convenient Synthesis of 3-o-Hydroxy-pyridines."

Prof. Abramovitch and D. Abramovitch (Grad Stu) - "Side Chain Amination of Heteroaromatic Compounds."

J. W. Huffman (Prof) presented a paper, "The Synthesis of (±)-Cacalol at the 30th Southeastern Regional meeting of the American Chemical Society, Savannah, GA, Nov. 8-10.

Prof. Huffman, W. E. Swain (Grad Stu) and J. Jacobus (Tulane Univ), presented a paper, "The Conformation of Epi- $\alpha$ -cyperone" at the 30th Southeastern Regional meeting of the American Chemical Society, Savannah, GA, Nov. 8-10.

The Student Affiliate Chapter of the American Chemical Society has been selected as one of the commendable chapters in the nation. Out of a total of 710 chapters only 58 were considered to be commendable for the 1977-78 academic year. C. B. Bishop (Assoc Prof) is the faculty advisor to the chapter.

H. G. Spencer (Prof) presented a lecture on "Fundamentals and Applications of Hyperfiltration" before the faculty and students of the Department of Chemistry, The Citadel, Nov. 30.

J. L. Gaddis (Prof, Mech Engr) and Prof. Spencer presented papers at the USEPA sponsored Symposium on Textile Industry Technology, Williamsburg, VA, Dec. 5-8 entitled "Hyperfiltration of Non-Electrolytes: Dependence of Rejection on Solubility Parameters" and "Separation of Toxic Substances by Hyperfiltration."

Keith McDowell (Assoc Prof) has published a paper, "The Incomplete Basis Set Problem. II. Perturbative Corrections to Coupled Perturbed Hartree-Fock Theory," in <a href="The Journal of Chemical Physics">The Journal of Chemical Physics</a>, vol. 69, page 5050.

#### CIVIL ENGINEERING

Ben L. Sill (Assoc Prof) has had a paper, "A Model for Prediction of Evaporative Heat Flux in Large Bodies of Water," accepted for presentation at the Second Waste Heat Management and Utilization Conference in Miami, Dec. 4-6, and post printed in the Proceedings. The paper was co-authored with Dr. Albert Mitry, Duke Power Company.

Subhash C. Anand (Prof), J. L. Linder (Grad Stu, DIS) and David D. Moyle (Assoc Prof, DIS) are co-authors of a paper, "Stress Analysis of Hip Prostheses,"

which was presented by Prof. Moyle at the 31st Annual Conference on Engineering in Medicine and Biology in Atlanta, GA, Oct. 21-25.

#### OFFICE OF THE DEAN OF THE UNIVERSITY

An Ad Hoc Committee has been appointed by Dean Victor Hurst to study the Proposed Revised Constitution and By-Laws of the Clemson University Faculty and Faculty Senate. The Ad Hoc Committee will be chaired by Dean H. M. Cox, and the other members are Dean S. R. Chapman, Dr. T. M. Keinath, Dr. J. M. Shively, Dr. R. L. Cottle, Dr. E. J. Kozma, and Dr. W. F. Steirer. The report of this Committee will be made to Dean Hurst not later than March 1, 1979.

#### ELEMENTARY AND SECONDARY EDUCATION

William Pennscott (Prof) made a presentation, "Developing Effective Consulting Skills," to the Pickens County Chapter of the Council for Exceptional Children at the Pickens County School District Office.

#### ENGINEERING TECHNOLOGY

Carl R. Lindenmeyer (Assoc Prof) gave a seminar to the Agricultural Engineering faculty and graduate students Nov. 28 entitled "Creative Problem Solving-Process and Evaluation."

Prof. Lindenmeyer is the recipient of a \$19,709 grant from the Community Service and Continuing Education Program, South Carolina Commission on Higher Education. The grant, which will be effective through Sept. 30, 1979, is to support a project entitled "In-Service Training Program Development and Implementation for Hospital Cost Containment."

Prof. Lidenmeyer presented a paper Nov. 16 to the Greenville-Spartanburg Chapter of the American Institute of Industrial Engineers (AIIE) entitled "Computer Applications in Industrial Engineering." He is president-elect of the Greenville-Spartanburg Chapter of the AIIE.

#### **ENGLISH**

Sterling Eisiminger (Asst Prof) read selections from his poetry and prose at the Anderson County Library, a program sponsored by the National Endowment for the Humanities and the S. C. Committee for the Humanities, Nov. 28.

Roger Rollin (Lemon Prof) published "In the Family: Television's Re-Formulation of Comedy" in <a href="The Psychocultural Review">The Psychocultural Review</a>, 2 (Fall 1978), 275-286.

#### ENTOMOLOGY AND ECONOMIC ZOOLOGY

A paper entitled "Investigations on the Immune Response of <u>Heliothis virescens</u> Infected with <u>Vairimorpha necatrix</u>" by J. A. Jordan (Asst Prof) and R. Noblet (Assoc Prof) was published in the <u>Journal of the Georgia Entomological Society</u>.

A paper entitled "An Annotated List of the Simuliidae (Diptera) of South Carolina" by Prof. Noblet was published in the <u>Journal of the Georgia Entomologi-</u> cal <u>Society</u>.

A paper entitled "Toxicological Studies with Mirex in Bobwhite Quail" by R. J. Kendall (former Grad Res Asst), Prof. Noblet, and J. R. Holman (former Asst Prof, Expt Stat) was published in Poultry Science.

A paper entitled "Susceptibility of Selected Insect Pests to Two Species of Microsporidan Pathogens, Nosema heliothidis and Vairimorpha necatrix" by Prof. Jordan and Prof. Noblet was published as a S. C. Agricultural Experiment Station Technical Bulletin No. 1069.

A paper entitled "Conditioning as Related to Food Preference Behavior in Adult Bobwhite Quail" by R. J. Kendall, Prof. Noblet, and D. L. Robinette (Assoc Prof) was published as a S. C. Agricultural Experiment Station Technical Bulletin No. 1070.

S. B. Hays (Prof & Hd) was the guest speaker at the Greenville Exchange Club's

Fall Harvest Festival Oct. 26. The subject of the presentation was "The Fascinating World of Insects."

On Nov. 2, Prof. Hays attended the S. C. Mosquito Control Association annual meeting in Greenville and presented an invitational presentation entitled "The Imported Fire Ant, Its History, Biology, Behavior, and Probable Future in S. C."

Ernie Wiggers (Grad Stu), along with Prof. Robinette, J. R. Sweeney (Asst Prof), R. F. Harlow (U.S. Forest Service) and Hoke S. Hill (Instr, Expt Stat), presented a paper, "Predictability of Deer Forage Using Overstory Measurements," at the 32nd Annual Conference of the Southeastern Association of Fish and Wildlife Agencies held in Hot Springs, VA, Nov. 5-8.

A paper entitled "An Apparatus for Field Sampling of Pine Aphids on 10-15-Yr-Old Loblolly Pines" by W. M. Hood (former Grad Res Asst) and R. C. Fox (Prof) was published in the Journal of the Georgia Entomological Society in October.

- A. G. Eversole (Assoc Prof) published a paper, "Life Cycles, Growth and Population Bioenergetics in the Snail Helisoma trivolvis (Say)," in the Journal of Molluscan Studies.
- T. E. Skelton (Prof) attended and participated in the annual Cumberland-Shenandoah Fruit Workers Conference at Gettysburg, PA, Nov. 15-17.
- Prof. Hays attended and participated in the ESA Governing Board Meeting, ESA Department Heads Meeting and National ESA meetings held in Houston, TX, Nov. 24-30.
- S. G. Turnipseed (Prof) attended the national ESA meetings held in Houston and met with others to develop an IPM grant proposal.
- G. R. Carner (Prof) and Prof. Turnipseed attended and participated in the planning session meeting for the soybean pest management project held in Atlanta, GA, Nov. 15-17.

Thomas M. Brown (Asst Prof) attended the national ESA meeting held in Houston and consulted with other scientists concerning insecticide resistance Nov. 26-30.

Prof. Skelton was moderator of a work-shop, "Use of Insects in the Teaching of High School Biology," at the annual meeting of the ESA in Houston, TX, Nov. 26-30.

J. C. Morse (Assoc Prof) attended the annual meeting of the ESA held in Houston Nov. 26-30 and presented an invited paper, "Techniques Used in Teaching Aquatic Insect Taxonomy in North American Universities," as part of a special symposium on Innovative Teaching Techniques in Aquatic Entomology.

#### FOOD SCIENCE

Robert G. Bursey(Assoc Prof), J. C. Acton (Assoc Prof), W. L. Jenkins (Grad Asst), S.H.H. Rizvi (Asst Prof), and W. P. Williams (Prof and Hd) presented a two-day workshop, "Nutrition Update," for S. C. School Food Service Supervisors in Columbia, Oct. 26-27.

Prof. Bursey presented a one-day work-shop, "Nutritional Care of the Institutionalized Elderly Patient," at Crafts-Farrow State Hospital in Columbia, Nov. 15, for physicians, nurses, mental health specialists and food service personnel in private and publicly funded healthcare facilities for the elderly.

Recent publications include:

"Phytosterol Biosynthesis in Ripening Tomatoes" by Joseph J. Jen (Assoc Prof) and Edward T.S. Chow (former Grad Res Asst), J. Food Science 43: 1424-1426 (1978).

"Peroxidase and Polyphenol Oxidase Activities in Developing Peaches" by Prof. Jen and William H. Flurkey (Grad Res Asst), J. Food Science 43: 1826-1831 (1978).

"Separation of Soybean Lipoxygenose and Peroxidase by Hydrophobic Chromatography"

by Prof. Jen, W. H. Flurkey and L. W. Young (former Res Tech), J. Agric Food Chemistry 26: 1474-1476 (1978).

Prof. Jen presented a paper, "Osmovac Dehydration Process," at the Modern Engineering and Technology Seminar in Taipie, Taiwan, July 2-23. It has been translated into Chinese by C. Y. Wang and published in Food Industries Monthly, Volume 10, No. 10, pp. 17-19.

Charles V. Morr (Stender Prof) presented a lecture on "Technical Problems and Opportunities for Using Vegetable Proteins in Dairy Products" at the World Conference on Vegetable Food Proteins, Amsterdam, the Netherlands, Oct. 29-Nov. 3.

#### HISTORY

John W. Johnson (Asst Prof) published an article, "Retreat from the Common Law?: The Grudging Acceptance of Legislative History by American Appellate Courts in the Early Twentieth Century," in The Detroit College of Law Review, 3 (Winter 1978), 413-431.

Prof. Johnson has been named to the Program Committee of the American Society for Legal History.

Richard M. Golden (Asst Prof) published an article, "The Mentality of Opposition: The Jansenism of the Parisian Curés During the Religious Fronde," The Catholic Historical Review LXIV (October, 1978), 565-580.

Joseph L. Arbena (Assoc Prof) has published a review of Mario Rodriguez, The Cadiz Experiment in Central America, 1808-1826 (Univ of California Press, 1978) in History: Reviews of New Books, 7:1 (October, 1978).

### **HORTICULTURE**

M. Le Ron Robbins (Assoc Prof) gave a talk on "Irrigation Research with Vegetable Crops" at the meeting of the South Carolina Irrigation Society in Columbia, Nov. 2.

Prof. Robbins provided herbarium specimens of tea to Carolina Biological Supply Company. Each specimen distributed will carry a credit line to Clemson University.

#### INDUSTRIAL EDUCATION

At a recent conference of the Association for Educational Communications and Technology of South Carolina (AECT) held in Columbia, introduction to the Graphic Communications Education Program was conducted by J. Page Crouch (Prof) by way of a multi-media presentation as well as a discussion on the uses of the slides, tapes and hands-on-aspects of the curriculum. Prof. Crouch explained the joint effort between The Printing Industry of the Carolinas (PICA), the South Carolina Department of Vocational Education and Clemson University in the development of the program. This comprehensive curriculum describing the graphic arts industry and its careers is a teaching tool that provides students with skills needed for employment.

Prof. Crouch presented three programs at the Dallas AVA Convention to industrial arts and trade and industrial teachers from across the United States emphasizing the exploratory phases of career education.

#### LANGUAGES

Margit M. Sinka (Asst Prof, German) participated in a colloquium on applying insights gained from Fulbright Summer Seminars on German Culture at the 1978 American Association of German Teachers Convention Nov. 24 in Chicago.

Gaston J. Fernandez (Prof, Spanish) was elected secretary of Spanish II at the 48th Annual Meeting of the South Atlantic Modern Language Association held in Atlanta Nov. 10.

Prof. Fernandez, as secretary-treasurer of the Mountain Interstate Foreign Language Conference, presented a talk on the expansion and achievement of the MIFLC to the members of the American Association of Teachers of Spanish and

Portuguese during its continental breakfast meeting.

## MATHEMATICAL SCIENCES

J. V. Brawley (Prof) served as a member of the NASDTEC (National Association of State Directors of Teacher Education and Certification) Evaluation Committee which examined the Bob Jones University programs in teacher education Dec. 6-7.

P. M. Dearing (Assoc Prof) and J. P. Jarvis (Asst Prof) published "A Location Model with Queueing Constraints" in Computers and Operations Research, Vol. 5, pp. 273-277.

John Kenelly (Prof) conducted a workshop in Waynesville, NC, Dec. 11, for the advanced placement teachers in Haywood County. During the visit he gave a talk to the advanced placement mathematics students in the county.

Prof. Kenelly has authored a 42-page booklet, "Grading the Advanced Placement Examination in Mathematics - 1977-78," for the College Board. The booklet will receive extensive national distribution in the advanced placement program.

John K. Luedeman(Assoc Prof) has lectured and participated in conferences in Germany as follows: Dec. 12 he gave a colloquium talk, "Models and Mimics," to the Medical School at the University of Hannover in Hannover, Germany; Dec. 13 he gave a colloquium at Math. Institute, Clausthal-Zellerfield entitled "The Ring of Quotients of R(S)"; and Dec. 14-21 he was an invited participant in a conference on Semigroups at Oberwolfach, West Germany.

#### MUSIC

Martha Hamilton (Vstg Instr) and Lillian Harder (Instr) gave a recital of music for flute and piano at Magill Hall in Greenville Nov. 19.

#### NURSING

Judith J. Chodil (Assoc Prof and Dir Continuing Education) presented a colloquium Nov. 30 at the University of Connecticut entitled "Theoretical Nursing Research: An Example."

#### PLANT PEST REGULATORY SERVICE

Neil Ogg (Pesticide Coord) published an article, "Store Pesticides Properly—For Safety's Sake," in Golf Business Vol. 52, Nov. 12, 1978.

#### POLITICAL SCIENCE

Harold E. Albert (Prof) published an article, "Clair P. Guess: Conservationist," in <u>Sandlapper</u>, Oct. 1978. He also served as a reviewer of Faculty Development Grant Proposals for the U.S. Department of Energy, Oct. 1978.

Michael A. Morris (Asst Prof) published a review of Oscar Pinochet de la Barra,

Base Soberania y otros recuerdos antarticos chilenos, 1947-1949 (Editorial Francisco de Aguirre) in Hispanic American Historical Review (November 1978), 770-771.

A book in which Prof. Morris has an article, originally published in hard-cover in 1977, has just been issued in a paperback edition as well: "The New International Economic Order and the New Law of the Sea," The New International Economic Order: Confrontation or Cooperation between North and South? eds.,

Karl P. Sauvant and Hajo Hasenpflug (Boulder, Colorado: Westview Press),
174-188. Frederick A. Praeger, Publisher.

At the invitation of the Southern Educational Communications Association and the Foreign Policy Association, Prof.
Morris was interviewed Nov. 30 by WEPR Educational Radio Station. The interview was on "World Law of the Oceans: Narrowing Options for the U.S." and will be broadcast nationally over National Public Radio as one of eight parts of the Foreign Policy Association's annual series, Great Decisions.

Martin Slann (Assoc Prof) published "Political Implications of the National Literature of Israel," in Reconstructionist, XLIV, No. 7 (November 1978) 13-21.

#### PROFESSIONAL DEVELOPMENT

John J. Porter (Prof, Tex) will chair a conference, "Textile Wastewater Treatment and Air Pollution Control," to be held at Hilton Head Island Jan. 24-26.

Robert W. Rouse (Assoc Prof, Acct and Fin) is chairperson for a seminar, "How to Perform an Operations Audit," to be held Jan. 29-31 in Greenville.

Carl Gooding (Assoc Prof, IM) will chair a seminar, "Improved Planning and Control through CPM/PERT," to be held Jan. 31-Feb. 1 at Clemson University.

J. Michael McDonald (Asst Prof, IM) is chairperson for a course, "Effective Time Management for Today's Secretary," to be held Feb. 5-6 on campus.

Hassan Behery (Assoc Prof, Tex) and Ernest B. Berry (Assoc Prof, Tex) will co-chair a workshop, "Technical Workshop on Shuttleless Looms," to be held Feb. 6-8 in Charlotte, NC, Greenville and Spartanburg.

Prof. McDonald will chair an on-campus seminar, "Effective Time Management by the Executive," Feb. 7-8.

Frederick T. Simon (Prof, Tex) will chair a conference, "Color Sorting with Instrumentation," Feb. 7-8 here.

Claude S. Simpson (Instr, IM) will chair a seminar, "Effective Management for Middle Managers," to be held here Feb. 12-13.

Prof. Porter and Fred L. Cook (Prof, Tex, Georgia Tech) will co-chair a conference, "Energy Conservation in the Textile Industry," to be held Feb. 13-14 at the Peachtree Plaza in Atlanta, GA.

Instr. Simpson is chairperson for a seminar, "Positive Discipline," which will be held here Feb. 14.

Prof. Gooding will chair a two-day seminar, "Results Oriented Maintenance Management," to be held on campus Feb. 15-16.

#### SOCIOLOGY

Christopher M. Sieverdes (Asst Prof) coauthored a paper, "A Multivariate Analysis of Reported and Unreported Female Delinquency," which was presented at the annual American Society of Criminology meeting Nov. 8-11 in Dallas, TX.

MINUTES OF THE HANDICAPPED STUDENT ADVISORY COMMITTEE MEETING, OCTOBER 5, 1978

The members of the Handicapped Student Advisory Committee are: Dr. George R. Von-Tungeln, Prof. Gordon W. Patterson, Dr. William O. Corder, Dr. Cecil O. Huey Jr., Prof. Ann E. James, Dr. Thomas N. Schaap, Dr. Carol Furry, Prof. Mary G. Robinson, Dr. Ralph P. Ashworth, Mr. L. R. Wood, Dr. William F. Steirer, Mr. Bill Pace, and Dr. William H. Wells.

- 1. Dean Victor Hurst informally began the meeting by asking the individuals present to introduce themselves and to indicate their affiliation. Following this he introduced and gave the floor to Col. Tyndall. Col. Tyndall briefly explained the mission of the Handicapped Student Advisory Committee and Section 504 of the Department of Health, Education and Welfare.
- 2. Dean Hurst suggested a chairperson be elected. Dean Hurst and Col. Tyndall then left.
- 3. Bill Pace conducted the nomination for chairperson. Nominations were open, and Dr. George Von-Tungeln nominated Dr. William H. Wells. Prof. Ann James seconded the nomination. It was moved, seconded and the motion carried that nominations close.
- 4. Dr. Wells took the chair, and after a brief discussion the meeting was adjourned at 5 p.m.

Respectfully submitted,

William H. Wells

MINUTES OF THE HANDICAPPED STUDENT ADVISORY COMMITTEE MEETING, NOVEMBER 2, 1978

## 1. Call to Order

The meeting was called to order by Chairperson Wells at 3:40 p.m.

## 2. Approval of Minutes

Dr. Wells read the minutes of the last meeting, and they were approved unanimously.

- 3. The floor was opened for nominations for recording secretary. After discussion it was decided that a recording secretary would be appointed by the chairperson at each meeting and would be on a rotating basis.
- 4. Dr. Wells reported on his meeting with Dean Hurst. Dean Hurst had suggested the probability of workshops for handicapped students.
- 5. Dr. Wells reported on letter of Dennis Deering, a handicapped student who wishes to return to Clemson in the Forestry Department. President Edwards had replied to this request and the letters were passed around to committee members.
- 6. Dr. Wells reported and passed around information of grants available from the Appalachian Council of Governments.
- 7. Mr. Bill Pace requested a clarification of his role on committee and whether he was ex officio member.
- 8. Dr. Ashworth suggested that a meeting with handicapped students by this committee or selected committee members should be structured so that their problems could be recognized. Also discussed the possibility of handicapped students serving on this committee. A question of legality was raised and after discussion the question was tabled until this was resolved. Dr. Wells will speak to Admiral McDevitt to check on legal problems.

- 9. A list of handicapped students currently enrolled was passed around by Mr. Pace.
- 10. Dr. Ashworth handed out to committee members a Faculty Guide for Helping Handicapped Students from North Texas State University which he received from a meeting he recently attended.
- 11. Problems of interpreters and accessibility to information for handicapped was generally discussed.
- 12. Many suggestions on information on handicapped were suggested. A Clearing House for Handicapped Information has been established, and it was suggested that Dr. Wells contact them for this committee.
- 13. Dr. Wells reported that many agencies would put on a workshop if contacted. He suggested that we think more about this for next meeting. Mr. Bill Pace suggested that these people could be contacted and perhaps come in and tell us what information they had.
- 14. It was brought up that there are no procedures existing for the handicapped at Clemson University particularly in the case of dissension by students. After discussion on the role of this committee in establishing procedures and the charge of this committee, it was decided that a sub-committee be appointed to establish procedures that could be submitted to the administration to clarify the role of this committee.
- 15. Two sub-committees were appointed:
  Workshop Committee Prof. Ann E. James,
  Dr. Thomas N. Schaap and Dr. Carol
  Furry; Procedures Committee Dr. William
  F. Steirer, Dr. Ralph P. Ashworth,
  Dr. William O. Corder and Prof. Gordon W.
  Patterson. These committees will report
  at the next meeting. Time of next meeting: Thursday, Nov. 30 at 3:30 p.m. in
  Room 300, Sikes Hall.

The meeting was adjourned at 5:30 p.m.

Respectfully submitted,

Gordon W. Patterson

MINUTES OF THE UNIVERSITY LIBRARY COMMITTEE MEETING, NOVEMBER 13, 1978

Present: Ann W. Baxter (chairperson), Becky F. Campbell, Harold N. Cooledge Jr., John V. Hamby, Patricia K. Hill, Garry Haehnle, Mable H. Wynn, J.W. Gordon Gourlay (secretary). Guest - Mr. A. Darrell Hickman, assistant vice-president budget and systems.

- 1. Minutes of the October 10th meeting were approved.
- 2. Mr. Gourlay reviewed all categories of library expenditures for 1977-78, Instructions for Completing Budget Request/Allocation (CUBO-100) for fiscal year 1978-79, and the 1978-79 budget allocation. He noted that additional funds had been requested both for the operating budget and because of inflationary trends in the prices of books and journals.
- 3. Mr. A. Darrell Hickman spoke on library budgeting in context to total University budgeting and on Institutional Goals and Measures. Throughout his discussion he referred to the five-year program of Clemson University and the library program within the five-year plan.
- 4. On-Line Bibliographic Searching.
  Previous to the meeting, On-Line Bibliographic Searching (see attachment) had been distributed to members of the Committee. It will be on the agenda for discussion at the next committee meeting.
- J.W. Gordon Gourlay, Secretary University Library Committee

#### ATTACHMENT

On-Line Bibliographic Searching

What is On-Line Bibliographic Searching?

Through on-line bibliographic searching, the library can directly retrieve information from a large number of data bases in the following fields: agriculture, the biological sciences, business,

chemistry, education, engineering, the earth sciences, physics, psychology and the social sciences. It provides the requestor with relevant citations on current literature on topics of interest. This service is provided by the library through a terminal connected with Lockheed Information Systems. The library has access to 69 data files through Lockheed Information Service. Several new data files are added each month.

There are two types of searches offered: Searches on Demand and Current Awareness. To date the library has provided only Searches on Demand. With the Current Awareness search, the requestor prepares a search profile which can be run each time the data file is updated.

# The Present Policy and Use of the Service

The library was authorized to purchase the equipment and to offer the service to the University clientele. A procedure was set up with the accounting office for billing the various departments for the cost of the service. This cost includes only the cost of connect time, off-line prints and communication cost. This cost does not include any compensation for library personnel or for training programs. Although the actual search may take less than 30 minutes, the amount of time spent by the librarian preparing the search strategy and running the search is approximately two hours per search. Also, librarians must spend much time studying manuals and must attend workshops on the different data bases to become proficient in accessing search data base.

# <u>Use of the Service by Others</u>

We anticipate receiving or have received requests from:

- 1) Faculty and students not having account numbers and wanting to pay for the service personally.
- 2) Federal agencies located in the Clemson area.
- 3) Other non-profit institutions in the state (colleges, universities and state agencies).

4) Research personnel from business and industries (Profit-making organizations).

To date we have had requests from a student without an account number, the U. S. Wildlife Service, an engineering student at the University of South Carolina and a student at the Spartanburg campus of the University of South Carolina. The Clemson student made arrangements to reimburse her department, and the U. S. Wildlife Service made arrangements to have the search charged to a department on campus.

# Future Policy

The library needs an official policy as a guide for providing service to the groups mentioned above. After checking with several other libraries offering the same type of service, the library suggests the recommendations listed below.

# <u>Information from Other Libraries</u>

Mississippi State University offers the service to anyone requesting the service at the actual cost of connect time, off-line prints and communication cost.

North Carolina State University offers the service primarily to its own clientele. Occasionally, the library may make an exception. The service is available to non-North Carolina State University clientele through another state agency.

Auburn University is only offering the service to its own clientele. University of Alabama does not offer the service and is served by a university library in another state.

University of Florida offers the service to anyone who requests it but has a base formula for charging the non-campus community.

#### Our Recommendations

1) The service be offered to the entire University community on a trial basis.

Persons who wish to charge to an account number may with approval of department. Students delinquent in paying for searches will have his or her name placed on the registrar's list for clearance.

2) Since Clemson University is the only university library providing this complete service (several other universities or colleges are offering limited service through Bibliographic Retrieval Service) and since the University is a research and service area for the State, the library should offer this service to outside users.

For outside users, one and one half actual cost is recommended for non-profit organizations and two times actual cost for private commercial organizations.

The revenue received in addition to the actual cost could be used for professional development related to on-line bibliographic searching, e.g., initial training and up-date sessions, special conferences and for purchase of manuals, thesauri, etc. In the future, it may cover other overhead expenses such as service contracts and new equipment.

The library would absorb the cost for reference department personnel and clerical personnel involved in billing, etc.

The accounting part is only a recommendation. Final authorization for charges and billing procedures must come from the Business and Finance Office.

MINUTES OF THE COUNCIL OF ACADEMIC DEANS MEETING, NOVEMBER 21, 1978

The Council of Academic Deans met Nov. 21 in the Conference Room of Tillman Hall. Dean Hurst called the meeting to order at 9 a.m. with the following in attendance: Dean Anderson, Dean McClure, Dr. Kozma (for Dean Landrith), Dr. Gilliland (for Dean Wilcox), Dr. Allen (for Dean Box), Dean Efland (for Dean Trevillian), Dean Cox, Dean Labecki, Dean Vogel, Dean Green, and

Dr. Steirer.

The recommendations made by the Undergraduate and Graduate Councils at their Nov. 3 meetings relative to additions, deletions, and changes in courses and/or curricula, after a few minor changes, were approved.

Dean Morris Cox distributed a statement relative to a double major between the College of Liberal Arts and another college. He proposed that a statement be entered in the catalog that would allow a student to elect a double major across college lines. This would be by arrangement between the dean of the College of Liberal Arts and the dean of another college offering a Bachelor of Arts curriculum. This proposal was approved by the deans, and Dean Cox was asked by Dean Hurst to draft a catalog statement to this effect to go forward to the Educational Council.

The subject of a draft report on Advisory Committees for graduate students was brought up, and Dean Hurst recommended that any further discussions and/or action be delayed. The motion was made, seconded and passed to table this matter until a later meeting.

Dean Hurst informed the deans that Dec. 29 (Friday) had been declared a holiday.

Dean Hurst announced that the Educational Council will meet Dec. 4, 1978, and the next Council of Deans' meeting will be Dec. 18, 1978.

Upon inquiry from the deans, Dean Hurst stated that College Faculty Meetings may be held at any time prior to the General Faculty Meeting that the deans determine to be satisfactory for their college.

Dean Green distributed two items relative to Advanced Placement: "Leading AP Colleges in the South--1978" and "AP Exams: Per Capita National Rankings." Dean Green called attention to South Carolina's overall improvement over the past few years, and stated that he was pleased that Clemson is doing so well compared

to other schools.

The subject of "Withdrawal from Class Policy" was raised, and Dean Hurst stated that for the time being the policy that presently appears in the Clemson University Announcements 1978-79 will remain in effect.

Dr. Steirer reported on the progress of the Presidential Screening Committee, of which he is a member. He stated that his committee is ready to turn over the names of 10 persons to the Presidential Selection Committee, whose mission will be to reduce the list of 10 names to not less than four by the end of January. Dr. Steirer stated that he is also a

member of the Selection Committee, and it will hold its first meeting Dec. 1. Dr. Steirer said that he was very pleased with the way the screening process has proceeded and was impressed with the quality of the candidates. The deans asked to go on record informing Dr. Steirer of this group's interest in the ongoing selection process, and asking that all of the academic deans be given the opportunity to meet in their respective offices with the final candidates.

The meeting was adjourned at 10:10 a.m.

Respectfully submitted,

Annette H. Kesler

# Calendar of Campus Events

- 15,18 -- Short Course: "Introduction to the Computer Center." Sponsored by Academic 22,23 Computing Support, M2 Martin Hall. (15) 9:05 a.m., (18) 3:35 p.m., (25) 6:30 p.m., (23) 9:05 a.m., (25) 1:25 p.m. Open to all interested persons. Call 656-3466 to register or obtain more information.
- 15-29 -- Art Exhibition: "S.E.C.C.A. Award Winners." Award winning paintings, sculpture, drawings, prints and photographs. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
- 15-29 -- Art Exhibition: "Paris Review Posters." Series of silk-screened and lithographed posters commissioned by The Paris Review. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
  - 15 -- Fingerpainting Day. Sponsored by University Union, loggia, noon 4 p.m. Open to students, faculty, staff and guests, no admission charge.
- 15-17 -- Movie: "The End." Sponsored by University Union, YMCA Theater, 7 and 9 p.m. Regular admission charge with University I.D.
- 15-20 -- Union Recruitment Week. Call 656-2461 for details.
- 15-21 -- Videotape: Martin Luther King "Legacy of a Dream." Sponsored by University Union, loggia, shown several times daily. Open to students, faculty, staff and guests.
- 15-27 -- Art Exhibition: "Clemson University Photo Exhibit" by Fred Toumlin.

  Sponsored by University Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.

#### CALENDAR OF CAMPUS EVENTS (Cont.)

- 15-4/23 -- Second Semester Fraternity Open Rush.
  - 16 -- Concert: Sarah Harvie, soprano. Sponsored by Department of Music Chamber Music Series, Daniel Auditorium, 8 p.m. Open to the public, no admission charge.
  - 16 -- Open House, Union Program Office. Sponsored by University Union, loggia, 10 a.m.-6 p.m. Open to students, faculty, staff and guests, no admission charge.
  - 16 -- Deadline to sign up for College Bowl. Sponsored by University Union, call 656-2461 for more information.
  - 17 -- Basketball: Wake Forest University (Women), here, 6:45 p.m.
  - 17 -- Basketball: Maryland (Men), here, 9 p.m.
  - 17-18 -- Seminar: "Farm Credit Seminar." Designed to promote a better understanding of current agricultural situations among directors and officers of the Farm Credit system. Sponsored by College of Agricultural Sciences, Clemson House, noon Jan. 17-noon Jan. 18. Open to all who are interested in agricultural financing. Call 656-3015 for more information.
  - 17-19 -- College Bowl Competition. Sponsored by University Union, Senate Chambers. Call 656-2461 for more information.
  - 18-20 -- Movie: "Blazing Saddles." Sponsored by University Union, YMCA Theater, 7 and 9 p.m. Regular admission charge with University I.D.
    - 18 -- Basketball: N.C. State (Women), here, 7:30 p.m.
    - 18 -- Seminar: William A. Bours III, vice president of the Fabrics and Finishes division of DuPont. Sponsored by Distinguished Chemical Business Industry Seminar Series, 131 Brackett Hall, 7:30 p.m. Open to the public, no admission charge.
    - 18 -- Dinner Theatre: Buffet and musical, Mark Twain's "Diary of Adam and Eve." Sponsored by University Union, Edgar's, 6-9 p.m. Open to University I.D. holders and their guests. Tickets are \$5 per person and are available at the University Union Program Office Monday-Friday, 9 a.m.-5 p.m. Advance sale only.
    - 19 -- Concert: Budapest Symphony Orchestra, conducted by Gyorgy Lehal.

      Sponsored by Clemson University Concert Series, Littlejohn Coliseum, 8 p.m.

      Open to the public, admission by season ticket, student use card or individual tickets on sale at Gate 5.
  - 19-20 -- Live Entertainment in Edgar's: Sims and Pollock. Sponsored by University Union, Edgar's, 9 p.m. University I.D. and proof of age required, 50¢ admission charge.
  - 19-20 -- Gutter Coffeehouse re-opens with live entertainment by Allan Damron.

    Sponsored by University Union, Gutter, located in basement of YMCA, 9 p.m.

    University I.D. required, 50¢ donation requested.

# CALENDAR OF CAMPUS EVENTS (Cont.)

- 20 -- Concert: Boston. Sponsored by University Union, Littlejohn Coliseum, 8 p.m. Open to the public. Call 656-2461 for ticket prices and information.
- 20 -- Basketball on Big Screen TV. Sponsored by University Union, Edgar's, 1 p.m. University I.D. and proof of age required, no admission charge.
- 20 -- ACU-I Chess Tournament. Sponsored by University Union. Details and sign up at Union Information Desk.
- 20 -- Budweiser Supersports Competition. Sponsored by University Union. Details and sign up at Union Information Desk.
- 20-21 -- Cross Country Skiing Trip. Sponsored by University Union. Details and sign up at Union Information Desk by Jan. 19.
  - 21 -- Free Flick: "Car Wash." Sponsored by University Union, YMCA Theater, 8 p.m. Free with University I.D.
  - 22 -- Spanish Film: "Summerskin." Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
  - 22 -- ACU-I Table Tennis and Bridge Tournaments. Sponsored by University Union.

    Details and sign up at Union Information Desk.
- 22-24 -- Movie: "Return of the Pink Panther." Sponsored by University Union, YMCA Theater, 7 and 9 p.m. Regular admission charge with University I.D.
- 22-25 -- College Bowl Competition. Sponsored by University Union, Senate Chambers. Call 656-2461 for more information.
- 22-28 -- Videotape: "Man Who Skied Down Mt. Everest." Sponsored by University Union, loggia, shown several times daily. Open to students, faculty, staff and guests.
  - 23 -- ACU-I Billiards Tournament. Sponsored by University Union. Details and sign up at Union Information Desk.
- 23,24 -- Short Course: "Introduction to Interactive Computing (TSO)" Parts I and
  29 II. Sponsored by Academic Computing Support, M2 Martin Hall. (23,24) Part
- 30,2/1 I Jan. 23, Part II Jan. 24, 3:35 p.m., (29) Parts I and II, 6:30-8:30 p.m.,
- 30,31 (30,2/1) Part I Jan. 30, Part II Feb. 1, 9:05 a.m., (30,31) Part I Jan. 30, Part II Jan. 31, 3:35 p.m. Open to all interested persons. Call 656-3466 for more information or to register.
  - 24 -- English Hour Reading: A poetry reading by Dr. Robert W. Hill. Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
  - 24 -- Lecture: Jim Rice, star outfielder for the Boston Red Sox and the American League's Most Valuable Player. Sponsored by Speakers Bureau, Tillman Auditorium, 8 p.m. Open to the public, no admission charge.
  - 24 -- ACU-I Backgammon Tournament. Sponsored by University Union. Details and sign up at Union Information Desk.

# CALENDAR OF CAMPUS FVENTS (Cont.)

- 24 -- Basketball on Big Screen TV: Clemson vs. Furman. Sponsored by University Union, Edgar's. University I.D. and proof of age required, no admission charge.
- 25 -- ACU-I Foosball Tournament. Sponsored by University Union. Details and sign up at Union Information Desk.
- 25-27 -- Movie: "Pink Panther Strikes Again." Sponsored by University Union, YMCA Theater, 7 and 9 p.m. Regular admission charge with University I.D.
  - 26 -- Trip to Atlanta for Atlanta vs. Toronto Hockey Game. Sponsored by University Union. Details and sign up at Union Information Desk.
- 26-27 -- Live Entertainment in Edgar's: Andy Whalberg. Sponsored by University Union, Edgar's, 9 p.m. University I.D. and proof of age required, 50¢ admission charge.
  - 27 -- Basketball: University of North Carolina (Women), here, 5:15 p.m.
  - 27 -- Basketball: University of North Carolina (Men), here, 7:30 p.m.
  - 28 -- Free Flick: "Sunshine Boys." Sponsored by University Union, YMCA Theater, 8 p.m. Free with University I.D.
  - 28 -- Snow Photography Trip. Sponsored by University Union. Details and sign up at Union Information Desk by Jan. 26.
- 29-2/2 -- Room Change Period. Students desiring to change room should submit an applicatiom to the Housing Office in Mell Hall between 8 a.m. and 4:30 p.m.
  - 29-31 -- Movie: "One on One." Sponsored by University Union, YMCA Theater, 7 and 9 p.m. Regular admission charge with University I.D.
- 29-2/4 -- Videotape: "Superman Cartoons." Sponsored by University Union, loggia, shown several times daily. Open to students, faculty, staff and guests.
- 29-2/4 -- Art Exhibition: "Paul Cook Photo Exhibit." Sponsored by University Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
  - 30 -- Basketball: South Carolina State (Women), here, 6:45 p.m.
  - 30 -- Basketball: N.C. State (Men), here, 9 p.m.
  - 30 -- Basketball on Big Screen TV: Clemson vs. N.C. State. Sponsored by University Union, Edgar's. Proof of age and University I.D. required, no admission charge.
  - 31 -- French Play. Sponsored by Language Department, Daniel Auditorium, 8 p.m. Open to the public, no admission charge.
  - 31 -- Workshop: "Human Relations and Communication Workshop for Office Personnel."
    An opportunity for staff members to enhance and/or modify their behaviors in the direction of better communication, mutual respect, and an increased awareness of consumer problems. Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

Vol. 18 No. 11

February 1, 1979



FEB 1 1979

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

# "CLEMSON UNIVERSITY NEWS" TO BE PUBLISHED IN FEBRUARY

A new University newspaper will begin publication in February as an additional step toward revamping Clemson's official on-campus and off-campus communications programs.

"Clemson University News," to be published six times yearly by the Department of University Relations, will have a circulation of approximately 45,000. It will be distributed to faculty and staff, alumni, parents, and selected businesses and industries. It will also be made available to students at strategic locations on campus.

In a coordinated move, "Clemson World," published by the Department of Alumni Relations, has dropped its tabloid issues and is now published as a quarterly magazine emphasizing in-depth features and analysis pieces. The first issue of "Clemson World" under its new format was published last month.

The planning document for "Clemson University News" includes as its statement of purpose: "To report Clemson's activities to the total University community through news, features and informative articles which focus on its goals and objectives as a people-oriented institution dedicated to education, research and public service."

In addition to news coverage of University events, the newspaper will present regular consumer advice articles, a "Forum" section for commentary and letters, continuing education opportunities, personality profiles, some solicited

articles, reviews and a calendar of campus events.

The general editorial policy of the publication stipulates that professional public relations and news judgment will be exercised in determining all content of "Clemson University News." Copies of the full policy and guidelines are available from the Department of University Relations.

"Clemson University News" represents
Phase 1 of a new communications program
for the University. Phase 2 begins in
August with a new format for the "Clemson
Newsletter" published for faculty and
staff.

The basic goal of this new effort in oncampus communication is to provide more job and personnel information to Clemson employees and to let them know about developments at the University in advance of public release of such information.

A "bulletin" type version of the new on-campus piece will be issued on an asneeded basis for fast breaking developments.

Melvin Long, director of university relations, and George Moore, director of alumni relations, said all these new information pieces are the result of more than a year of planning.

They said the new approach represents the best thinking of the Department of Alumni Relations and the Department of University Relations about how to streamline the University's communications programs and make them more efficient and effective.

Long emphasized that "Clemson University News" in no way is intended to compete with other Clemson publications, but rather "to integrate and fill some gaps in the University's overall approach to telling the Clemson story."

#### REDUCTION-IN-FORCE POLICY ADOPTED

A policy prescribing the manner in which employees of Clemson University are to be released should a reduction-in-force become necessary was approved at the Dec. 14 Cabinet meeting and adopted by the State Budget and Control Board.

Ray Thompson, personnel director, says the policy is the result of a state-wide attempt to ensure consistent, equitable treatment for employees who must be laid off permanently or temporarily due to any number of reasons including shortage of funds or work.

It calls for the use of a retention credit formula, based on merit and length of service with the State, to identify which employees will be retained and which will be suspended.

The proposal was initiated by the University's Personnel Division and was formulated by the Coordinating Council of the Business and Finance Division. The Council consists of Vice President for Business and Finance Melvin Barnette and his assistant vice presidents.

A copy of the policy in full, explaining provisions such as benefits to which the suspended employee is entitled, effects upon State benefits, and employee's recall rights, will be included in the next revision of the Personnel Manual. For further information, contact Ray Thompson at 2426.

# ITEMS CONCERNING UNIVERSITY PROPERTY APPROVED BY CABINET

In its Dec. 14 meeting the Cabinet approved several items concerning University property including relocation of five structures from the site selected for

the new student dormitory complex, crosswalks in the vicinity of Sikes Hall and the new student housing site, and use of the old poultry site property.

Five wooden structures have been moved from the site selected for the new student dormitory complex off South Palmetto Boulevard near the Hanover House.

The Boy Scout and Girl Scout cabins, which the University constructed in 1942, were moved to the YMCA Recreation Area where they will continue to be used for scout meetings in addition to meetings, camp-outs, cookouts, etc. for YMCA-related groups.

A two-story log cabin, dating back to the 1850's, a kettle shed and a smoke house were relocated in the Pioneer Complex of the Horticultural Gardens. Field stone from the cabin's chimney and the cast iron kettle under the kettle shed came from "Red House," the home of General Andrew Pickens, 11 miles northeast of Walhalla.

In other action, the Cabinet approved a recommendation of the Traffic and Parking Committee that a feasibility study be conducted of an overpass on Highway 93 in the vicinity of Sikes Hall and on South Palmetto Boulevard in the vicinity of the new student housing site.

Further recommendations that (a) the State Highway Department be requested to lower the speed limit on Highway 93 between the traffic signals at College Avenue and South Palmetto Boulevard and (b) stop signs not be used on Highway 93 were also approved.

The Cabinet approved a request from the City of Clemson for use of the property adjacent to the Army Reserve, commonly known as the old poultry site, by the A.M. Tuck Construction Company for approximately eight months while it constructs sewer lines for the City. The site will be used as a base of operations by the company and will be restored to its present condition when work is finished.

# EQUAL OPPORTUNITY POLICY REVISED

A revision of the University's Equal Opportunity Policy was approved at the Dec. 14 Cabinet meeting.

According to E. N. Tyndall, assistant to the president, the new Equal Opportunity Policy, in compliance with laws passed since the University last revised its policy, includes protection for the handicapped and for disabled veterans of the Vietnam era.

The revision also covers equal opportunity in programs and activities, whereas the previous policy only concerned equal opportunity in employment.

The laws which the new policy takes into consideration are: The Civil Rights Act of 1964, the Education Amendments of 1972, the Rehabilitation Act of 1973, the Vietnam Era Veterans Readjustment Assistance Act of 1974, the Age Discrimination in Employment Act Amendments of 1978, and Executive Order 11246.

# RECOMMENDATION APPROVED FOR TENNIS COURT LIGHTING

A recommendation of the University Recreation Advisory Committee to provide for night play on the most economical basis was approved at the Dec. 14 Cabinet meeting as follows:

Eight courts should be available for night play from dusk until 11 p.m. with the exception of Saturday night, year round.

The lights on these courts should be connected to a timer with the following characteristics in the event supervisory personnel are not present:

- (1) The timer will activate a power switch at dusk.
- (2) When the power switch is energized the lights will stay on for 90 minutes.

- (3) Lights may be relit if players are present prior to 11 p.m.
- (4) Lights will go off by timer control at 11 p.m.
- (5) A locked manual override switch should be present with access restricted to director of Fike Recreation Center and/or his designate.

#### BIOMEDICAL RESEARCH SUPPORT GRANTS AWARDED

As a result of announcements in the 1978 October first and fifteenth issues of the Clemson University Newsletter and a September 20, 1978, memorandum and notice to all appropriate deans and department heads, the University Biomedical Research Support Grant (BRSG) Committee received 11 applications (proposals) for support under the current University award (\$21,147).

After peer review for scientific merit and consideration of the Committee goals and objectives, the following awards, totaling \$19,910, were made by the Committee.

- A. F. von Recum (Interdisciplinary Studies) "Development of an Animal Model for Testing Hip Implants" \$4,980.
- T. Gimenez (Animal Science) "A Very Early Pregnancy Diagnosis With the Rosette Inhibition Test" \$3,000.
- J. W. Lawson (Microbiology) "Effect of a Staphylococcin on Neisseria gonorrhoeae" \$5,120
- J. D. Frey (Psychology) "Antecedents and Consequences of Lamaze Childbirth" \$2,030.
- E. B. Pivorun (Zoology) 'Medical Applications of a Cryoadaptive Agent from Hibernators' \$4,780.



VICE PRESIDENT FOR ACADEMIC AFFAIRS AND DEAN OF THE UNIVERSITY

January 15, 1979

#### MEMORANDUM

TO:

The Faculty

FROM:

Victor Hurst, Dean of the University ()

SUBJECT:

Acquisitions for the Bookshelves in the Office of the Dean of the University

For some years, I have been collecting books of many kinds that have been authored by members of our faculty. These have been placed on an appropriate shelf in my office and, to me, represent a collection that might be envied by many other persons in my position. These books belong to the University and not to me personally. I hope to continue the practice of collecting these publications and would welcome any additions that you would care to make. As a matter of interest, I am listing those titles with their authors that are currently on display.

"Textile Processing Volume-I," by John H. Marvin

"Mediterranean Winter-1906 Journal and Letters," by Thomas Nelson Page and edited by Harriet R. Holman

"An Auto-Tutorial Laboratory Manual In The Plant Sciences," by M. W. Jutras and B. J. Skelton

"Our Land Is Our Life," edited by J. M. Eleazer

"Environmental Planning: An Economical Analysis, Applications for the Costal Zone," by James C. Hite and Eugene A. Laurent

"Costal Zone Resource Management," by James C. Hite and James M. Stepp

"A Dutch Fork Farm Boy," by J. M. Eleazer

"Economics Today," edited by Russell D. Shannon

"John Trotwood Moore: Tennessee Man of Letters," by Claud B. Green

"The Economics of Environmental Quality," by James C. Hite, Hugh H. Macaulay, James M. Stepp, and Bruce Yandle, Jr.

"The Lyric Poems of Jehan Froissart," by Rob Roy McGregor, Jr.

"Informal Logic," by John W. Kenelly

The Faculty
Page Two
January 15, 1979

"Reading in Group Processes: Training for Recreation Leadership and Administration," edited by Jack L. Stevenson

"Physics Experiments, Solid State, Optics and Modern Physics," by D. P. Miller and F. J. Keller

"Fertilizers, Food Producing Minerals and Chemicals," by U. S. Jones

"The Arts in the Middle English Romances," by M. A. Owings

"Where Free Men Shall Stand," by Revis Frye

"Thomas Green Clemson - His Life and Work," by Alester G. Holmes and George R. Sherrill

"The Verse of Floride Clemson," edited by Harriet R. Holman

"Two Decades of Change, The South Since the Supreme Court Desegregation Decision," edited by Ernest M. Lander, Jr. and Richard J. Calhoun

"The Future of the American Presidency," edited by Charles W. Dunn

"Index to Biographies of Englishmen 1000-1485 Found in Dissertations and Theses," by Jerome V. Reel, Jr.

"The Oglethorpe Ladies and the Jacobite Conspiracies," by Patricia Kneas Hill

"An Introduction to Invertebrate Endocrinology," by A. S. Tombes

"Plant Life in Anaerobic Environments," edited by Donal D. Hook and R. M. M. Crawford

"The Railroad Mergers and the Coming of Conrail," by Richard Saunders

"John Fox and Tom Page; As They Were," edited by Harriet R. Holman

"When I Was a Little Boy," by Rosewell Page, "Foreword and Afterword," by Harriet R. Holman

"Understanding Political Science - The Area of Power," by Ronald J. Stupak, Stuart C. Gilman, Craig E. Hartzer, Michael J. Keller, Jeffrey P. Krans, and Stephen H. Wainscott

"Temas E Imagenes En Los Versos Sencillos De Jose Marti," edited by Gaston J. Fernandez

"American Democracy Debated - An Introduction to American Government," by Charles W. Dunn

"Statistics: A Tool for the Social Sciences," by Lyman Ott, William Mendenhall, and Richard F. Larson

The Faculty
Page Three
January 15, 1979

"Introductory Sociology - Order and Change in Society," by Gerald R. Leslie, Richard F. Larson, and Benjamin L. Gorman

"Star-Spangled Banner," by Louis Moreau Gottschalk and Dudley Buck, transcribed by John H. Butler

"Tournament Galop," by Louis Moreau Gottschalk, arranged by John H. Butler

"Alternatives for Growth," edited by Harvey McMains and Lyle Wilcox

"James L. Orr and the Sectional Conflict," by Roger P. Leemhuis

VH/ep

#### ARCHITECTURAL STUDIES

Joseph L. Young (Prof) had his work exhibited at the Pickens Art Gallery, Pickens, Nov. 12-Dec. 4.

Tom Dimond (Coordinator of Educational Media and Exhibits) participated in a regional art exhibition Nov. 5-19 in Shelby, NC. He had an acrylic and a watercolor selected for 4th Annual Juried Exhibition of the Shelby Art League. The exhibition included top artists from the Southeast and was juried by Ted Potter of the Southeastern Center for Contemporary Art in Winston-Salem, NC. Mr. Dimond's watercolor received an honorable mention at the exhibition.

Gayland Witherspoon (Prof and Hd) participated in the 3rd Annual United States Air Force Design Awards Jury Oct. 17-18 in Washington, DC. He also presented a lecture, "Architecture Design Excellence," at the National Air Force Reserve Conference Oct. 27 in Pittsburgh, PA.

#### CHEMISTRY

Recent publications from the department are as follows:

H. G. Spencer (Prof) and J. A. Barrie (Imperial College, London), "Transient Sorption by Two-Component Laminate Slabs in a Finite Bath," J. Appl. Polym. Sci., 22, 3539 (1978).

Prof. Spencer and I. M. Ibrahim (Dept of Athletics), "A Note on the Effect of Water Vapor on the Permeability of Gases Across Ethyl Cellulose Membranes,"

J. Appl. Polym. Sci., 22, 3607 (1978).

#### **ELEMENTARY AND SECONDARY EDUCATION**

Morris A. King (Prof) served as chairman of the Visiting Committee to Bob Jones University for the National Association of State Directors of Teacher Education and Certification (NASDTEC) Dec. 5-7.

#### ENGINEERING TECHNOLOGY

Daniel L. Ryan (Assoc Prof) attended the ASEE Conference at Mississippi State University in Starksville Jan. 3-5 where he presented a technical paper, "Pictorial Image Display from Computer Database," to the Engineering Design Graphics division of the American Society for Engineering Education.

#### HISTORY

Roger P. Leemhuis (Asst Prof) has published a book, <u>James L. Orr and the Sectional Conflict</u> (University Press of America, 1979).

E. M. Lander Jr. (Alumni Prof) reviewed G. C. Rogers Jr. and D. R. Chesnutt, eds., The Papers of Henry Laurens, Vol VI (Columbia: University of S. C. Press, 1978) in the North Carolina Historical Review, October 1978.

Richard M. Golden (Asst Prof) chaired a session on "Witchcraft and Spirit Possession in Early Modern France" at the annual convention of the American Historical Association in San Francisco Dec. 29.

#### HISTORY AND VISUAL ARTS

John Acorn (Prof and Hd) has been elected to the Southeastern College Art Conference Board of Directors for a three-year term of office (1978-1981). In this office he represents all of the art departments of higher education in the State of South Carolina to the SECAC Board. He also participated in a two-man exhibition with Mr. Robert Hunter at the Mint Museum of Art in Charlotte, NC, Oct. 5-30.

#### INTERDISCIPLINARY STUDIES

Andreas von Recum (Prof) has demonstrated the feasibility of the use of a partial artificial hip joint in the pony. The experiment was part of a three-year study by F. W. Cooke (Prof and Hd) which is funded by the National Institutes of Health. Other investigators on the project are E. M. Lunceford (Orthopedic Surgeon, Columbia) and G. H. Kenner (Assoc Prof). The present success increases the possibility that the pony, whose load-bearing on the hind-leg is similar to that of man, will be a suitable model for human orthopedic studies.

Prof. von Recum was an invited guest at a Merck (Darmstadt) Co. Symposium in Chicago Sept. 26-27. The theme of the symposium was "Properties of Bone Cement Admixed with Antibodies."

#### MATHEMATICAL SCIENCES

Robert E. Haymond (Prof) attended the Winter Simulation Conference in Miami Beach Dec. 4-6 at which he presented an invited talk, "A Programming Theory for Discrete Simulation."

John Kenelly (Prof) gave a talk, "Grading Essay Examinations," at a Dec. 15 conference at the Trinity School in New York City. The conference was sponsored by the College Board for Mathematics Teachers in the Mid Atlantic, New England Region.

Prof. Kenelly gave a series of three talks in Charleston Jan 9. He talked on SAT scores to the county principals, on "Mathematics and Social Directions" to the mathematics students at Bonds-Wilson High School and "Advanced Placement" to the local mathematics teachers. On January 16-18 Prof. Kenelly served as a member of the NASDTEC (National Association of State Directors of Teacher Education and Certification) Evaluation Committee which examined the Francis Marion College programs in teacher education.

Philip Burt and John Ray (Profs, Physics and Astronomy) and Andrew Sobczyk (Martin Prof) participated in the Seventeenth Annual Eastern Conference of Theoretical Physics, hosted by the University of Georgia, Athens, Jan. 11-13.

#### PHYSICS AND ASTRONOMY

Beverly B. Bookmyer (Prof) and Danny R. Faulkner (Grad Stu) have had an astronomical note, "An Increase in the Period of SW Lacertae?," published as <u>International Astron</u>. <u>Union Infor</u>. <u>Bulletin on Variable Stars No. 1503</u>, 1978.

P. B. Burt (Prof) published a paper, "Exact Solutions of Non-linear Generalizations of the Klein Gordon and Schrodinger Equations," in the November issue of the <u>Journal of Mathematical</u> Analysis and Applications.

#### PLANT PATHOLOGY AND PHYSIOLOGY

Stephen A. Lewis (Assoc Prof) attended and served as secretary for the meeting of the Technical Committee for the southern regional project entitled "Nature and Extent of Variation in Root-Knot and Cyst Nematodes" held at Quebradillas, Puerto Rico, Dec. 4-8.

The following paper was published from work in the Herbicide Physiology Laboratory: "Growth Inhibition in Tobacco (Nicotiana tabacum) callus by 2,6-dinitroaniline herbicides and protection by D- $\alpha$ -tocopherol acetate," Weed Sci. 26:527-530 (1978) by J. B. Huffman and N. D. Camper (former Res. Tech. and Prof., respectively).

#### PROFESSIONAL DEVELOPMENT

J. Michael McDonald (Asst Prof, IM) will be the chairperson for a seminar, "From Secretary to Administrative Assistant," to be held at the Sheraton-Palmetto Inn in Greenville Feb. 17.

Leonard Berger (Assoc Prof, Psych) will be the chairperson for a workshop, "Management by Objectives," Feb. 19-20 on campus.

Prof. McDonald will chair a one-day seminar, "Communication and Listening to Improve Productivity," to be held Feb. 21 on campus. Hassan Behery (Assoc Prof, Text) will cochair two conferences, "Carpet Manufacturing Technology" and "Carpet Installation and Maintenance," to be held here Feb. 27-28 and March 1.

Prof. McDonald will be the chairperson for a course, "Managing Burn-Out: The Organizational Dilemma," to be held on campus Feb. 28-March 1.

## ZOOLOGY

John P. Wourms (Assoc Prof) was appointed associate editor on the Editorial Review Board of the Journal of Experimental Zoology. The journal, begun in 1904 and published under the auspices of the American Society of Zoologists, is one of the oldest biological journals in the U.S.

# MINUTES OF HANDICAPPED STUDENT ADVISORY COMMITTEE MEETING, NOVEMBER 30, 1978

## 1. Call to Order

The meeting was called to order by Chairperson Wells at 3:40 p.m.

2. Those in attendance were Professors VonTungeln, Patterson, James, Schaap, Furry, Robinson, Ashworth, Wood, and Steirer, and Mr. Pace. Absent were Professors Corder and Huey.

# 3. Approval of Minutes

The minutes of the November 2 meeting were approved with one change: Professor Owens Corder was designated to serve on the Procedures Committee.

- 4. Mr. Bill Pace attempted to clarify his role as a member of UHSAC. He was originally invited to serve on the Committee because he is the University Advisor to Handicapped Students, presently a parttime position. He suggested that when enough handicapped students enroll at Clemson, a full-time advisor should be appointed.
  - 5. A general discussion of possible

functions and duties of UHSAC ensued. It was noted that curriculum problems might be brought to the committee. Professor Mary Robinson suggested that knowledge of roles that handicapped students could play in particular careers should be made available to faculty. Professor Robinson also questioned whether certain handicapped students would be able to pass the state Nursing Boards even after successfully obtaining degrees from Clemson. It was suggested that each member of the Committee should be a specialist in the area of providing information to other faculty on possible roadblocks and opportunities for handicapped students in their career plans.

- 6. Prof. Bill Steirer began a discussion of college-level committees. He noted that the College of Sciences committee is made up of department heads. A discussion of the pros and cons of having department heads on the college committees brought out the problem of time restriction vs. control over the situation. It was decided that each college dean should appoint the committee members.
- 7. Prof. Steirer passed out copies of the Recommendations of the Sub-Committee on Procedure: Section No. 6 was unanimously amended to read "Each College would have such a Committee consisting of at least one member from each of its departments and appropriate units."
- 8. An amending clause (#I) was also moved and unanimously passed after some discussion. Amendments would require a majority of the membership, with 2/3 of the membership constituting a quorum.
- 9. A motion was entered to make the university-appointed student advisor to the handicapped an ex officio member of UHSAC. A motion to that effect was made and passed unanimously when Chairperson Wells discovered that the question had already been decided.
- 10. Chairperson Wells stated that he had contacted the U.S. Government Clearing House but had not received any information.

- 11. Chairperson Wells reported that there would be no legal barriers to having students serve the UHSAC in an advisory capacity.
- 12. Dr. Ashworth suggested the need for a formal statement of confidentiality to be used during any hearings. Chairperson Wells said that he would talk with Ben Anderson about this.
- 13. Chairperson Wells passed out copies of an article from the <u>Journal of College Student Personnel</u> titled "Counseling and Guidance Approaches to Deaf College Students."
- 14. There was no report from the Workshop Committee. Chairperson Wells volunteered to contact vocational rehabilitation to schedule an individual to speak at the

next committee meeting in January.

- 15. There was a general discussion on the advisability of printing the Committee minutes in the faculty newsletter. Chairperson Wells will speak to Dean Hurst about this matter.
- 16. Dr. Ashworth reminded the committee members of the state-wide short course for science teachers. Dr. Ashworth is preparing a grant proposal dealing with the topic of teaching science to handicapped students.
- 17. The meeting was adjourned at 5:15 p.m.

Respectfully submitted,

Carol Furry

# MINUTES OF THE FACULTY SENATE MEETING, NOVEMBER 21, 1978

# 1. Call to Order

A quorum was declared and the meeting was called to order by President Steirer at  $3:35\ p.m.$ 

# 2. Approval of Minutes

The minutes of the October 17 meeting were approved with minor corrections.

# 3. Committee Reports

a. Admissions and Scholarship Committee - Senator Edie, Chairman, reported that the Admissions and Scholarship Committee met on October 31 and again on November 14. A resolution concerning reexaminations for graduating seniors was discussed. The resolution (as we have amended it) was supported by the committee. This resolution will be introduced under new business.

A resolution concerning course repeats was also referred to our committee. This resolution asked that the policy allowing students to repeat courses be discontinued. The resolution states that repeating courses discriminates against students who obtain a B or better the first time they take the course. Since the author of this resolution doesn't seem to understand that the student's transcript shows the grade obtained every time a course was taken and every grade obtained is entered in the calculation of the student's G.P.R., the committee recommends that the author research the problem further before introducing a resolution.

Student senate resolution R-78-79-20 (policy for syllabus handouts) was discussed. While the resolution does have some merit it is vague. The first paragraph of the resolution states that the syllabus consists of grading, absence policies and an examination schedule. The last sentence of the resolution states that a syllabus is a course outline. While the committee, as a whole, favors professors distributing grading policies and course outlines at the beginning of the semester, we believe this is a common practice at present and see no need for a formal requirement. In addition some courses do not lend themselves to a formal structure.

Tabulation of the results of the final exam questionnaire are complete and appear below. The committee would like to thank the faculty for its excellent response to this questionnaire.

This questionnaire was prompted by suggestions that there is a lack of uniformity in professors' final exam policies, that many professors in contradiction to University policy do not give exams, and that an unusually large number of students are exempted from final examinations. Much to our surprise, the results of the questionnaire do not reveal any discrepancies or problems or significant deviations. There is in fact, if these results are to be believed, considerable uniformity in final

examination practices; also, of the roughly 500 respondents, a surprisingly high percent of the faculty agreed with the University policy on final examinations. Of the twelve (12) percent of instructors who do not give examinations, most indicated that this was warranted by the special nature of their classes - labs, music recitals, oral language proficiency, etc. Similarly, many of those who favored ending a uniform, university-wide policy on final examinations offered the diversity of classroom needs and experiences as the justification of leaving the decision whether or not to give exams to the professors themselves.

The following questions were tabulated:

- 2: Do you require a final examination in all courses you teach?
- 3: Do you require a final examination in some courses but not in others?
- 4: Do you give written final examinations?
- 5: Do you give oral examinations?
- 6: Are your final examinations usually cumulative?
- 8: Do you grant exemptions for final examinations?
- 10: Final examinations are now required by the university. Do you agree with this policy?
- 11: What level undergraduate course do you usually teach?

Summary of Questionnaire Responses

Arch,	Arch,	Educ,		Engineer	FFR	IM & TS	Lib, Arts	Nurs.	Sciences 85 (02)%	University
75 (83)% 9 (60)% 28 (85)% 60 ( 15 (17)% 6 (40)% 5 (15)% 11 (	9 (60)% 28 (85)%		11	60 (85)%	2 (9)%	2(96) 7	89 (88) k 12 (12) %	2 (9)%	7 (8)%	451 (66)% 64 (12)%
4 (29)% 9 (35)%	4 (29)% 9 (35)%		14 (24)	84	6 (27)%	7 (33)%	19 (20)%	2 (19)%	28 (35)%	112 (24)%
59 (72) <b>x</b> 10 (71) <b>x</b> 17 (65) <b>x</b> 45 (76) <b>x</b>	10 (71)% 17 (65)%		45 (76)	%	16 (73)%	47 (87)%	78 (80)%	21 (91)%	53 (65)%	346 (76)%
88 (98) <i>x</i> 10 (71) <i>x</i> 32 (100) <i>x</i> 69 (97) <i>x</i>	10 (71)% 32 (100)%		(76) 69	24	22 (100)%	67 (100)%	2(76) 26	23 (100) <b>z</b>	90 (100) <b>z</b>	x(6) 867
2 (2)% 4 (29)% 0 (0)% 2 (3)%	(29)% 0 (0)% 2	2	2 (3)%		2(0) 0	2(0) 0	2(9) 9	X(0) 0	2(0) 0	14 (3)%
7 (8)% 3 (23)% 2 (7)% 7 (9)%	(23)% $2 (7)$ % $7$	7 7 7	7 (9)%		7 (32)%	2 (3)%	27 (26)%	2(0) 0	28 (28)%	83 (16)%
80 (92)% 10 (77)% 26 (93)% 68 (91)%	(77)% 26 (93)% 68	89	(8 (61)	82	15 (68)%	2(26) 79	75 (74)%	23 (100)%	71 (72)%	432 (84)%
75 (86) <i>x</i> 7 (58) <i>x</i> 23 (72) <i>x</i> 60 (90) <i>x</i>	(58)% 23 (72)%	(72)%	(06) 09	24	17 (74)%	51 (76)%	78 (72)%	22 (96)%	84 (93)%	417 (82)%
12 (14)% 5 (42)% 9 (28)% 7 (10)%	(42)% 9 (28)% 7 (	(28)% 7 (	$\sim$ l	~	6 (26)%	16 (24)%	31 (28)%	1 (4)%	6 (17)%	93 (18)%
47 (59)% 4 (31)% 7 (22)% 25 (38)%	7 (22)%		25 (38)%		9 (39)Z	30 (45)%	31 (30)%	3 (13)%	7(2) 67	199 (40)%
32 (41)% 9 (69)% 25 (78)% 41 (62)%	25 (78)%	-	41 (62)		14 (61)%	37 (55)%	71 (70)2	20 (87)%	48 (53)%	297 (60)%
65 (75)% 5 (36)% 24 (80)5 54 (77)%	(36)% 24 (80)5		54 (77)%		15 (65)%	50 (76)%	63 (70)%	12 (44)%	66 (73)%	354 (71)%
22 (25) <b>x</b> 9 (64) <b>x</b> 6 (20) <b>x</b> 16 (23) <b>x</b>	(64)% 6 (20)% 16 (	(20)% 16 (	$\sim$	20	8 (35)%	16 (24)%	27 (30)%	15 (56)%	24 (27)%	143 (29)%
4 1 3 19			19		\$	m	58	11	47	151
25 6 6 19	9		19		6	22	53	m	39	182
28 5 12 38	12		38		œ	77	89	9,	29	238
57 9 24 51	24		51			37	51	6	97	295

The Admissions and Scholarship Committee is seeking information concerning the effect of requiring undergraduates to have a 2.0 G.P.R. in their major field as well as an overall 2.0 in order to graduate. (This was a regulation that had been attempted to be instituted in past years.) However, each "major area" should be defined for each type of degree to properly validate the Committee's investigations.

Consequently, the Admissions and Scholarship Committee has requested each representative and/or senator to ask each department head in their respective schools or colleges to submit a list of courses which constitute major area courses.

The following is a list of the departments which have submitted such lists:

Departments of Agricultural Engineering
Architectural Studies
Building Science
Ceramic Engineering
Chemical Engineering
Civil Engineering
Electrical and Computer Engineering
Recreation and Park Administration
Accounting and Finance
Industrial Management
Biochemistry
Botany
Chemistry and Geology
Mathematical Sciences

If any of the departments within your college are not listed above, kindly see that the information about "major area" is sent to: C. L. B. Addison, Associate Professor, College of Architecture, or to D. D. Edie, Chemical Engineering, 221 Earle.

The following discussion ensued on professional examinations and their relationship to student grades. The suggestion was made that maybe a university-wide committee is needed to study professional examinations. The question of whose business this is was raised. Senator West asked if we should test value judgements and wondered how these examinations reflect on Clemson University. Senator Snipes stated that we should compare ourselves with the University of South Carolina. Senator Hester stated that there are professional organizations which judge the credibility of a degree, and we are not in the position to judge the quality of some other program. Senator Baron agreed with Senator Hester. Senator Coulter stated that in his area they have sought out weaknesses and corrected them. One Senator indicated that it had been reported that the rate of failure on the professional exam given to graduates of Clemson's College of Nursing has been exceptionally high. President Steirer reminded the senators that the question is "Should we assume the responsibility to look into this problem?" Senator Prince was not sure that we can agree that there is a problem. Senator Schindler recommended that the committee draft a resolution to examine what policies have been established and the success rates of such examinations. He expressed the opinion that he does not think this is a function of the Senate per se, but we should be

instrumental in getting the departments, schools and colleges to look into the problem. The opinion was expressed that maybe students do not know how to take the professional exams and maybe something should be done along these lines. Senator Worm stated that he can support the efforts of departments. Senator Walker stated that the elementary and secondary education department is studying the problems along with NTE and they are looking into how to take these tests. Senator Edie stated that his committee will take these thoughts into consideration.

- b. <u>Policy Committee</u> Senator West, Chairman, stated that the policy committee does not have a formal report for the November Faculty Senate meeting. The committee continues to work on the rewrite of the policy dealing with 'Faculty Participation in the Selection of Academic Administrators' and should be able to report this item out for the December Faculty Senate Meeting.
- c. Research Committee Senator Fennell, Chairman, briefly discussed preliminary research proposals and referred to Dean R. W. Henningson's August 17, 1973, letter which outlined the procedure to be followed when a preliminary proposal is to be submitted to a sponsoring agency. Senator Worm commented that neither signatures nor itemized budget are needed, but they must contain bottom-line figures.
- d. <u>Welfare Committee</u> Senator Burt, Chairman, announced that his committee met on October 24 and that the next meeting is scheduled for November 28. The following subcommittee reports were filed:
  - (1) Academic Year Subcommittee, Bob Lambert, Chairman.

Activity: (a) to determine policies within the University for promotion and tenure.

Report:

All colleges have a mechanism for recommendations with variations from department to department. The most common practice is for departmental committees to advise the department head - the latter recommends these names to the Dean. One college has a college committee. In Agriculture and Engineering recommendations of advisory committee and department heads are reviewed by associate deans or a committee of department heads. Recommendations from deans go to Dean Hurst.

The College of Engineering has established "Promotion Guidelines" which are distributed to its faculty.

- (b) this subcommittee is considering the reply on summer school employment.
- (2) Calendar Year Subcommittee, Bob Mazur, Chairman

Activity: determination of fringe benefits.

Report: Retirement, 6.8%; preretirement death, .3%; Social Security, 6.05%; Workman's Compensation, .2%; Unemployment, .4%; Blue Cross-Blue Shield, averaging approximately 2%.

(3) Retirement Subcommittee, Steve Melsheimer, Chairman.
This subcommittee has completed its comparison of TIAA-CREF and South Carolina retirement systems. A draft of the analysis is complete and the final report, with recommendations, will be made to the Senate in December or January.

A discussion followed and Senator Baron observed that TIAA-CREF and the S.C. Retirement benefits are about the same if a person stays in the SCRS until retirement. Otherwise, if the person does not stay until retirement he is getting "The short end of the stick." If he leaves anytime up to 10 years of retirement, he would be better off if he took his money out of the system and invested it elsewhere.

Senator Hester addressed the option question and asked about the legality of dual requirements. Apparently, there has been a ruling regarding this in Texas.

A rather spirited discussion developed over the existence of promotion-tenure guidelines in the College of Engineering. The blanket statement was issued that no guidelines exist in the College of Engineering beyond those published in the Faculty Manual. Another blanket statement was issued that such a document does exist. Senator Hester stated that it does not exist. Senator Lambert stated that it does exist and that he saw it. Senator Baron stated that guidelines do exist. Senator Coulter raised a point of order that this discussion was supposed to involve the Welfare Committee report and not Theology.

President Steirer announced that there will be an exchange of information with USC on retirement and that the study is being conducted in the law school and they will be in a good position to examine the legality of the system.

# e. Ad Hoc Committees

Faculty Compensation - Senator Burt, Chairman, reported that this committee met on October 24 and has a draft of its report and recommendation which is being put in final form. The committee will meet next Tuesday and the final report will be circulated in order to allow all senators to study it before meeting.

<u>Salutary Letters</u> - Senator Coulter, Chairman, stated that his committee consisting also of Senator Worm will file its report under new business.

# f. <u>University Committees</u> -

<u>Traffic and Parking Committee</u> - Senator Burt, representative, filed the following report:

(1) The Committee recommended that a feasibility study be made on building an overhead walk over Highway 93 in front of Sikes Hall.

# (2) Adopted two recommendations

- (a) Overhead walks in conjunction with new dormitory (this is to be given consideration any time there is a traffic hazard).
- (b) Lower the speed limits between the two traffic lights on Highway 93 (between President's home and Mell Hall).

A discussion followed: Secretary Adkins asked about push-botton controlled traffic lights at crosswalks in front of Sikes Hall -- Senator Burt responded that the Committee had looked into this and decided that they would not solve the problem. President Steirer asked if the Faculty Senate is interested in the dramatic changes that will occur in the appearance of the campus if overhead pedistrian-traffic separation devices are constructed on the campus. Senator Hester reminded the Senate that a resolution (FS-78-9-5) is on record endorsing safety measures taken at pedestrian crosswalk to Clemson House (see page 7 of September 19 minutes).

Tunnels were discussed briefly, and it was pointed out that they would not blight the campus; however, there is a resistance to tunnels because they create situations conducive to crimes of violence.

Computer Advisory Committee - Senator Hood, representative, announced that Senator Worm is chairing the subcommittee on long range planning and would appreciate receiving faculty input.

<u>Undergraduate Council</u> - Senator Hipps, representative, reported that the plus or minus grading resolution was rejected for the following reasons:

(1) Student Senate was against it.

(2) Plus or minus grades are not used in other universities in our area.

(3) Institution of plus or minus grades would be costly and is not warranted.

As far as the Withdrawal Policy is concerned, the Council accepted the Dean's compromise proposal.

[The Plus or Minus Grading Proposal and the Withdrawal Policy were referred to the Admissions and Scholarship Committee for further study].

# 4. President's Report

- a. In response to questions from various faculty members, I pass the following information on to you. The quotation is from Section 13 of the 1979 Appropriations Act, p. 71.
  - E. With respect to the unclassified employees of the universities, colleges, and the State Board of Technical and Comprehensive Education, the authorities of each agency are authorized to determine the total funds required for base increases of 4%, as set forth in paragraphs C and D of this plan, for its unclassified employees as a group and to allot such total among individual unclassified employees without uniformity.

The pertinent parts of paragraphs C and D say this "unless otherwise modified or prohibited by paragraphs E through L of this plan." No such modifications or prohibitions are evident. At this time, the University plans to follow the dictates of the statute.

- b. The Council of Academic Deans met on October 27. At that time the entire issue of withdrawal from class was referred back to the Undergraduate Council. It is my'understanding that the faculty members on the Undergraduate Council did not support the Senate's proposal. The four week limitation was approved by the Senate by a large margin, and I believe that vote represents the sentiments of most faculty members. If you agree, it is up to you to persuade faculty members to articulate those sentiments to the Undergraduate Council.
- c. The subject of payroll deductions being instituted for the University Foundation, Alumni Loyalty Fund and the R. C. Edwards Endowment Fund has been raised again. The capability for this now exists, but the objections that it is too costly to implement and that such payroll deductions establish dangerous precedents still prevail.
- d. The Athletic Council has met twice and the members have been briefed on various bowl possibilities (all of which by the time of this meeting are of dubious worth), passed resolutions commending the ACC champion soccer and cross-country teams, and discussed the difficulties posed by the AIAW in regulating women's sports. The Council was asked eventually to determine whether the dual tasks of living up to Title IX guidelines and following AIAW rules are compatible.
- e. The Honors Commons Room approved by the Faculty Senate in October is accepted in principle. The drawback is the unavailability of a centrally located room that is appropriate for use as a lounge.
- f. Mr. Paul W. McAlister, Chairman of the Board of Trustees, has appointed Mr. T. Kenneth Cribb, Chairman of the Presidential Selection Committee. Fellow Board members, Mr. James C. Self and Mr. Lewis F. Holmes will join Mr. Mike Ozburn and myself on that committee. Mr. McAlister will serve in an <u>ex officio</u> capacity.

The Screening Committee will complete its work on November 27, when it will pass a list of approximately ten names on to the Selection Committee.

# 5. <u>Old Business</u>

A motion was made by Senator West that the Faculty Senate convene in Executive Session. The motion was seconded by Senator Burt and was approved unanimously by voice vote. After about a half hour the motion was made by Senator West that the Executive Session be closed. The motion was seconded by Senator Worm and was approved unanimously by voice vote.

Senator Burt requested the floor and stated that he wished to add one more item to his Welfare Committee report: His committee will be looking at the problem of developing guidelines for drawing up procedures for selecting a new Vice President for Academic Affairs upon the retirement of the incumbent. He requested suggestions from the Senate.

# 6. New Business

a. Senator Edie, Chairman of the Admissions and Scholarship Committee, moved that the Faculty Senate approve the following Resolution:

FS-78-11-1

Resolution on Reexaminations for Graduating Seniors

- WHEREAS, current regulations on reexaminations for graduating seniors (p. 48, Clemson University, <u>Announcements</u>) infringe upon the affected faculty member's discretion as to whether a reexamination is appropriate or justifiable on an individual basis;
- WHEREAS, these regulations constitute administrative interference in grading of students by faculty;
- BE IT THEREFORE RESOLVED that current University regulations on reexaminations for graduating seniors for purposes of making up grade deficiencies and qualifying for graduation be amended to include the following:
- Under "Examination on F received in last semester" (p 47) add to the fourth line of the paragraph:

may (at the discretion of the instructor) stand a special examination on the course provided:

The motion was seconded by Senator Prince. Senator Edie reviewed the current policy on reexamination:

A student in line for graduation at the end of this semester who fails to graduate because of an F on one course taken this semester may stand a special examination under certain conditions on the course after the regular degree date. A senior who qualifies for graduation under this provision will be awarded his degree on the next regular date for the award of degrees.

The resolution was approved unanimously by voice vote.

b. Senator Edie, Chairman of the Admissions and Scholarship Committee, moved that the Faculty Senate reject the Student Senate Resolution (R-78-79-20) policy for syllabus handouts. The motion was seconded by Senator Howard. During the discussion it was brought out that the resolution does have some merit but it is vague. Senator Young stated that the policy would allow no flexibility, would not allow for exigencies, would hamstring artistic courses, would result in more paper work, and would be a burden to faculty and students. Senator Howard supported Senator Young. Senator Burt stated that faculty members are already supposed to state grading and absence policies.

The vote to reject passed unanimously by voice vote.

- c. Senator Coulter, Chairman of Ad Hoc Committee on Salutary Letters, reported that there is nothing in the current Faculty Manual, in either the Constitution or By-laws of the Faculty Senate, requiring that Faculty Senate actions take the form of resolutions exclusively, the Committee moves that the following procedures, concerning the disposition of salutary expressions to persons or bodies relating to meritorious acts toward the University, become operational forth with, and that these procedures be entered into the minutes for future reference:
  - 1. Any member of the Faculty, the Faculty Senate or any committee thereof may draft a letter of appreciation or other salutary expression directed toward any person or body relating to the University.
  - 2. Such letter may be sent to the President of the Faculty Senate whereupon he will place it on the agenda for the next regularly scheduled meeting under "New Business."
  - 3. Upon its being called, the President will dissolve the Faculty Senate into a "Committee of the Whole" for purposes of discussing and/or amending such a letter.
  - 4. After due consideration, the Faculty Senate will reassemble as a plenary body and vote on the letter as it has emerged from the Committee of the Whole.
  - 5. Should passage occur, the letter shall be sent to the appropriate person or body under the signature of the President of the Faculty Senate indicating that it expresses the consensus of the Faculty Senate. This action shall be recorded in the minutes.

Senator Coulter moved for acceptance of the report and Senator Grubb seconded.

During the ensuing discussion, Senator Burt suggested that the Salutary Letters be referred to the Policy Committee for their action and recommendation rather than to the Senate as a Committee of the Whole.

Senator West complimented the efforts of the Ad Hoc Committee. Senator Coulter stated that the Committee had considered utilizing a standing committee rather than the Committee of the Whole. Senator Hester expressed concern that at a later date we may have a letter of controversy or disagreement which would be rejected, and the utilization of the Committee of the Whole would at least keep the discussion and action out of the minutes and maybe save some embarrassment.

Senator Snipes called the question. The motion to accept the report passed by voice vote. There was one No vote.

d. Senator Coulter moved that an <u>ad hoc</u> committee be formed to consider the possibility of creating, designing, qualifying, and disseminating special certificates of Merit for <u>especially</u> outstanding service to the University. The motion was seconded by Senator West and was approved unanimously by voice vote. Senator Worm will chair this committee and Senator Coulter will serve with him.

- e. Senator Hester requested that a committee examine the problem of staggered class schedules. President Steirer referred this problem to the Admissions and Scholarship Committee.
- 7. The meeting adjourned at 5:33 p.m.

Respectfully submitted,

T. R. Adkins, Jr.

Senators absent:

Agricultural Sciences

S. G. Turnipseed

B. R. Smith (J. Palmer, substituting)

Liberal Arts

H. W. Fleming

Library

D. A. Fiste (Alternate Myra A. Armistead present)

# Calendar of Campus Events

- l -- Basketball: Winthrop (Women), Littlejohn Coliseum, 5:15 p.m.
- 1 -- Basketball: Colgate (Men), Littlejohn Coliseum, 7:30 p.m.
- 1 -- Deadline to apply for all undergraduate scholarships for the 1979-80 academic year.
- 2 -- Live Entertainment in Edgar's: Carolina Pride, duet. Sponsored by University Union, Edgar's, 9 p.m. University I.D. and proof of age required, 50¢ admission charge.
- 3 -- Basketball: University of South Carolina (Women), Littlejohn Coliseum, 6:30 p.m.
- 3 -- Basketball: University of South Carolina (Men), Littlejohn Coliseum, 9 p.m.
- 3 -- Tennis: USC-Sumter (Men), here, 1 p.m.
- 5 -- French Film: "Tales of Paris." Sponsored by Language Department, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 5-11 -- Videotape: "Animal Farm." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
- 5-17 -- Art Exhibition: "Cage Nakayama Photos of New York City." Sponsored by University Union, Union Gallery, 8 a.m. 5 p.m. Monday Saturday, noon 5 p.m. Sunday. Open to the public, no admission charge.
- 5,8 -- Short Course: "Introduction to Simulation." Taught by Academic Computing Support, M-2 Martin Hall, (5) 6:30 7:30 p.m., (8) 1:25 2:15 p.m. Open to the public. Call 656-3466 for more information or to register.
- 5,7,9 -- Short Course: "Introduction to Job Control Language (JCL)." Taught by
  12 Academic Computing Support, M-2 Martin Hall, (5,7,9) 9:05 9:55 a.m.,
  (12) 6:30 9 p.m. Open to the public. Call 656-3466 for more information or to register.
  - 5-8 -- Short Course: "Text Formatters." Taught by Academic Computing Support, M-2 Martin Hall, 3:35 4:25 p.m. Open to the public. Call 656-3466 for more information or to register.
  - 5-26 -- Art Exhibition: "Diane Arbus Photographs." Exhibition of bizarrely unforgettable portraits. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m. 4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
  - 5-26 -- Art Exhibition: "Deborah Frederick Rainbow Nets." Exhibition of a unique form of fiber sculpture employing a knitting technique. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m. 4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.

# ALENDAR OF CAMPUS EVENTS (Cont.)

- 6 -- Concert: An Evening of Musical Madness -- "The Intimate P.D.Q. Bach."
  Sponsored by Clemson University Concert Series, Littlejohn Coliseum, 8 p.m.
  Open to the public. Admission by season ticket, student use card, or individual tickets on sale at Gate 5.
- 6,8,13 -- Short Course: "Interactive VS Basic." Taught by Academic Computing Support,
  14 M-2 Martin Hall, (6,8,13) 9:05 9:55 a.m., (14) 6:30 9 p.m. Open to
  the public. Call 656-3466 for more information or to register.
- 6,7,9 -- Short Course: "Introduction to FORTRAN." Taught by Academic Computing Support, M-2 Martin Hall, 10:10 11 a.m. Open to the public. Call 656-3466 for more information or to register.
  - 9 -- Tennis: Anderson College (Men), here, 2 p.m.
  - 9,10 -- Live Entertainment in Edgar's: Wooge and Co. Sponsored by University Union, Edgar's, 9 p.m. University I.D. and proof of age required, 50¢ admission charge.
- 12-18 -- Videotape: "Bread in Concert." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
- 12,14, -- Short Course: "Intermediate Job Control Language (JCL)." Taught by 16 Academic Computing Support, M-2 Martin Hall, 9:05 9:55 a.m. Call 656-3466 for more information or to register.
- 12,13, -- Short Course: "Statistical Analysis System." Taught by Academic Computing 14,15 Support, M-2 Martin Hall, 6:30 9 p.m. Call 656-3466 for more information or to register.
  - 13 -- Tennis: Limestone (Men), here, 2 p.m.
  - 14 -- Basketball: Erskine College (Women), Littlejohn Coliseum, 6:45 p.m.
  - 14 -- Basketball: Virginia (Men), Littlejohn Coliseum, 9 p.m.

# PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events. etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

ADDENDUM

CLEMSON UNIVERSITY LIBRARY SOUTH CAROLINA ROOM

to the

# CLEMSON UNIVERSITY NEWSLETTER

FEB 1 1979

February 1, 1979

Minutes of the Educational Council Meeting, December 4, 1978

Present:

Robert C. Edwards, presiding
Ben W. Anderson
Luther P. Anderson
Melvin E. Barnette
Benton H. Box
Judith J. Chodil
Walter T. Cox
James E. Dalton
J. L. Edwards
J. W. Gordon Gourlay

J. W. Gordon Gourla Claud B. Green Victor Hurst Harold F. Landrith

Richard F. Larson
Melvin C. Long
Joseph B. McDevitt
Stanley G. Nicholas
A. E. Schwartz

William F. Steirer
Wallace D. Trevillian
K. N. Vickery

Henry E. Vogel S. M. Willis

E. N. Tyndall, Secretary

## 1. Minutes

The minutes of the meeting of November 6, 1978, were approved as submitted.

#### 2. Academic Matters by Colleges:

Statement and Recommendations: The Dean of the University recommended the following:

#### A. COLLEGE OF AGRICULTURAL SCIENCES

# (1) New Undergraduate Courses:

FdSc	464	Food Packaging Systems	3 cr (3,0)
FdSc	466	Food Packaging Systems Lab	1 cr (0,3)

# (2) Undergraudate Course Deletion:

FdSc 462 Food Packagin	g Systems	4 cr (3,3)
------------------------	-----------	------------

# (continuing . . . COLLEGE OF AGRICULTURAL SCIENCES)

# (3) New Graduate Courses:

FdSc 664 Food Packaging Systems 3 cr (3,0)

FdSc 666 Food Packaging Systems Laboratory

1 cr (0,3)

# (4) Graduate Course Deletion:

FdSc 662 Food Packaging Systems

4 cr (3,3)

# (5) Curriculum Revision: Effective, Fall 1979

Agronomy (Crops and Soils)

# (ATTACHMENT 1) pgs. 82-83

#### B. COLLEGE OF ARCHITECTURE

# (1) Curriculum Revision: Effective, Fall 1979

Bachelor of Arts in Design

Bachelor of Science in Design

## (ATTACHMENT 2) pgs. 84-87

# (2) New Undergraduate Courses:

CABS	476	Natural Hazards	3 cr (3,0)
CAAR	424	Furniture Design/Industrial Product Design	3 cr (1,4)
CAAR	425	Energy Criteria on Architectural Design	3 cr (3.0)

#### (3) Undergraduate Course Changes:

change)

СААН	115	History of Art and Architecture I (Number, title, & Department designation change)	3 cr (3,0)
СААН	116	History of Art and Architecture II (Number, title, & department designaiton change)	3 cr (3,0)
СААН	215	History of Art and Architecture III	3 cr (3,0)

(Number, title, & department designation

# (COLLEGE OF ARCHITECTURE)

(conti	nued	<u>Un</u>	dergraduate Course Changes)			
	СААН	216	History of Art and Architecture IV (Number, title, and department designation change)	3	cr	(3,0)
	CAAH	303	Evolution of Visual Arts I (Department designation change)	3	cr	(3,0)
	СААН	304	Evolution of Visual Arts II (Department designation change)	3	cr	(3,0)
	СААН	403	History of Modern Architectural Movement (Title, department, & department designation change)		cr	(3,0)
(	СААН	404	Current Directions in Architecture (Department & department designation change)		cr	(3,0)
(	CAAH	405	The History of Planning and Cities (Title, description, department, number & department designation change)	3	cr	(3,0)
(	СААН	411	Directed Research in Art History (Department designation change)	3	cr	(3,0)
	СААН	412	Directed Research in Art History (Department designation change)	3	cr	(3,0)
	СААН	413	Twentieth Century Visual Arts (Department designation change)	3	cr	(3,0)
	СААН	417	Studies in the Art and Architecture of the Ancient World I (Department designation change)	3	cr	(3,0)
	СААН	418	Studies in the Art and Architecture of the Ancient World II (Department designation change)	3	cr	(3,0)
	СААН	419	Studies in the Art and Architecture of the Early Middle Ages (Department designation change).	3	cr	(3,0)
	СААН	420	Studies in the Art and Architecture of the Late Middle Ages (Department designation change)	3	cr	(3,0)
	СААН	423	Studies in the Art and Architecture of the Renaissance I (Department designation change)	3	cr	(3,0)
	СААН	424	Studies in the Art and Architecture of the Renaissance II (Department designation change)	3	cr	(3,0)

# (COLLEGE OF ARCHITECTURE)

(continued	<u>Un</u>	dergraduate Course Changes)			
СААН	427	Eighteenth Century Visual Arts (Department designation change)	3	cr	(3,0)
СААН	428	Nineteenth Century Visual Arts (Department designation change)	3	cr	(3,0)
СААН	429	Studies in the Art and Architecture of India and the Far East (Department designation change)	3	cr	(3,0)
CAAR	351	Design Studies (Number, description designation, title, and department designation change)	5	cr	(0,15)
CAAR	352	Design Studies (Number, title, and department designation change)		cr	(0,15)
CAAR	451	Design Studies Number, title, and department designation change)	5	cr	(0,15)
CAAR	452	Design Studies (Number, title, and department designation change)		cr	(0,15)
CAAR	557	Architectural Design (Number, title, and department designation change)		cr	(3,18)
CAAR	558	Architectural Design (Number, title, and department designation change)		cr	(3,18)
CAAR	421	Architectural Seminar (Department designation change)	3	cr	(3,0)
CAAR	481	Architectural Office Practice (Department designation change)	3	cr	(3,0)
CAAR	485	Health Care Delivery Systems and Health Care Facilities Seminar (Department designation change)	3	cr	(3,0)
CAAR	488	Health Care Facilities Programming Techniques (Department designation change)	3	cr	(2,3)
CAAR	490	Directed Studies (Department designation change)	1-5	cr	
CAAR	559	Terminal Project in Architecture (Department designation change)	9	cr	(1,24)

# (COLLEGE OF ARCHITECTURE)

(continued	<u>Un</u>	ndergraduate Course Changes)			
CABS	201	Building Science (Description & department designation change)	3	cr	(2,3)
CABS	202	Building Science (Description & department designation change)	3	cr	(2,3)
CABS	303	Building Science (Description & department designation change)	3	cr	(3,0)
CABS	304	Building Science (Number & department designation change)	3	cr	(3,0)
CABS	403	Building Sceince (Description & department designation change)	3	cr	(3,0)
CABS	404	Building Science (Description & department designation change)	3	cr	(3,0)
CABS	471	Architectural Structures (Description & department designation change)	3	cr	(3,0)
CABS	472	Architectural Structures (Description & department designation change)	3	cr	(3,0)
CABS	475	Building Equipment and Systems (Department designation change)	3	cr	(3,0)
CABS	490	Directed Studies (Department designation change)	1-5	cr	
CADS	151	Design Studies (Number, department designation, title, and credit change)	4	cr	(2,6)
CADS	152	Design Studies (Number, department designation, title, and credit change)	4	cr	(2,6)
CADS	251	Design Studies (Number, title, and department designation change)		cr	(0,15)
CADS	252	Design Studies (Number, department designation, & title change)	5	cr	(0,15)
CAP1	411	Introduction to City and Regional Planning (Description & department designation chan		cr	(3,0)

(COLLEGE OF ARCHITECTURE)									
(continued	<u>Un</u>	dergraduate Course Changes)							
CAP1	421	Urban Social Structure (Credit, description, & department designation change)	3 cr (3,0)						
CAP1	472	Implementation of the Local Planning Process (Description & department designation change)	3 cr (3,0)						
CAP1	473	Government and Planning Law (Description & department designation change)	3 cr (3,0)						
CAP1	483	Seminar on Planning Communication (Description & department designation change)	3 cr (3,0)						
CAVA	203	Visual Arts Studio (Description & department designation change)	3 cr (1,6)						
CAVA	205	Beginning Drawing (Description & department designation change)	3 cr (1,6)						
CAVA	207	Beginning Painting (Description & department designation change)	3 cr (1,6)						
CAVA	209	Beginning Sculpture (Description & department designation change)	3 cr (1,6)						
CAVA	211	Beginning Printmaking (Description & department designation change)	3 cr (1,6)						
CAVA	213	Beginning Photography (Description & department designation change)	3 cr (1,6)						
CAVA	215	Beginning Graphic Design (Description & department designation change)	3 cr (1,6)						
CAVA	217	Beginning Ceramics (Description & department designation change)	3 cr (1,6)						
CAVA	305	Drawing (Description & department designation change)	3 cr (1,6)						
CAVA	307	Painting (Description & department designation change)	3 cr (1,6)						

(COLLEGE OF ARCHITECTURE)										
(continued	<u>Un</u>	dergraduate Course Changes)								
CAVA	309	Sculpture (Description & department designation change)	3 cr	(1,6)						
CAVA	311	Printmaking (Description & department designation change)	3 cr	(1,6)						
CAVA	313	Photography (Description & department designation change)	3 cr	(1,6)						
CAVA	315	Graphic Design (Description & department designation change)	3 cr	(1,6)						
CAVA	317	Ceramic Arts (Description & department designation change)	3 cr	(1,6)						
CAVA	405	Drawing (Description & department designation change)	3 cr	(0,9)						
CAVA	407	Painting (Description & department designation change)	3 cr	(0,9)						
CAVA	409	Sculpture (Description & department designation change)	3 cr	(0,9)						
CAVA	411	Printmaking (Description & department designation change)	3 cr	(0,9)						
CAVA	413	Photography (Description & department designation change)	3 cr	(0,9)						
CAVA	415	Graphic Design . (Description & department designation change)	3 cr	(0,9)						
CAVA	417	Ceramic Arts (Description & department designation change)	3 cr	(0,9)						
CAVA	490	Directed Studies (Description & department designation change)	1-5 cr							

# (4) Undergraduate Course Deletions:

AAH	215	Architectural History I	3 cr	(3,0)
ААН	216	Architectural History II	3 cr	(3,0)
ААН	303	Evolution of Visual Arts I	3 cr	(3,0)
AAH	304	Evolution of Visual Arts II	3 cr	(3,0)
ААН	315	Architectural History III	3 cr	(3,0)
ААН	316	Architectural History IV	3 cr	(3,0)
ААН	411	Directed Research in Art History	3 cr	(3,0)
ААН	412	Directed Research in Art History	3 cr	(3,0)
ААН	413	Twentieth Century Visual Arts	3 cr	(3,0)
ААН	417	Studies in the Art and Architecture of the Ancient World I	3 cr	(3,0)
ААН	418	Studies in the Art and Architecture of the Ancient World II	3 cr	(3,0)
ААН	419	Studies in the Art and Architecture of the Early Middle Ages	3 cr	(3,0)
AAH	420	Studies in the Art and Architecture of the Late Middle Ages	3 cr	(3,0)
ААН	423	Studies in the Art and Architecture of the Renaissance I	3 cr	(3,0)
ААН	424	Studies in the Art and Architecture of the Renaissance II	3 cr	(3,0)
ААН	427	Eighteenth Century Visual Arts	3 cr	(3,0)
ААН	428	Nineteenth Century Visual Arts	3 cr	(3,0)
ААН	429	Studies in the Art and Architecture of India and the Far East	3 cr	(3,0)
Arch	101	Architectural Analysis	3 cr	(1,6)
Arch	102	Architectural Analysis	3 cr	(1,6)
Arch	253	Architectural Design I	5 cr	(0,15)
Arch	254	Architectural Design	5 cr	(0,15)
Arch	353	Architectural Design II	5 cr	(0,15)

(	continued	•	•	•	٠	Undergraduate	Course	Deletions)	)
---	-----------	---	---	---	---	---------------	--------	------------	---

Arch	354	Architectural Design IV	5	cr	(0,15)
Arch	403	Seminar in the Analysis and Criticism of Architectural and Town Building Works	3	cr	(3,0)
Arch	404	Current Directions in Architecture	3	cr	(3,0)
Arch	421	Architectural Seminar	3	cr	(3,0)
Arch	453	Architectural Design V	5	cr	(0,15)
Arch	454	Architectural Design VI	5	cr	(0,15)
Arch	481	Architectural Office Practice	3	cr	(3,0)
Arch	485	Health Care Delivery Systems and Health Care Facilities Seminar	3	cr	(3,0)
Arch	488	Health Care Facilities Programming	3	cr	(2,3)
Arch	490	Directed Studies	1-5	cr	
Arch	553	Architectural Design VII	9	cr	(3,18)
Arch	554	Architectural Design VIII	9	cr	(3,18)
Arch	559	Terminal Project in Architecture	9	cr	(1,24)
B1Sc	201	Building Science I	3	cr	(3,0)
BlSc	202	Building Science II	3	cr	(2,2)
B1Sc	301	Building Science III	3	cr	(3,0)
B1Sc	302	Building Science IV	3	cr	(3,0)
B1Sc	401	Building Science V	3	cr	(3,0)
B1Sc	402	Building Science VI	3	cr	(3,0)
B1Sc	471	Architectural Structural Seminar	3	cr	(3,0)
B1Sc	472	Architectural Structural Seminar	3	cr	(3,0)
B1Sc	473	Architectural Structural Seminar	3	cr	(3,0)
B1Sc	475	Building Equipment and Systems	3	cr	(3,0)
B1Sc	490	Directed Studies	1-5	cr	
CRP	411	Introduction to City and Regional Planning	3	cr	(3,0)

(continued .	U	Undergraduate Course Deletions)	
CRP	421	Urban Social Structure	3 cr (3,0)
CRP	441	History of Planning	3 cr (3,0)
CRP	472	Implementation of the Local Planning Process	3 cr (3,0)
CRP	473	Government and Planning Law	3 cr (3,0)
CRP	483	Seminar on Planning Communication	1-3 cr (1-3,0)
Vis	203	Visual Arts Studio	3 cr (1,6)
Vis	205	Beginning Drawing	3 cr (1,6)
Vis	207	Beginning Painting	3 cr (1,6)
Vis	209	Beginning Sculpture	3 cr (1,6)
Vis	211	Beginning Printmaking	3 cr (1,6)
Vis	213	Beginning Photography	3 cr (1,6)
Vis	215	Beginning Graphic Design	3 cr (1,6)
Vis	217	Beginning Ceramics	3 cr (1,6)
Vis	305	Drawing	3 cr (1,6)
Vis	306	Drawing	3 cr (1,6)
Vis	307	Painting	3 cr (1,6)
Vis	308	Painting	3 cr (1,6)
Vis	309	Sculpture	3 cr (1,6)
Vis	310	Sculpture	3 cr (1,6)
Vis	311	Printmaking	3 cr (1,6)
Vis	312	Printmaking	3 cr (1,6)
Vis	313	Photography	3 cr (1,6)
Vis	314	Photography	3 cr (1,6)
Vis	315	Graphic Design	3 cr (1,6)
Vis	316	Graphic Design	3 cr (1,6)
Vis	317	Ceramic Arts	3 cr (1,6)
Vis	318	Ceramic Arts	3 cr (1,6)

(continued Undergraduate Course Deletions)								
	3 cr (0,9)							
	Vis	406	Drawing	3 cr (0,9)				
	Vis	407	Painting	3 cr (0,9)				
	Vis	408	Painting	3 cr (0,9)				
	Vis	409	Sculpture	3 cr (0,9)				
	Vis	410	Sculpture	3 cr (0,9)				
	Vis	411	Printmaking	3 cr (0,9)				
	Vis	412	Printmaking	3 cr (0,9)				
	Vis	413	Photography	3 cr (0,9)				
	Vis	414	Photography	3 cr (0,9)				
	Vis	415	Graphic Design	3 cr (0,9)				
	Vis	416	Graphic Design	3 cr (0,9)				
	Vis	417	Ceramic Arts	3 cr (0,9)				
	Vis	418	Ceramic Arts	3 cr (0,9)				
	Vis	490	Directed Studies	1-5 cr				
(5)	New Grad	uate Co	urses:					
	CAAR	624	Furniture Design	3 cr (1,4)				
	CAAR	625	Energy Criteria on Architectural Design	3 cr (3,0)				
	CAAR	801	Professional Practice Seminar	3 cr (3,0)				
	CABS	676	Natural Hazards	3 cr (3,0)				
	CAP1	884	Public Services and Facilities Planning	3 cr (3,0)				
	CAP1	885	City and Regional Financial Planning	3 cr (3,0)				
(6)	Graduat	e Cours	e Changes:					
	СААН	603	History of Modern Architectural Movement (Title, department and department designation change)	3 cr (3,0)				

# (continued . . . .Graduate Course Changes)

(Continued	• • • • • • • • • • • • • • • • • • • •	duate course changes)		
СААН	604	Current Directions in Architecture (Department & department designation change)	3 cr	(3,0)
СААН	605	The History of Planning and Cities (Title, description, department designation change)	3 cr	(3,0)
СААН	611	Directed Research in Art History (Department designation change)	3 cr	(3,0)
СААН	612	Directed Research in Art History (Department designation change)	3 cr	(3,0)
СААН	613	Twentieth Century Visual Arts (Department designation change)	3 cr	(3,0)
СААН	617	Studies in the Art and Architecture of the Ancient World I (Department designation change)	3 cr	(3,0)
СААН	618	Studies in the Art and Architecture of the Ancient World II (Department designation change)	3 cr	(3,0)
СААН	619	Studies in the Art and Architecture of the Early Middle Ages (Department designation change)	3 cr	(3,0)
СААН	620	Studies in the Art and Architecture of the Late Middle Ages (Department designation change)	3 cr	(3,0)
СААН	623	Studies in the Art and Architecture of the Renaissance I (Department designation change)	3 cr	(3,0)
СААН	624	Studies in the Art and Architecture of the Renaissance II (Department designation change)	3 cr	(3,0)
СААН	627	Eighteenth Century Visual Arts (Department designation change)	3 cr	(3,0)
СААН	628	Nineteenth Century Visual Arts (Department designation change)	3 cr	(3,0)
СААН	629	Studies in the Art and Architecture of India and the Far East (Department designation change)	3 cr	(3,0)
СААН	815	Art and Architectural History Seminar I (Department designation change)	3 cr	(3,0)

(conti	nued	<u>Gr</u>	aduate Course Changes)		
	CAAH	816	Art & Architectural History Seminar II (Department designation change)	3 cr	(3,0)
	CABS	671	Architectural Structures (Description & department designation change)	3 cr	(3,0)
	CABS	672	Architectural Structures (Description & department designation change)	3 cr	(3,0)
	CABS	675	Building Equipment and Systems (Department designation change)	3 cr	(3,0)
(	CAAR	681	Architectural Office Practice (Department designation change)	3 cr	(3,0)
1	CAAR	685	Health Care Delivery Systems and Health Care Facilities Seminar (Department designation change)	3 cr	(3,0)
	CAAR	688	Health Care Facilities Programming Techniques (Department designation change)	3 cr	(2,3)
	CAAR	853	Architectural Design (Title & department designation change)	6-9 cr	(0,18-27)
	CAAR	854	Architectural Design (Title & department designation change)	6-9 cr	(0,18-27)
	CAAR	857	Architectural Design (Title & department designation change)	9 cr	(0,27)
	CAAR	858	Preliminary Thesis or Terminal Project (Title & department designation change)	3 cr	(1,6)
	CAAR	859	Terminal Project (Title & department designation change)	1-12 cr	(0,3-36)
	CAAR	886	Health Care Facilities Components & Functions (Title & department designation change)	3 cr	(2,3)
	CAAR	890	Directed Studies (Title & department designation change)	1-5 cr	
	CAAR	891	Architectural Thesis (Title & department designation change)	1-12 cr	
	CAP1	611	Introduction to City and Regional Planning (Description & department designation change)	3 cr	(3,0)

(continued	<u>Gr</u>	aduate Course Changes)			
CAP1	621	Urban Social Structure (Credit, description, & department designation change)	3	cr	(3,0)
CAP1	672	<pre>Implementation of the Local Planning    Process (Description &amp; department designation change)</pre>	3	cr	(3,0)
CAP1	673	Government and Planning Law (Description & department designation change)	3	cr	(3,0)
CAP1	683	Seminar on Planning Communication (Description & department designation change)	3	cr	(3,0)
CAP1	812	City & Regional Planning Theory (Description & department designation change)	3	cr	(3,0)
CAP1	821	Intergovernmental Relations in the Planning Process 1  (Description & department designation change)		cr	(1-3,0)
CAP1	822	Urban Systems and Designs (Description & department designation change)	3	cr	(3,0)
CAP1	853	Comparative Studies in Planning Methods & Analysis (Title, description, & department designation change)	3	cr	(0,9)
CAP1	854	Planning & Built Form Studies (Title, description, & department designation change)	3	cr	(0,9)
CAP1	863	Urban & Metropolitan Planning Studies Studio 3. (Title, description, & department designation change)	-6	cr	(0,9-18)
CAP1	865	Advanced Landuse & Built Form Studies Studio (Title & department designation change)	<b>-</b> 9	cr	(0,9-27)
CAP1	871	Seminar on Planning & Management of Change (Description & department designation change		cr	(3,0)

(continued		Graduate Course Changes)			
CAP1	881	Quantitative Methods for Urban Planning & Policy (Title, description, & department designation change)	3	cr	(3,0)
CAP1	882	Seminar in Mathematical Modeling for Urban & Regional Planning (Title, description, & department designation change)	3	cr	(0,3-0)
CAP1	890	Directed Studies in City & Regional Planning (Department designation change)	1-5	cr	(0,1-5)
CAP1	891	Planning Thesis (Department designation change)	3-9	cr	(0,0)
CAP1	893	City & Regional Planning Internship (Department designation change)	6	cr	(0,6)
CAVA	605	Drawing (Description & department designation change)	3	cr	(0,9)
CAVA	607	Painting (Description & department designation change)	3	cr	(0,9)
CAVA	609	Sculpture (Description & department designation change)	3	cr	(0,9)
CAVA	611	Printmaking (Description & department designation change)	3	cr	(0,9)
CAVA	613	Photography (Description & department designation change)	. 3	cr	(0,9)
CAVA	615	Graphic Design (Description & department designation change)	3	cr	(0,9)
CAVA	617	Ceramic Arts (Description & department designation change)	3	cr	(0,9)
CAVA	690	Directed Studies (Description & department designation change)	1-5	cr	
CAVA	850	Visual Arts Studio (Department designation change)	3	cr	(0,9)

(cor	ntinued	<u>Gr</u>	raduate Course Change)			
	CAVA	851	Visual Arts Studio (Department designation change)	3-6	cr	
	CAVA	870	Visual Arts Studio (Department designation change)	6	cr	(1,15)
	CAVA	871	Visual Arts Studio (Department designation change)	3-6	cr	
	CAVA	880	Visual Arts Studio (Department designation change)	3-15	cr	
	CAVA	891	Master's Research (Department designation change)	3-15	cr	
(7)	Graduate	Course	Deletions:			
	AAH	611	Directed Research in Art History	3	cr	(3,0)
	ААН	612	Directed Research in Art History	3	cr	(3,0)
	AAH	613	Twentieth Century Visual Arts	3	cr	(3,0)
	ААН	617	Studies in the Art of Architecture of the Ancient World I		cr	(3,0)
	ААН	618	Studies in the Art of Architecture of the Ancient World II		cr	(3,0)
	ААН	619	Studies in the Art of Architecture of the Early Middle Ages		cr	(3,0)
	ААН	620	Studies in the Art & Architecture of the Late Middle Ages	3	cr	(3,0)
	ААН	623	Studies in the Art & Architecture of the Renaissance I	3	cr	(3,0)
	ААН	624	Studies in the Art & Architecture of the Renaissance II	3	cr	(3,0)
	AAH	627	Eithteenth Century Visual Arts	3	cr	(3,0)
	ААН	628	Nineteenth Century Visual Arts	3	cr	(3,0)
	AAH	629	Studies in the Art and Architecture of India and the Far East	3	cr	(3,0)
	AAH	815	History Seminar I	3	cr	(3,0)
	AAH	816	History Seminar II	3	cr	(3,0)

(continued	•	Graduate	Course	Deletions)
------------	---	----------	--------	------------

(con	tinued	· · Gra	addate Course Deletions)			
	Arch	603	Seminar in the Analysis and Criticism of Architectural & Town Building Works	3	cr	(3,0)
	Arch	604	Current Directions in Architecture	3	cr	(3,0)
	Arch	681	Architectural Office Practice	3	cr	(3,0)
	Arch	685	Health Care Delivery Systems and Health Care Facilities Seminar	3	cr	(3,0)
	Arch	688	Health Care Facilities Programming	3	cr	(2,3)
	Arch	853	Architectural Studies	6-9	cr	(0,18-27)
	Arch	854	Architectural Studies	6-9	cr	(0,18-27)
	Arch	857	Architectural Studies	6-9	cr	(0,27)
	Arch	858	Preliminary Thesis or Terminal Project	3	cr	(1,6)
	Arch	859	Terminal Project	1-12	cr	
	Arch	886	Health Care Facilities Components and Functions	3	cr	(2,3)
	Arch	890	Directed Studies	1-5	cr	
	Arch	891	Architectural Thesis	1-12	cr	
	B1Sc	671	Architectural Structural Seminar	3	cr	(3,0)
	BlSc	672	Architectural Structural Seminar	3	cr	(3,0)
	BlSc	673	Architectural Structural Seminar	3	cr	(3,0)
	B1Sc	675	Building Equipment and Systems	3	cr	(3,0)
	CRP	611	Introduction to City and Regional Planning	3	cr	(3,0)
	CRP	621	Urban Social Structure	1-3	cr	(1-3,0)
	CRP	641	History of Planning	3	cr	(3,0)
	CRP	672	Implementation of the Local Planning Process	3	cr	(3,0)
	CRP	673	Government and Planning Law	3	cr	(3,0)
	CRP	683	Seminar on Planning Communication	2	cr	(2,0)
	CRP	812	City and Regional Planning Theory	3	cr	(3,0)

(continued	(	Graduate Course Deletions)	
	_		
CRP	821	Intergovernmental Relations in the Planning Process	1-3 cr (1-3,0)
CRP	822	Urban Systems and Design	3 cr (3,0)
CRP	853	Introduction to Planning Studio	3 cr (0,9)
CRP	854	Planning Studio II	3 cr (0,9)
CRP	863	Planning Studio III	3-6 cr (0,9-18)
CRP	865	Planning Studio IV	3-9 cr (0,9-27)
CRP	871	Seminar on Planning & Management of Change	3 cr (3,0)
CRP	881	Seminar in Quantitative Methods I	3 cr (3,0)
CRP	882	Seminar in Quantitative Methods II	3 cr (3,0)
CRP	884	Public Facilities & Capital Improvement Planning	3 cr (3,0)
CRP	890	Directed Studies in City & Regional Planning	1-5 cr
CRP	891	Planning Thesis	3-9 cr
CRP	893	City & Regional Planning Internship	6 cr (0,6)
Vis	605	Drawing	3 cr (0,9)
Vis	606	Drawing	3 cr (0,9)
Vis	607	Painting	3 cr (0,9)
Vis	608	Painting	3 cr (0,9)
Vis	609	Sculpture	3 cr (0,9)
Vis	610	Sculpture	3 cr (0,9)
Vis	611	Printmaking	3 cr (0,9)
Vis	612	Printmaking	3 cr (0,9)
Vis	613	Photography	3 cr (0,9)
Vis	614	Photography	3 cr (0,9)
Vis	615	Graphic Design	3 cr (0,9)
Vis	616	Graphic Design	3 cr (0,9)

(continued	٠		Graduate	Course	Deletions)
-					

Vis	617	Ceramic Arts	3	cr	(0,9)
Vis	618	Ceramic Arts	3	cr	(0,9)
Vis	690	Directed Studies	1-5	cr	
Vis	850	Visual Arts Studio	3	cr	(0,9)
Vis	851	Visual Arts Studio	3-6	cr	
Vis	870	Visual Arts Studio	6	cr	(1,15)
Vis	871	Visual Arts Studio	3-6	cr	
Vis	880	Visual Arts Studio	3-15	cr	
Vis	891	Visual Arts Thesis	3-15	cr	

### C. COLLEGE OF EDUCATION

# Program in Special Education at the Master Level

Proposal submitted by Robert C. Edwards, President

#### D. COLLEGE OF ENGINEERING

# (1) New Undergraduate Courses:

AgE	472	Research II	1 cr	(0,3)
E&CE	203	Electrical Circuits Laboratory I	1 cr	(0,2)
E&CE	303	Electrical Circuits Laboratory II	1 cr	(0,2)
E&CE	309	Electrical Engineering Laboratory I	1 cr	(0,2)
E&CE	310	Electrical Engineering Laboratory II	1 cr	(0,2)
E&CE	322	Electronics for Computer Engineers	3 cr	(3,0)
E&CE	325	Electronics Laboratory I	1 cr	(0,2)
E&CE	326	Electronics Lab II	1 cr	(0,2)
E&CE	402	Engineering Projects	1 cr	(0,2)
E&CE	417	Software Design	3 cr	(3,0)
E&CE	438	Computer Communications	3 cr	(3,0)

(con	tinued	<u>Nev</u>	v Undergraduate Courses)		
	E&CE	441	Theory of Sequential Machines	3 c	r (3,0)
	E&CE	463	Microcomputers II	3 с	r (2,2)
4.5					
(2)	Underg	raduate Cou	rse Changes:		
	AgE	422	Soil and Water Resources Engineering II (Prerequisite changes)	3 c	r (2,3)
	AgE	442	Agricultural Process Engineering (Prerequisite change)	3 с	r (2,3)
	AgE	465	Engineering Properties of Biological Materials (Prerequisite change)	2 c	r (2,3)
	AgE	471	Research I (Title, description & prerequisite changes)	1 c	r (0,3)
	ChE	301	Unit Operations Theory I (Prerequisite changes)	3 с	r (3,0)
	ChE	306	Unit Operations laboratory I (Credit & description change)	2 c	r (1,3)
	ChE 3	331/н331	Chemical Engineering Thermodynamics I (Prerequisite change)	3 c	r (3,0)
	ChE.	353	Process Dynamics (Number change)	3 c	r (3,0)
	ChE 4	401/H401	Transport Phenomena (Prerequisite & description change)	3 с	r (3,0)
	ChE	407	Unit Operations Laboratory II (Credit & description change)	3 с	r (1,6)
	CE	205	Civil Engineering Computer Applications (Credit, title, & description change)	3 с	r (2,2)
	CE	320	Introduction to Construction Materials (Credit, title, and description change)	3 с	r (2,3)
	CE	421	Hydrology (Credit, title, description, & department change)	3 c	r (3,0)
	CE	424	Introduction to Construction Engineering (Credit & title change)	3 c	r (3,0)

(continu	ied	. Undergraduate Course Changes)			
E& C	E 201	Logic and Computing Devices (Theory-Lab hours change)	3	cr	(1,4)
E&C	E 202	Electric Circuits I (Theory-Lab hours change)	3	cr	(3,0)
E& C	E 250	Principles of Digital Computer Systems (Prerequisite change)	3	cr	(3,0)
E&C	E 299	Digital Computation (Prerequisite & description change)	2	cr	(1,2)
E &C	E 301	Electric Circuits II (Credit change)	2	cr	(2,0)
E&C	E 307	Basic Electrical Engineering (Credit & description change)	2	cr	(2,0)
E&C	E 308	B Electronics and Electromechanics (Credit change)	2	cr	(2,0)
E&C	E 317	7 Electrical Systems Analysis II (Prerequisite change)	3	cr	(3,0)
E& C	E 320	) Electronics I (Credit & description change)	2	cr	(2,0)
É&C	E 321	Electronics II (Credit & description)	2	cr	(2,0)
E& C	E 411	Electrical Systems (Credit change)	1	cr	(0,2)
E&C	E 422	Electronics III (Theory-Lab hours change)	3	cr	(3,0)
E& C	SE 425	Microcomputers I (Title change)	3	cr	(2,2)
E&C	SE 426	Digital Computer Design (Description change)	3	cr	(3,0)
ME	302	Dynamic Systems and Control (Title, description, & prerequisite change)	3	cr	(3,0)
ME	312	Engineering Thermodynamics II (Description change)	3	cr	(3,0)
ME	404	Control Systems Design (Title & description change)	3	cr	(2,2)
ME	406	Computer Control of Machines & Processes (Title, description, department, & number change)	3	cr	(2,2)

(cor	ntinued .	Uno	dergraduate Course Changes)		
	ME	409	Design of Machine Elements (Description change)	3 cr	(3,0)
	ME	412	<pre>Introduction to Compressible Flow and    Turbomachinery (Title, description, &amp; prerequisite change)</pre>	3 cr	(3,0)
	SE	450	Introduction to Systems Engineering (Prerequisite change)	3 cr	(3,0)
	SE	452	Reliability Engineering (Prerequisite change)	3 cr	(3,0)
•	SE	480	Introduction to Methods of Operations Research (Prerequisite change)	3 cr	(3,0)
	SE	486	Work-Flow Systems and Control (Prerequisite change)	3 cr	(3,0)
(3)	Undergra	ıduate (	Course Deletions:		
	AC	410	Introduction to Digital Control	3 cr	(3,0)
	ChE	202	Stagewise Separation Operations	4 cr	(3,1)
	ChE	352	Chemical Enginnering Systems Analysis	4 cr	(3,3)
	Ch E.	453	Process Dynamics	3 cr	(3,0)
(4)	New Grad	luate Co	purses:		
	E&CE	615	Information Theory	3 cr	(3,0)
	E&CE	617	Software Design	3 cr	(3,0)
	E&CE	638	Computer Communications.	3 cr	(3,0)
	E&CE .	641	Theory of Sequential Machines	3 cr	(3,0)
	E&CE	663	Microcomputers II	3 c1	(2,2)
	CE	814	Traffic Flow Theory	3 cr	(3,0)
	CE	840	Construction of Nuclear Power Plants	3 cr	(2,3)
	E&CE	803	Linear Control Theory and Design	3 cr	(3,0)
	E&CE	804	Optional Control Theory	3 cr	(3,0)
	E&CE	817	Power System Transients	3 cr	(3,0)

(cor	ntinued .	<u>N</u>	ew Graduate Courses)			
	E&CE	841	Distributed Computing and Networks	3	cr	(3,0)
	E& CE	842	Advanced Computer Architecture	3	cr	(3,0)
	E&CE	843	Computer Graphics	3	cr	(3,0)
	E&CE	845	Computer System Design and Operation	3	cr	(3,0)
	ESE	849	Environmental Systems Engineering Chemistry Lab II	2	cr	(0,6)
	MatE	824	Extractive Metallurgy	3	cr	(3,0)
	ME	609	Design of Machine Elements	3	cr	(3,0)
	ME	701	Applications of Engineering Analysis	3	cr	(3,0)
	ME	806	Heat and Mass Transfer II	3	cr	(3,0)
	SE	703	Engineering Project Operations	3	cr	(3,0)
	SE	861	Nonlinear Programming and Methods of Search	3	cr	(3,0)
	SE	880	Advanced Methods of Operations Research	3	cr	(3,0)
(5)	Graduate	Course	Changes:			
(5)	Graduate ChE	Course 601	Changes:  Transport Phenomena (Prerequisites & description change)	3	cr	(3,0)
(5)			Transport Phenomena			(3,0)
(5)	ChE	601	Transport Phenomena (Prerequisites & description change)  Hydrology (Credit, title, description, department, &	3	cr	
(5)	ChE	601	Transport Phenomena (Prerequisites & description change)  Hydrology (Credit, title, description, department, & number change)  Construction Project Modeling and Control	3	cr	(3,0)
(5)	ChE CE	601 621 835	Transport Phenomena (Prerequisites & description change)  Hydrology (Credit, title, description, department, & number change)  Construction Project Modeling and Control (Title & description change)  Flow in Open Channels	3 3	cr cr	(3,0)
(5)	ChE CE CE	601 621 835 846	Transport Phenomena (Prerequisites & description change)  Hydrology (Credit, title, description, department, & number change)  Construction Project Modeling and Control (Title & description change)  Flow in Open Channels (Department & number change)  Electrical Systems	3 3 1	cr cr cr	(3,0) (2,3) (3,0)
(5)	ChE CE CE E&CE	601 621 835 846 611	Transport Phenomena (Prerequisites & description change)  Hydrology (Credit, title, description, department, & number change)  Construction Project Modeling and Control (Title & description change)  Flow in Open Channels (Department & number change)  Electrical Systems (Credit change)  Electronics III	3 3 1	cr cr cr	(3,0) (2,3) (3,0) (0,2)

(con	tinued .	<u>G</u> :	raduate Course Changes)			
	ME	604	Control Systems Design (Title & description change)	3	cr	(2,2)
	ME	606	Computer Control of Machines and Processes (Title, description, department, & number change)	3	cr	(2,2)
	ME	801	Foundation of Fluid Mechanics (Department change)	3	cr	(3,0)
	ME	805	Heat and Mass Transfer I (Title, description, & number change)	3	cr	(3,0)
	ME	812	Experimental Fluid Mechanics (Department and number change)	3	cr	(3,0)
	ME	814	Turbulent Boundary Layer (Department change)	3	cr	(3,0)
	ME	820	Modern Control Engineering (Title, description, department, and number change)	3	cr	(3,0)
	ME	821	Advanced Control Engineering (Title, description, department, and number change)	3	cr	(3,0)
	SE	650	Introduction to Systems Engineering (Prerequisite change)	3	cr	(3,0)
	SE	652	Reliability Engineering (Prerequisite change)	3	cr	(3,0)
	SE	680	Introduction to Methods of Operations Research (Prerequisite change)	3	cr	(3,0)
	SE	686	Work-Flow Systems and Control (Prerequisite change)	3	cr	(3,0)
(6)	Graduate	Course	Deletions:			
	AC	610	Introduction to Digital Control	3	cr	(3,0)
	AC	810	Modeling and Control of Engineering Systems	3	cr	(3,0)
	AC	811	Modern Control THeory	3	cr	(3,0)
	AC	815	Nonlinear Controls	3	cr	(3,0)
	AC	820	Digital Control I	3	cr	(3,0)
	AC	910	Adaptive and Optimal Control	3	cr	(3,0)

```
(COLLEGE OF ENGINEERING)
```

(continued			Graduate Course Deletions	3)

ChE	653	Process Dynamics	3 cr (3,0)
FM	801	Foundation of Fluid Mechanics	3 cr (3,0)
FM	811	Experimental Fluid Mechanics	3 cr (3,0)
FM	812	Theory of Incompressible Ideal Flow	3 cr (3,0)
FM	814	Turbulent Boundry Layer	3 cr (3,0)
FM	816	Flow in Open Channels	3 cr (3,0)
FM	817	Non-Newtonian Flow	3 cr (3,0)
ME	809	Thermal Systems	3 cr (3,0)

(7) Curriculum Revisions: Effective, Fall 1979

Electrical & Computer Engineering

#### (ATTACHMENT 3) p. 88

Civil Engineering

#### (ATTACHMENT 4) p. 89

Agricultural Engineering

### (ATTACHMENT 5) p. 90

Chemical Engineering

### (ATTACHMENT 6) p. 91

Mechanical Engineering

#### (ATTACHMENT 7) p. 92

B.S. in Ceramic Engineering

#### (ATTACHMENT 8) p. 93

#### COLLEGE OF FOREST & RECREATION RESOURCES Ε.

# Undergraduate Course Changes:

RPA	206	Leisure Programs II (Description change)	1 cr (0,3)
RPA	207	Leisure Programs III (Description change)	1 cr (0,3)

#### F. COLLEGE OF LIBERAL ARTS

#### (1) New Undergraduate Courses:

Engl	321	Reporting for the News Media	3 cr (3,0)
Eng1	336	Advanced Studies in Film	3 cr (2,3)

#### (2) Undergraduate Course Changes:

Eng1	204/H204	Survey of English Literature II (Description change)	3	cr	(3,0)
Engl	206/н206	Survey of American Lieterature II (Description change)	3	cr	(3,0)
Eng1	335	Film (Department & number change)	3	cr	(3,0)

### (3) Undergraduate Course Deletion:

Hum 303 Film 3 cr (3,0)

#### (4) Curriculum Revision: Effective, Fall 1979

Minor Concentration in Psychology

#### Change description in catelog to read:

"A minor concentration in Psychology requires Psych 201, 263, 265, and 15 semester credits from 300-400 level Psychology courses. Sociology majors may be excused from Psych 263 and 265."

# (5) The Double Major Across College Lines for the Bachelor of Arts Degree:

By arrangement between the Dean of the College of Liberal Arts and the Dean of another college offering a Bachelor of Arts curriculum, a double major across college lines may be elected.

#### G. COLLEGE OF SCIENCES

#### (1) New Undergraduate Courses:

Math	150	Introduction to the Mathematical Sciences	1 cr (1,0)
Astr	401	Stellar Atmospheres	3 cr (3,0)
Astr	402	Stellar Interiors and Evolution	3 cr (3,0)

(COLLEGE OF	SCIENCES)
-------------	-----------

(cor	ntinued .	<u>N</u>	ew Undergraduate Courses)			
	Astr	403	Galactic Structure	3	cr	(3,0)
(2)	Undergra	udate C	ourse Change:			
	Astr	412	Practical Astronomy (Title and description change)	3	cr	(3,0)
(3)	Undergra	duate C	ourse Deletions:			
	Astr	407	Introduction to Astrophysics	3	cr	(3,0)
	Astr	408	Introduction to Galactic Astronomy	3	cr	(3,0)
(4)	New Grad	uate Co	urses:			
	Astr	601	Stellar Atmospheres	3	cr	(3,0)
	Astr	602	Stellar Interiors and Evolution	3	cr	(3,0)
	Astr	603	Galactic Structure	3	cr	(3,0)
(5)	Graduate	Course	Changes:			
	Astr	612	Practical Astronomy (Title and description change)	3	cr	(3,0)
	Ch	700	Physical Science in Elementary School - Chemistry (Description and prerequisite change)	3	cr	(2,3)
	Ch	701	Review of General Chemistry (Prerequisite changes)	3	cr	(3,0)
	Ch	702	Chemistry for High School Teachers (Prerequisite changes)	3	cr	(2,3)
	Ch	703	Special Problems in Chemistry, for Elementar & Secondary School Teachers (Credit, title, & prerequisite change)		cr	(2-6,6-0)
(6)	Graduate	Course	Deletions:			
	Astr	607	Introduction to Astrophysics	3	cr	(3,0)
	Astr	608	Introduction to Galactic Astronomy	3	cr	(3,0)

(continued . . . COLLEGE OF SCIENCES)

### (7) Curriculum Revisions: Effective, Fall 1979

B. S. in Mathematical Sciences

(ATTACHMENT 9) p. 94

Applied Mathematics Option

(ATTACHMENT 10) pgs. 95-96

Actuarial Science Option

(ATTACHMENT\_11) p. 97

Biology Option

(ATTACHMENT 12) p. 98

Computer Science Option

(ATTACHMENT 13) P. 99

Chemistry Option

Managerial Science Option

Physics Option

Applied Mathematics Option

Statistics Option

Operations Research Option

Psychology Option

(ATTACHMENT 14) p. 100

B. A. in Mathematical Sciences

(ATTACHMENT 15) p. 101

B. S. in Physics - Astrophysics Option

Change	From:		
ASTR	301	General Astronomy	3 cr (3,0)
ASTR	302	General Astronomy	3 cr (3,0)
ASTR	407	Introduction to Astrophysics	3 cr (3,0)
ASTR	408	Introduction to Galactic Astrophysics	$\frac{3}{12}$ cr (3,0)

### (COLLEGE OF SCIENCES)

(continued . . . Curriculum Revision: Effective, Fall 1979)

### Change to:

ASTR 301 General Astronomy

3 cr (3,0)

ASTR 302 General Astronomy

3 cr (3,0)

Two 400 level courses in Astronomy

 $\frac{6}{12}$ 

Action: APPROVED

E. N. Tyndall, Secretary

### (ATTACHMENT 1)

#### AGRONOMY (CROPS AND SOILS) CURRICULUM

Effective: Fall 1979

### FRESHMAN

First Semester	Second Semester
AGRIC 103 Intro. to Animal Ind. 3 (2,3) or AGRIC 104 Intro. to Plant Sci. 3 (2,3) CH 101 General Chemistry 4 (3,3) ENGL 101 English Composition 3 (3,0) MATH 105 Algebra and Trig. 2 5 (5,0)	AG EC 202 Agric. Economics 3 (3,0)  AGRIC 104 Intro. to Plant Sci. 3 (2,3)  or AGRIC 103 Intro. to Animal  Ind. 3 (2,3)  CH 102 or 112 General Chemistry 4 (3,3)  ENGL 102 English Composition 3 (3,0)  Social Science Elective 4 3  16
SOPHOMORE	
BIOL 103 General Biology I 3 (3,0) BIOL 105 General Biology Lab I 1 (0,3) CH 223 Organic Chemistry 3 (3,0) and CH 227 Organic Chem. Lab. 1 (0,3) or BIOCH 210 Elem. Biochem. 4 (3,3) or CH 201 General Chemistry 4 (3,3) PHYS 122 Phys. with Cal. I 3 (2,2) or PHYS 207 General Phys. I 4 (3,2) Literature Requirement 3 (3,0) Elective 3-4	AGRON 202 Soils 3 (2,2) BIOL 104 General Biology II 3 (3,0) BIOL 106 General Biol. Lab II 1 (0,3) ENGL 231 Intro. to Journalism 3 (3,0) or ENGL 301 Pub. Speaking 3 (3,0) or ENGL 304 Adv. Comp. 3 (3,0) Minor 3 6 Elective 2
18	18

#### JUNIOR

AGRON 301 Fertilizers 5 3 (3, AGRON 421 Field CropsMonocots and Specialty Crops 5 3 (3, BOT 421 Plant Physiology 4 (3, GEN 302 Genetics 4 (3, MICRO 305 General Microbiology 4 (3, or PL PA 401 Plant Pathology 3 (2,	AGRON 423 Field Crops—Forages <sup>5</sup> 3 (3,0) 0) AGRON 424 Adv. Field Crops Lab. 1 (0,2) 3) AGRON 475 Soil Phys. and Chem. 3 (2,3) 3) Minor <sup>3</sup> 3 Social Science Elective 3 3)
18-17 SENIOR	16
AGRON 403 Soil Genesis and Classification 2 (1, AGRON 407 Prin. of Weed Control 3 (2, AGRON 455 Seminar 1 (1,	7

3(2,3)

4

3-4

 $16 - \overline{17}$ 

Seminar

AGRON 453 Soil Fert. Lab.

TOTAL SEMESTER HOURS = 134

AGRON 456

Minor<sup>3</sup>

Elective

AGRON 452 Soil Fert. and Mgt. 2 (2,0)

Effective: Fall 1979

1(0,3)

1 (1,0)

 $\frac{5}{17}$ 

#### Agronomy (Crops and Soils) Curriculum

AGRON 490 Soil Organisms in

Crop Production

Minor

Elective

<sup>1</sup>To be selected from the following: Engl 202, 203, 204, 205, 206, 207, 208, 209.

<sup>&</sup>lt;sup>2</sup>Students who make a satisfactory score on the Mathematics Test, Level II (Standard) may schedule other mathematics courses or mathematics-related courses in lieu of Math 105. (See adviser for electives.)

 $<sup>^{3}\</sup>mathrm{See}$  adviser for available minors and course requirements.

<sup>&</sup>lt;sup>4</sup>To be selected from the following: Ed 302, Geog 101, 301, 302, Hist 101, 102, 172 173, Phil 201, 325, Pol Sc 201, Psych 201, RS 301, 401, Soc 201.

<sup>&</sup>lt;sup>5</sup>Science minors select 13 credits from these courses. Students other than Sceince minors select 6 courses from the following: Agron 301, 403, 405, 407, 423, 425, 475, 409.

#### (ATTACHMENT 2)

### SACHELOR OF ARTS IN DESIGN

#### BACHELOR OF SCIENCE IN DESIGN

Effective: Fall 1979

### FRESHMAN

First Semester	Second Semester
CADS 151 Design Studies 4(2,6) 4(2,6) (CAAH 115 History of Arch I 3(3,0) 3(3,0) ENGL 101 English Comp. 3(3,0) 3(3,0) MATH 106 Cal of One Var I 4(4,0) 4(4,0) PHYS 115 Classical Phys I 3(3,0) Modern Language 4(3,1)	CADS 152 Design Studies 4(2,6) 4(2,6) CAAH 116 History of Arch II 3(3,0) 3(3,0) ENGL 102 English Comp. 3(3,0) 3(3,0) MATH 301 Stat. Theo. & Meth. 3(3,0) 3(3,0) PHYS 116 Classical Physics II 3(3,0) Modern Language 4(3,1) 17 16
SOPHOMORE	1, 10
CADS 251 Design Studies 5(0,15) 5(0,15) CAAH 215 History of Arch III 3(3,0) 3(3,0) CABS 201 Bldg. Science 3(2,3) 3(2,3) Visual Arts (1) 3(1,6) 3(1,6) Econ 201 Prin. of Econ.(2) 3(3,0) Modern Language 3(3,0) 17 17	CADS 252 Design Studies 5(0,15) 5(0,1 CAAH 216 History of Arch IV 3(3,0) 3(3,0 CABS Bldg. Science 3(2,3) 3(2,3 Visual Arts (1) 3(1,6) 3(1,6 Econ 202 Prin. of Econ.(2) 3(3,0 Modern Language 3(3,0) 17 17

<sup>(1)</sup> CAVA 205, 207, 209, 211, 213, 215, 217

<sup>(2)</sup> Econ 200 and a 300 level Economics course may be substituted for Econ 201 and Econ 202.

(continued . . . ATTACHMENT 2)

Bachelor of Arts in Design
Bachelor of Science in Design

Effective: Fall 1979

	JUNIOR		
First Semester	·	Second Semester	
CAAR 351 Design Studies Major Studies Literature Requirement (1) Elective	6	CAAR 352 Design Studies Major Studies Literature Requirement (1) Elective	5 (0,15) 6 3 (3,0) 3 17
CAAR 451 Design Studies	SENIOR 5 (0,15)	_	5 (0,15)
Major Studies Elective	9 3 17	Major Studies Elective	$\frac{9}{3}$

TOTAL SEMESTER HOURS, BA IN DESIGN = 137 TOTAL SEMESTER HOURS, BS IN DESIGN = 135

<sup>(1)</sup> English 202, 203, 204, 205, 206, 207, 208, 209.

(continued . . . ATTACHMENT 2)

Bachelor of Arts in Design
Bachelor of Science in Design

Effective: Fall 1979

#### MAJOR STUDIES

The undergraduate programs in Design in the College of Architecture are preparatory to professional study in Architecture, City and Regional Planning, Visual Arts and Landscape Architecture.

Major studies in the Junior and Senior years consists of 20 credits of Design Studies and 30 credits of coursework to be designated for each professional area.

#### MAJOR STUDIES EXAMPLES

Architecture (General Option)

20 credits of Design Studies with emphasis in Architectural Design 15 credits required in CABS 303, 304, 403, 404; and CAAR 421 15 credits of approved major electives

Architecture (Administration Option)

Same as above except that: approved electives would be Comp Sc 205, Acct. 200, Law 312 and Fin 306, plus 3 credits approved elective.

Architecture (Health Care Facilities)

Same as Architecture (General Option) except that two of the major electives would be: H. Adm. 308 Hospital and Health Serv. Adm. and CAAR 438 Health Care Facilities Programming.

(continued . . . ATTACHMENT 2)

# Bachelor of Arts in Design Bachelor of Science in Design

### NOMENCLATURE

CA	Designates, "College of Architecture" as the prefix to all college and multi-disciplinary offerings.
	CA used alone designates courses offered at the Charles E. Daniel Center for Building Research and Urban Studies, Genoa, Italy.
CA DS	Multi-disciplinary design studies and seminars with emphasis in the major field of the particular student.
CA AR	Architectural Studies; within the professional degree programs in Architecture.
CA BS	Building Science Studies
CA AH	Art and Architectural History Studies
CA VA	Visual Arts
CA P1	Planning Studies

Effective: Fall 1979

3.

### ELECTRICAL & COMPUTER ENGINEERING

Effective: Fall 1979

# SOPHOMORE YEAR

First Semester	Second Semester
E&CE 201 Logic and Comp. Devices 3 (1,4)  Econ 200 Economic Concepts 3 (3,0)  or Econ 201 Prin. of Econ. 3 (3,0)  Math 206 Calculus of Sev. Var 4 (4,0)  Phys 221 Phys with Cal. II 3 (2,2)  Literature Requirement 3 (3,0)  Elective 3	E&CE 202 Electric Circuits I 3 (3,0)  E&CE 203 Elec. Circuits Lab I 1 (0,2)  E&CE 250 Principles of Digital
JUNIOR YEAR	
E&CE 301 Electric Circuits II 2 (2,0)  E&CE 303 Electric Circuits Lab II 1 (0,2)  E&CE 320 Electronics I 2 (2,0)  E&CE 325 Electronics Lab I 1 (0,2)  E&CE 330 Electrical Sys. Analy. 3 (3,0)  E&CE 340 Electric & Magnetic  Fields 1 2 (2,0)  EM 211 Particle Mechanics 3 (3,0)  Statics & Dynamics  Humanistic-Social Elective 2 3  17	E&CE 302 Linear Control Sys. 3 (3,0)  E&CE 317 Electrical Sys.  Analysis 3 (3,0)  E&CE 321 Electronics II 2 (2,0)  E&CE 326 Electronics Lab II 1 (0,2)  E&CE 341 Electric and Magnetic  Field II 2 (2,0)  E&CE 420 Power Sys. Analy. I 3 (3,0)  Technical Elective 3 3
SENIOR YEAR	
E&CE 402 Engineering Projects 1 (0,2) E&CE 411 Electrical Systems 1 (0,2) E&CE 422 Electronics III 3 (3,0) Humanistic-Social 3 Technical Elective 3 9 17	E&CE 410 Discrete Sys. Design 3 (3,0) E&CE 451 System Design Project2 (0,4) Humanistic-Social Elective <sup>2</sup> 3 Technical Elective <sup>3</sup> 8

TOTAL SEMESTER HOURS = 138

Footnotes as in the 1978-79 catalog

<sup>3)</sup> 

<sup>4)</sup> Not required of students who complete the R.O.T.C. program

#### CIVIL ENGINEERING

Effective: Fall 1979

### FRESHMAN YEAR

First Semester		Second Semester
ENGL 101 English Composition 3 ENGR 180 Engineering Concepts 3 or Humanistic-Social Elective 3	(3,3) (3,0) (2,2) (4,0)	Basic Science/Earth/Life Sci. 3-4 ENGL 102 English Composition 3 (3,0) Humanistic-Social Elective 3 or ENGR 180 Engr. Concepts 3 (2,2) MATH 108 Cal. of One Var. II 4 (4,0) PHYS 122 Phys with Cal. I 3 (2,2) Elective 17-18
SOPHOMO	RE YEAR	
EM 201 Engr. Mech. (Statics) 3 Literature Requirement* 3 MATH 206 Calculus of Sev. Var. 4	(2,3) (3,0) (3,0) (4,0) (2,2)	PHYS 222 Phys with Cal. III 3 (2,2) EG 110 Engr. Des. Graphics** 2 (1,3) EM 304 Mechanics of Mat'l 3 (3,0) EM 305 Mech. of Mat'ls Lab 1 (0,3) Literature Requirements* 3 (3,0) MATH 208 Engineering Math I 4 (4,0) Elective 17
JUNIO	R YEAR	
CE 320 Intro. to Constr. Mat'ls3 CRE 310 Intro. to Mat'l Sci. 3 EM 202 Engr. Mech. (Dynamics) 3	(3,0) (3,0) (3,0)	CE 302 Structural Steel Des.3 (2,2) CE 310 Transportation Engr. 4 (3,2) ECON 200 Economic Concepts 3 (3,0) ECE Elective 3 (3,0) EM 320 Fluid Mechanics 3 (3,0) EM 322 Fluid Mech Lab 1 (0,3)
SENIO	R YEAR O	
CE 424 Intro. to Constr. Eng'g. 3	(2,2) (3,0) (3,0)	CE 402 Reinforced Concrete  Design 3 (2,2)  CE 425 Engr. Relations 3 (3,0)  ESE 401 Environmental Engr. 3 (3,0)  ME 311 Engr. Thermo I 3 (3,0)  Techinical Elective+ 3  CE 499 CE Design Project 3 (2,3)

TOTAL SEMESTER HOURS = 138

<sup>\*</sup>To be selected from the following: Engl 202, 203, 204, 205, 206, 207, 208, 209. +Each class advisor has a list of approved electives from which students may make selections. Any exceptions to this list must have the approval of the Department Head \*\*Students enrolled in the ROTC program may substitute advanced ROTC courses for E.G.110 and one technical elective.

OThe first and second semester of the senior year are interchangeable.

# (ATTACHMENT 5)

### AGRICULTURAL ENGINEERING

Effective: Fall 1979

# FRESHMAN YEAR

First Semester	Second Semester
CH 101 General Chemistry 4 (3,3) ENGL 101 English Composition 3 (3,0) ENGR 180 Engineering Concepts 3 (2,2) or Humanistic-Social Elective 3 MATH 106 Calculus of One Var. I 4 (4,0) Elective 2	Basic Science Elective 2 4  ENGL 102 English Composition 3 (3,0)  Humanistic-Social Elective 3  or ENGR 180 Engr. Concepts 3 (2,2)  MATH 108 Cal. of One Var. II 4 (4,0)  PHYS 122 Phys. with Cal. I 3 (2,2)  ELective 1  18
SOPHOMORE	YEAR
AGE 221 Soil/Water Res. Engr. I 3 (2,3) EG 109 Engr. Graphical Comp. 2 (1,3) EM 201 Engr. Mech. (Statics) 3 (3,0) MATH 206 Cal. of Sev. Var. 4 (4,0) PHYS 221 Phys. with Cal. II 3 (2,2) Literature Requirement 3 (3,0) Elective 1 19	AGE 212 Fund. of Mechanization 3 (2,3)  EM 202 Engr. Mech. (Dynamics) 3 (3,0)  MATH 208 Engr. Mat. I 4 (4,0)  Plant Science Elective 2 3  PHYS 222 Phys. with Cal. III 3 (2,2)  Elective 1
JUNIOR YE	CAR
AGE 353 Computation Systems 2 (1,3) AGE 355 Engr. Anal. & Creat. 2 (1,3) EM 304 Mechanics of Mat'ls. 3 (3,0) ME 311 Engr. Thermodynamics I 3 (3,0) Animal Science Elective <sup>2</sup> 3 E&CE 307 Basic Elec. Engr. 2 (2,0) E&CE 309 Elect. Engr. Lab I 1 (0,2)	AGE 362 Energy Conv. in Agricultural Systems 3 (2,3)  AGE 433 Design Criteria for Plant & Animal Environment 2 (2,0)  AGE 465 Engr. Prop. of Biol. Mat. 2 (1,3)  AGE 364 Agric. Waste Mgt. Sys. 2 (2,0)  Humanistic-Social Elective 3  AGRON 202 Soils 3 (2,2)  EM 320 Fluid Mechanics 3 (3,0)
SENIOR YE	CAR
AGE 431 Agric. Struc. Design 3 (2,3) AGE 471 Research I 1 (0,3) ECON 201 Prin. of Economics 3 (3,0) or ECON 200 Econ. Concepts 3 (3,0) Mathematics Elective <sup>2</sup> 3 (3,0) Engineering Science Elective <sup>2</sup> 3 Elective 3 16	AGE 416 Agric. Machinery Des.3 (2,3) AGE 422 Soil/Water Res. Engr. II 3 (2,3) AGE 442 Agric. Process Engr. 3 (2,3) Engineering Science Elective 3 Elective 2 AGE 472 Research II 1 (0,3) Humanistic-Social Elective 3 18

 $<sup>^{1}</sup>$ To be selected from the following: Engl. 202, 203, 204, 205, 206, 207, 208, 209.

 $<sup>^{2}\</sup>mathrm{To}$  be selected in consultation with advisor.

#### (ATTACHMENT 6)

#### CHEMICAL ENGINEERING

Effective: Fall 1979

### FRESHMAN YEAR

First Semester		Second Semester	
CHEM 101 General Chemistry ENGL 101 English Composition ENGR 180 Engineering Concepts or Humanistic-Social Elective MATH 106 Cal. of One Var. I Elective	4 (3,3) 3 (3,0) 3 (2,2) 3 4 (4,0) 2	Basic Science (1) ENGL 102 English Composition Humanistic-Social Elective or ENGR 180 Engr. Concepts MATH 108 Cal. of One Var. II PHYS 122 Phys. with Cal. I Elective	3-4 3 (3,0) 3 3 (2,2) 4 (4,0) 3 (2,2) 1 17-18
	SOPHOMORE Y	EAR	
ChE 201 ntro. to ChE MATH 206 .1c. of Sev. Var. PHYS 221 Phys with Cal. II *Literature Requirement CHEM 223 Organic Chemistry EG 109 Engr. Graph. Elective	3 (2,3) 4 (4,0) 3 (2,2) 3 (3,0) 3 (3,0) 2 (1,3) 1	ChE 210 Proc. Mod. & Num. Meth. EM 201 Engr. Mech(Statics) MATH 208 Engr. Math I *Literature Requirement CHEM 224 Organic Chemistry CHEM 229 Org. Chem. Lab Elective	3 (3,0) 4 (4,0) 3 (3,0)
	JUNIOR YE	<u>AR</u>	
ChE 301 Unit Op Theory I EM 304 Mech. Of Materials CH 331 P. Chem. CH 339 P. Chem Lab MATH 309 Engr. Math II E&CE 307 Basic Elec. Engr. E&CE 309 Elec. Engr. Lab I Elective	3 (3,0) 3 (3,0) 3 (3,0) 1 (0,3) 3 (3,0) 2 (2,0) 1 (0,2) 3 19	ChE 302 Unit Op Theory II ChE 306 Unit Op Lab I ChE 353 Process Dynamics ChE 331 ChE Thermo I CH 332 P. Chem. CH 340 P. Chem. Lab Humanistic-Social Elective	3 (3,0) 2 (1,3) 3 (3,0) 3 (3,0) 3 (3,0) 1 (0,3) 3
	SENIOR YE	<u>AR</u>	
ChE 403 Unit Op Theory III ChE 407 Unit Op Lab II ChE 421 Process Dev. Design & Opt. of ChE Sys. I ChE 430 ChE Thermo II ChE 440 Inspection Trip ChE 450 ChE Kinetics Humanistic-Social Elective	3 (3,0) 3 (1,6) 3 (2,3) 3 (3,0) 0 3 (3,0) 3 (3,0)	& Opt. of ChE Sys. II  CerE 419 Sci. of Engr. Mat'ls  PHYS 222 Phys with Cal. III  Humanistic-Social Elective  Elective	3 (0,9)

TOTAL SEMESTER HOURS = 144

\*To be selected form Eng. 202, 203, 204, 205, 206, 207, 208, 209.

Note: A student must achieve a minimum cumulative Grade Pcint Ratio of 2.0 in required Chemical Engineering courses in the Chemical Engineering Curriculum to be eligible for graduation.

### (ATTACHMENT 7)

### MECHANICAL ENGINEERING

Effective: Fall 1979

### SOPHOMORE YEAR

First Semester		Second Semester	
CRE 310 Intor. to Mat'l. Sci. EM 201 Engr. Mech. (Statics) MATH 206 Cal. of Sev. Var. ME 201 Innovative Design I PHYS 221 Phys. with Cal. II Literature Requirements <sup>1</sup>	3 (3,0) 3 (3,0) 4 (4,0) 2 (1,3) 3 (2,2) 3 (3,0)	7 1	(4,0) (2,3) (2,2) (3,0)
	JUNIOR YE	AR	
EM 320 Fluid Mechanics ME 301 Engr. Systems Analysis ME 305 Engr. Experimentation ME 311 Engineering Thermo. I	2 (2,0) 1 (0,2) 3 (3,0) 3 (3,0) 3 (3,0) 1 (0,3) 3 (3,0) 1 (0,3) 3 (3,0)	E&CE 310 Elec. Engr. Lab II 1 ME 302 Automatic Controls 3 ME 304 Heat Transfer 3 ME 312 Engr. Thermo. II 3	(2,0) (0,2) (3,0) (3,0) (3,0) (2,3)
	SENIOR YE	AR	
ME 401 Design of Mechanical System Components  ME 405 Kinematics and Dynamics of Machinery  ME 412 Design of Themal Sys. Components  ME 413 Thermal Systems Lab. or ME 414 Mech. Sys. Lab. Technical Elective  Humanistic-Social Elective	3 (3,0) 3 (3,0) 3 (3,0) 1 (0,3) 1 (0,3) 3 3	ME 414 Mech. Sys. Lab. 1	

TOTAL SEMESTER HOURS = 138

<sup>&</sup>lt;sup>1</sup>To be selected from the following: Engl. 202, 203, 204, 205, 206, 207, 208, 209.

Note: All electives must be approved in advance by departmental advisers.

#### B. S. IN CERAMIC ENGINEERING

Effective: Fall 1979

0) 6)

#### FRESHMAN YEAR

First Semester		Second Semester	
Ch 101 General Chemistry ENGL 101 Engl Composition ENGR 180 Engr Concepts MATH 106 Cal. of One Var. I Elective	4 (3,3) 3 (3,0) 3 (2,2) 4 (4,0) 2	Basic Science* ENGL 102 ENGL Composition Humanistic-Social Elective MATH 108 Cal. of One Var. II PHYS 122 With Cal. I Elective	4 (3,3) 3 (3,0) 3 (3,0) 4 (4,0) 3 (3,0) $\frac{1}{-18}$

\*Ceramic Engineering students may take either CH 102 or 112

### SOPHOMORE YEAR

CrE 201 Intro. to Ceramic Engr.	2 (2,0)	CrE 202 Ceramic Materials	3 (3,0)
CrE 204 Laboratory Procedures	1 (0,3)	Literature Requirement**	3 (3,0)
Literature Requirement**	3 (3,0)	MATH 208 Engineering Math I	4 (4,0)
MATH 206 Cal of Sev. Var.	4 (4,0)	PHYS 222 Physics with Cal. III	3 (2,2)
PHYS 221 Physics with Cal. II	3 (2,2)	Planned Elective	4
Planned Elective	3	Elective	1
Elective	17		18
	1/		

## JUNIOR YEAR

CH	331	Physical Chemistry	3	(3,0)	CrE	302	Thermo-Chemical Cer.	3	(3,0)
CrE	304	Experiment Design	2	(1, 3)	CrE	309	Research Methods	2	(0,6)
CrE	307	Thermal Process of Cer	3	(3,0)	E&CE	308	Electronics &		
EM	201	Engr. Mech. (Statics)	3	(3,0)	Ele	ctrom	echanics	2	(2,0)
E&CE	307	Basic Elec. Engr.	2	(2,0)	E&CE	310	Elec. Engr. Lab. II	1	(0,2)
E&CE	309	Elec. Engr. Lab. I	1	(0,2)	Planne	d Ele	ctive	6	
Plann	ed El	ective	_3		Electi	ve		3	
			17					17	

#### SENIOR YEAR

CrE	402	Solid State Ceramics	3 (3,0)	CrE	403 Glasses	3 (3,0)
EM	304	Mechanics of Materials	3 (3,0)	ME	304 Heat Transfer	3 (3,0)
Planr	ed El	ective	9	Plann	ed Elective	12
Elect	ive		2			
			17			18

TOTAL SEMESTER HOURS = 138

<sup>\*\*</sup>To be selected from the following: Engl 203, 204, 205, 206, 207, 208, 209.

Note: 12 credits of planned electives must be taken in humanistic-social science courses. Nineteen credits of planned electives should be technical courses selected with the help of the class adviser.

### B. S. IN MATHEMATICAL SCIENCES

Effective: Fall 1979

#### FRESHMAN YEAR

First Semester	Second Semester
CH 101 General Chemistry <sup>2</sup>	CH 102 General Chemistry <sup>2</sup> , <sup>8</sup> 4(3,3) ECON 201 Principles of Economics3(3,0) ENGL 102 English Composition3(3,0) MATH 108 Cal. of One Var. II4(4,0) Elective <sup>3</sup>
SOPHOMORE '	YEAR
MATH 206 Calculus of Sev. Var $4(4.0)$ MATH 301 Stat. Theory and Meth. I.3(3,0) PHYS 122 Phys. with Cal. I $3(3,0)$ Literature Requirement $3(3,0)$ Elective $3(3,0)$ Elective $3(3,0)$ Elective $3(3,0)$	MATH 208 Engineering Math. I4(4,0) MATH 411 Linear Algebra3(3,0) Literature Requirement <sup>1</sup> 3(3,0) Elective <sup>3</sup>
JUNIOR YEA	AR
MATH 350 Intr. to Math. Models3(3,0) MATH 453 Advanced Calculus I or MATH 463 Math. Analysis I3(3,0) Modern Language	MATH 402 Theory of Probability3(3,0) MATH 454 Advanced Calculus II or MATH 464 Math. Analysis II3(3,0) Modern Language
SENIOR YEA	AR
ENGL 301 Public Speaking3(3,0) MATH 412 Intr. to Mod. Algebra or MATH 419 Discrete Math. Structures3(3,0) Mathematics Elective43(3,0) Option3	Mathematics Elective
Elective <sup>3</sup> 4	130 Total Semester Hours
¹To be selected from the following: Engl. 20	

<sup>&</sup>lt;sup>2</sup>Those qualifying for advanced placement in languages or wanting to take languages the freshman year may taken them in place of these courses.

<sup>&</sup>lt;sup>2</sup>Electives approved by the advisor should include one of the following sequences: Biol. 103, 104, 105, 106; Econ. 314, Mgt. Sci. 311; Phys. 221, 223, 222, 224.

<sup>&</sup>lt;sup>4</sup>To be selected from Math. 403, 404, 405.

<sup>&</sup>lt;sup>5</sup>Select the following sequence: Econ. 314, Mgt. Sci. 311.

<sup>&</sup>lt;sup>6</sup>Select the following sequence: Phys. 221, 222, 223, 224.

<sup>&</sup>lt;sup>7</sup>Select the following sequence: Biol. 103, 104, 105, 106.

<sup>&</sup>lt;sup>8</sup>Students in the Chemistry option must take CH 112, General Chemistry.

#### APPLIED MATHEMATICS OPTION

Effective: Fall 1979

## FRESHMAN YEAR

First Semester		Second Semester	
CPSC 205 Elem. Comp. Program	.4 (3,3) 3 (3,0) 3 (3,0) 1 (1,0) 4 (4,0)	CH 102 General Chemistry <sup>2</sup> ECON 201 Prin. of Econ. ENGL 102 English Composition MATH 108 Cal. of One Var. II Elective <sup>1</sup>	3 (3,0) 3 (3,0)
	SOPHOMORE Y	EAR	
MATH 301 Stat. Theory & Meth. I PHYS 122 Phys. with Cal. I			4 (4,0) 3 (3,0) 3 (3,0) 3 3 (3,0) 16
	JUNIOR YE	ZAR	
MATH 350 Intr. to Math. Models MATH 453 Advanced Cal. I or MATH 463 Math. Analy. I Modern Language Option Elective <sup>3</sup>	3 (3,0) 3 (3,0) 4 (3,1) 3 4 17		3 (3,0) 3 (3,0) 4 (3,1) 3 4 17
	SENIOR YE	<u>CAR</u>	
ENGL 301 Public Speaking MATH 412 Intr. to Mod. Algebra or MATH 419 Discrete Math. Structures 4 Mathematics Elective Option Elective	3 (3,0) 3 (3,0) 3 (3,0) 3 4 16	Mathematics Elective Option Elective	3 3 10

TOTAL SEMESTER HOURS = 130

<sup>&</sup>lt;sup>1</sup>To be selected from the following: Engl. 202, 203, 204, 205, 206, 207, 208, 209.

<sup>&</sup>lt;sup>2</sup>Those qualifying for advanced placement in languages or wanting to take languages the freshman year may take them in place of these courses.

<sup>&</sup>lt;sup>3</sup>Electives approved by the advisor should include one of the following sequences: Biol. 103, 104, 105, 106; Econ. 314, Mgt. Sci. 311; Phys. 221, 223, 222, 224.

 $<sup>^{4}</sup>$ To be selected from Nath. 403, 404, 405.

<sup>&</sup>quot;Students in the Chemistry option must take Ch 112. General, Chemistry."

Effective: Fall 1979

(continued . . . ATTACHMENT 10)

## Applied Mathematics Option

## Option Courses

Applied Mathematics

Three out of four

Math	309	Engr. Meth. II	3	(3,0)
Math	407	Partial Diff. Eq.	3	(3,0)
Math	435	Complex Variables	3	(3,0)
Math	460	Int. Num. Anal. I	3	(3,0)

plus

 $\frac{3}{12}$  (3,0) Application Area

### ACTUARIAL SCIENCE OPTION

Effective: Fall 1979

## FRESHMAN YEAR

First Semester	Second Semester						
CH 101 General Chemistry <sup>2</sup>	CH 102 General Chemistry 2						
SOPHMORE	YEAR						
ECON 201 Principles of Econ3(3,0) MATH 206 Calculus of Sev. Var4(4,0) MATH 301 Stat. Theory and Meth. I.3(3,0) PHYS 122 Phys. with Cal. I3(2,2) Literature Requirement $\frac{1}{16}$	ECON 306 Risk and Insurance3(3,0) ECON 314 Inter. Econ. Theory3(3,0) MATH 208 Engineering Math. I4(4,0) MATH 232 Actuarial Sci. Sem1(1,0) MATH 411 Linear Algebra3(3,0) Literature Réquirement $^1$						
JUNIOR YEAR							
ACCT 201 Principles of Accounting.3(3,0) MATH 430 Actuarial Finite Diff3(3,0) MATH 453 Advanced Calculus I or MATH 463 Math. Anal. I3(3,0) Modern Language	ACCT 301 Intermed. Accounting3(3,0) MATH 431 Theory of Interest3(3,0) MATH 454 Advanced Calculus II or MATH 464 Math. Anal. II3(3,0) Modern Language						
SENIOR YEAR							
ENGL 301 Public Speaking3(3,0)  MATH 350 Intr. to Math. Models3(3,0)  MATH 402 Theory of Prob. 43(3,0)  MGT SC 311 Intr. to Econometrics3(3,0)  Elective	MATH 403 Statistical Inference3(3,0) MATH 412 Intr. to Mod. Algebra or MATH 419 Discrete Math. Structures I3(3,0) MATH 432 Actuarial Science Sem. II <sup>4</sup>						

## 130 Total Semester Hours

<sup>&</sup>lt;sup>1</sup>To be selected from the following: Engl. 202, 203, 204, 205, 206, 207, 208, 209.

<sup>&</sup>lt;sup>2</sup>Those qualifying for advanced placement in languages or wanting to take languages the freshman year may take them in place of these courses.

<sup>&</sup>lt;sup>3</sup>Electives must be approved by advisor.

<sup>\*</sup>Math 430 and 431 will be offered in 1978/79 and alternate years thereafter. Therefore Math 402, 403, 432 should be scheduled by juniors or seniors during the off year.

Effective: Fall 1979

## BIOLOGY OPTION

First Semester	Second Semester						
BIOL 103 General Biology $I^2$ 3(3.0) BIOL 105 General Biology Lab I1(0,3) CPSC 205 Elem. Comp. Prog3(3,0) ENGL 101 English Composition3(3,0) MATH 106 Cal. of One Var. I4(4,0) MATH 150 Intr. to Math. Sci1(1,0)	BIOL 104 General Biology II <sup>2</sup> 3(3,0) BIOL 106 General Biology Lab II1(0,3) ECON 201 Principles of Econ3(3,0) ENGL 102 English Composition3(3,0) MATH 108 Cal. of One Var. II4(4,0) Elective						
SOPHOMORE	YEAR						
CH 101 General Chemistry4(3,3) MATH 206 Calculus of Sev. Var4(4,0) MATH 301 Stat. Theory and Meth I.3(3,0) Literature Requirement $\frac{1}{18}$ 3(3,0) PHYS 207 General Physics I4(3,2)	CH 112 General Chemistry4(3,3)  MATH 208 Engineering Math. I4(4,0)  MATH 411 Linear Algebra3(3,0)  PHYS 208 General Physics II4(3,2)  Literature Requirement $^1$ 3(3,0)						
JUNIOR Y	YEAR						
CH 223 Organic Chemistry3(3,0) CH 227 Organic Chemistry Lab1(0,3) MATH 350 Intr. to Math Models3(3,0) MATH 453 Advanced Calculus I or MATH 463 Math. Analysis I3(3,0) Modern Language	CH 224 Organic Chemistry3(3,0) CH 228 Organic Chemistry Lab1(0,3) MATH 402 Theory of Probability3(3,0) MATH 454 Advanced Calculus II or MATH 464 Math. Analysis II.3(3,0) Modern Language						
SENIOR YEAR							
BOT 202 Survey of Plant King4(3,3) or ZOOL.301 Comp. Vert. Anat4(3,3) MATH 412 Intr. to Mod. Algebra or MATH 419 Discrete Math. Structures I	BOT 441 Plant Ecology						

<sup>&</sup>lt;sup>1</sup>To be selected from the following: Engl 202, 203, 204, 205, 206, 207, 208, 209.

130 Total Semester Hours

<sup>&</sup>lt;sup>2</sup>Those qualifying for advance placement in languages or wanting to take languages the freshman year may take them in place of these courses.

<sup>&</sup>lt;sup>3</sup>Electives must be approved by advisor.

<sup>&</sup>quot;To be selected from Math 403, 404, 405.

#### COMPUTER SCIENCE OPTION

Effective: Fall 1979

## FRESHMAN YEAR

First Semester	Second Semester
CH 101 General Chemistrv <sup>2</sup> 4(3;3) COMP SC 205 Elem Comp. Prog3(3,0) ENGL 101 English Composition3(3,0) MATH 150 Intr. to Math. Sci1(1,0) MATH 106 Cal. of One Var. I4(4,0) $\frac{1}{15}$	CH 102 General Chemistry <sup>2</sup>
SOPHOMO	RE YEAR
COMP SC 321 Assembly Language Programming	COMP SC 422 Systems Prog3(3,0) MATH 208 Engineering Math. I4(4,0) MATH 411 Linear Algebra3(3,0) Literature Requirement $1 = 100$ Mest. Civ
JUNIO	R YEAR
MATH 460 Intr. to Num. Anal. I3(3,0) MATH 350 Intr. to Math Models3(3,0) PHYS 122 Phys. with Cal. I3(2,2) Modern Language	ENGL 301 Public Speaking3(3,0) MATH 402 Theory of Probability3(3,0) MATH 412 Intr. to Mod. Algebra or MATH 419 Discrete Math. Structures I3(3,0) Modern Language4 Elective <sup>3</sup>
SENIO	R YEAR
MATH 453 Advanced Calculus I or MATH 463 Math. Anal. I3(3,0) Computer Science Elective <sup>5</sup> 3 Mathematics Elective <sup>4</sup> 3 Elective	MATH 454 Advanced Calculus II or MATH 464 Math. Anal. II3(3,0) Computer Science Elective <sup>5</sup> 3 Elective <sup>3</sup>
	130 Total Semester Hours

<sup>&</sup>lt;sup>1</sup>To be selected from the following: Eng 202, 203, 204, 205, 206, 207, 208, 209.

<sup>&</sup>lt;sup>2</sup>Those qualifying for advance placement in languages or wanting to take languages the freshman year may take them in place of these courses.

<sup>&</sup>lt;sup>3</sup>Electives approved by advisor should include one of the following sequences: Phys 221, 223, 222, 224; Biol 103, 104, 105, 106; Econ 314, Mgt Sc 311.

To be selected from the following: Math 403, 404, 405, 452.

<sup>&</sup>lt;sup>5</sup>Select from 400-level computer science courses or mathematical science computing course.

Effective:	Fall	1070
ETTECTIVE:	гатт	上フ/フ

## OPTIONS

Plus

Application Area Elective 3

CHEMISTRY	STATISTICS
CH 331 Physical Chemistry 3 (3,0) CH 332 Physical Chemistry 3 (3,0) CH 339 Physical Chemistry Lab 1 (0,3) CH 340 Physical Chemistry Lab 1 (0,3) CH 402 Inorganic Chemistry 3 (3,0) CH 435 Spectroscopy and Mol. Structure 3 (3,0)	MATH 404 Intr. to Stoch. Proc 3 (3,0) MATH 405 Statistical Theory & Methods II 3 (3,0) MATH 409 Statistical Theory & Methods III 3 (3,0) MATH 471 Applied Statistical Decision Theory 3 (3,0)
MANAGERIAL SCIENCE <sup>5</sup>	OPERATIONS RESEARCH
IM 402 Oper. Plan. and Control 3 (3,0)  IM 404 Managerial Economics  or IM 418 Mgt. Infor. Sys. 3 (3,0)  MATH 404 Intro. to Stoch. Proc. 3 (3,0)  MATH 452 Linear Programming 3 (3,0)  PHYSICS <sup>6</sup>	MATH 460 Intro. to Numerical Analysis I 3 (3,0)  IM 402 Oper. Plan. & Control 3 (3,0)  MATH 404 Intro. to Stoch. Proc 3 (3,0)  MATH 409 Stat. Theory and Meth. III or MATH 461 Intr. to Num. Anal. II 3 (3,0)  MATH 452 Linear Programming 3 (3,0)
PHYS       321       Mechanics I       3 (3,0)         PHYS       322       Mechanics II       3 (3,0)         or       PHYS       441       Elec. and Mag. II       3 (3,0)         PHYS       340       Elec. and Magnetism I       3 (3,0)         9	7
APPLIED MATHEMATICS	PSYCH 263 Intro. Exper. Psych 3 (3,0) PSYCH 305 Applied Psychology 3 (3,0) PSYCH 363 Adv. Exper. Psych. 4 (3,3)
Three of the following from:	PSYCH 471 Psych. Test Eval. $\frac{3}{16}$ (3,0)
MATH 309 Engr. Mech. II 3 (3,0) MATH 407 Partial Diff. Eqns. 3 (3,0) MATH 435 Complex Variables 3 (3,0) MATH 460 Intro. to Num. Anal. I 3 (3,0)	

## B. A. IN MATHEMATICAL SCIENCES

Effective: Fall 1979

For a major concentration a recommend program of study is shown below, with 130 semester hours required for graduation.

## FRESHMAN YEAR

First Semester	Second Semester
CPSC 205 Elem. Comp. Prog3(3,0) ENGL 101 English Composition3(3,0) MATH 150 Intr. to Math. Sci1(1,0) MATH 106 Cal. of One Var. I4(4,0) Modern Language	ENGL 102 English Composition3(3, HIST 172 Western Civilization3(3, MATH 108 Cal. of One Var. II4(4, Modern Language4(3, Elective
SOPHOMORE \	'EAR
MATH 206 Calculus of Sev. Var4(4,0) MATH 301 Stat. Tehory and Meth I.3(3,0) Literature Requirement $^1$ 3(3,0) Modern Language3(3,0) HIST 173 Western Civilization3(3,0)	ECON 200 Economic Concepts3(3, MATH 208 Engineering Math. I4(4, MATH 411 Linear Algebra3(3, Literature Requirement 13(3, Elective 2
JUNIOR YE	AR
MATH 350 Intr. to Math. Models3(3,0) Minor	MUS 210 Music Appreciation3(3, or CAAH 303 Evol. of Vis Arts I.3(3, Mathematics Elective <sup>2</sup> 3 Minor3 Natural Science Elective <sup>2</sup> 4 Social Science Elective <sup>2</sup> 3
SENIOR Y	EAR
MATH 412 Intr. to Mod. Algebra3(3,0) or MATH 419 Discrete Math. Structures I	MATH 454 Adv. Calculus II
- 10	130 Total Semester Hours
<sup>1</sup> To be selected from the following: Engl 202 <sup>2</sup> Electives must be approved by advisor.	, 203, 204, 205, 206, 207, 208, 209.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

Vol. 18 No. 12

February 15, 1979



CLEMSON UNIVERSITY LIBRARY SOUTH CAROLINA ROOM

## FACULTY AND STAFF INVITED TO PARTICIPATE IN EDWARDS ENDOWMENT CAMPAIGN

An opportunity will be provided from March 28 to April 15 for Clemson University faculty and staff to subscribe to the campaign to establish a major endowment to honor President Robert C. Edwards.

A campus-wide solicitation of 3,000 faculty and staff will follow three consecutive training and kick-off meetings for solicitors on March 28, 29, and 30. These sessions will be held in Daniel Hall Auditorium at 3 p.m.

Faculty and staff will be personally solicited by a fellow faculty or staff member.

The Robert Cook Edwards Endowment for Excellence in Science and Technology honors Clemson's eighth president, who will retire in June after 21 years in office. The Board of Trustees authorized the establishment of the Edwards Endowment in the Clemson University Foundation as a way to honor Edwards for his outstanding accomplishments.

Since the campaign began last November, more than \$650,000 has been subscribed in gifts and pledges from trustees, alumni, friends, foundations and corporations. A minimum goal of \$1 million has been set.

Principally, the Edwards Endowment fund will enhance graduate programs throughout the University. It also will be used in other areas of the University, including professorships, research, public service programs and continuing education, as well as for graduate fellowships and scholarships.

Robert H. Yeargin, general campaign chairman, said: "I want to emphasize that

since state assistance must continue to increase simply to keep up with rising costs of goods and services, private giving is becoming even more important."

#### O'DELL CITED FOR SERVICE

Wayne T. O'Dell, director of the Cooperative Extension Service, has been cited for outstanding contributions to Extension programs and the people of South Carolina.

O'Dell received the 1978 State Distinguished Service Award presented by Epsilon Sigma Pi, honorary Extension society, during ceremonies at Program Emphasis Week in Myrtle Beach.

Dr. O'Dell has served as director of Extension since 1969. He holds degrees from Clemson University and Pennsylvania State University. He served as assistant professor of dairy science at Penn State and served as dairy science specialist with Clemson Extension until he was named associate director of Extension in 1965.

He is a member of several honorary fraternal organizations, a Rotarian, and winner of the 1973 Land Bank and Credit Bank Award for outstanding contributions to the progress of agriculture.

## LIBERAL ARTS LECTURE SERIES SCHEDULED

"The Making of the Public Mind" is the theme of the 1978-79 College of Liberal Arts Lecture Series, which will be held March 6-8.

Four distinguished speakers—a journalist, a theologian, a historian, and a literary critic—will be featured in the three—day period. They will deliver their addresses according to the following schedule:

Tuesday, March 6 -- "The Presidency in the Media Age" by Richard T. Stout, visiting Kiplinger professor of public affairs reporting at The Ohio State University, Daniel Hall Auditorium, 4 p.m.

Tuesday, March 6 -- "The Transforming Powers of Print" by Elizabeth L. Eisenstein, Alice Freeman Palmer professor of history at The University of Michigan, Hardin Hall Auditorium, 8 p.m.

Wednesday, March 7 -- "Can the Tribal Mind Turn Civil?: American Religion and the Public Mind" by Martin E. Marty, Fairfax M. Cone distinguished service professor of religion at The University of Chicago, Daniel Hall Auditorium, 4 p.m.

Thursday, March 8 -- "Modern Literature: Private Meaning and the Public Mind" by Bernard Benstock, professor of English and director of the program in comparative literature at The University of Illinois, Hardin Hall Auditorium, 8 p.m.

The series is sponsored annually by the College of Liberal Arts. All lectures are open to the public free of charge.

## ACCOUNTING AND FINANCE

Jon W. Dowie (Asst Prof) was elected Jan. 16 to the Board of Governors for the 1978-1980 term of the Western Carolina's Chapter of the Institute of Internal Auditors.

Glenn S. Carew (CPA, CDP, Asst Prof) was installed as the treasurer of the Palmetto Chapter Data Processing Management Association at a meeting held in Greenville Jan. 17. DPMA is a non-profit educational association with the aim of improving the level of computer and management skills of its members.

Thad R. Bismack (Assoc Prof) spoke on "Insights to the NAA Chapter Competition System" at the November technical meeting of the Asheville, NC, National Association of Accountants. The presentation was made jointly with James H. Toy, manager of Corporate Planning, Milliken and Company. Prof. Bismack is past president of the

Anderson Area Chapter and past vicepresident of the Carolina's Council, which is comprised of the 20 NAA Chapters located in North and South Carolina.

## AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

B. L. Dillman (Assoc Prof) served as a member of a review team for the Department of Agricultural Economics and Rural Sociology's research program at Auburn University Dec. 12-14.

R. W. Sutton (Assoc Prof) presented a paper, "A Statistical Analysis of U. S. Foreign Tobacco Trade," at the National Tobacco Worker's Conference, Orlando, FL, Jan. 16.

## AGRICULTURAL ENGINEERING

Jerry R. Lambert (Prof) and W. Al Tinsley (Prof, Ag Econ & Rural Soc) have received a one year grant of \$38,340 from the Coastal Plains Regional Commission for a study of "Personal Computers in Agriculture."

On Jan. 7-10 Thomas H. Garner (Prof) and Dan Wolf (Vstg Prof) attended the Beltwide Cotton Research Conference in Phoenix, AZ. Prof. Garner reported on Clemson University's work on herbicide incorporation at planting and served as a member of the technical committee on Engineering Systems and Energy Needs for Cotton Production.

Faculty of the Agricultural Engineering Department presented the following papers at the Southeast Region Meeting of the American Society of Agricultural Engineers in New Orleans, LA, Feb. 4-7.

"System for Year-Round Irrigation of Dairy Wastewater" by Clyde L. Barth (Prof) and Virgil L. Quisenberry (Asst Prof, Agron & Soils).

"Open Channel Flush Systems and Water Release Devices in Swine Confinement. Systems in South Carolina" by Gerald D. Christenbury (Asst Prof). "Development of a State Irrigation Society" by Charles V. Privette (Assoc Prof).

"State-of-the Art of Anaerobic Digesters for Animal Manure" by Richard O. Hegg (Assoc Prof) and C. L. Barth (Prof).

"Effects of Suspended Sediment and pH on Flow in a Controlled and Reversible Drainage System" by Ronald E. Yoder (Grad Stu) and James T. Ligon (Prof).

#### **BIOCHEMISTRY**

Carolyn Brown (Asst Prof) presented a talk, "What's Eating You? (or What Are You Eating?)," at USC-Spartanburg Nov. 27.

J. W. Brunson (Grad Stu) and J. M. Shively (Prof & Hd) published a paper, "Intracytoplasmic Membrane Production in Escherichia coli Ollla; Phospholipid Biosynthesis," in Current Microbiology, Vol. 1 (1978), pp. 219-222.

R. H. Hilderman (Asst Prof), Phillip Gainey (Grad Stu) and Ray Glinski (Grad Stu) presented a poster session, "Purification of Arginyl- and Lysyl-tRNA Synthetase from Rat Liver: Evidence They Exist as Glycoproteins," at the 11th Annual Meeting of the Miami Winter Symposium on "From Genes to Proteins" in Miami, FL, Jan. 8-12.

Prof. Shively attended and participated in a Gordon Research Conference on "CO<sub>2</sub> Fixation in Green Plants" in Santa Barbara, CA, Jan. 8-12.

## CIVIL ENGINEERING

Russell H. Brown (Assoc Prof) has received initial funding of a research grant, "Investigation of Splitting Stresses in Grouted Hollow Clay Masonry Prisms," from the Brick Association of South Carolina. The experimental and analytical project will be of 12 months duration.

Billy L. Edge (Prof) began Jan. 1 a year's leave of absence to work with Dames and Moore, Inc., Washington, DC.

Herbert W. Busching (Prof and Hd) presented a paper, "Factors Influencing Built-up Roofing Design and Performance," at IAHS International Symposium on Housing Problems in Developing Countries at the University of Petroleum and Minerals, Dhahran, Saudi Arabia, Dec. 19-23.

Prof. Busching received a grant of \$4,000 from the Carolinas Roofing and Sheet Metal Contractors Association (Raleigh, NC) to conduct research on thermal splits in built-up roofing membranes.

Parviz F. Rad (Assoc Prof) and William Baron (Assoc Prof) served as co-directors of a two-day seminar Jan. 23-24 in Columbia on pavement maintenance conducted for engineers, supervisors, foremen, city and county officials, and administrators.

### COMMUNICATIONS CENTER

Bo Bierley (WEPR news and public affairs producer) has been elected to the Board of Directors of the Associated Press Broadcasters Association.

## **ECONOMICS**

Bruce Yandle (Prof) and M. T. Maloney (Asst Prof) have been awarded a \$10,000 grant from The DuPont Company to do a study on "The Economic Assessment of EPA Air Emission Regulations on the Control of Hydrocarbons." The data for the study are also being supplied by DuPont.

Hugh Macaulay (Alumni Prof) and Prof. Yandle have published "The New Competitive Structure of the American Economy" in Economic Realism, edited by E. D. Chastain and Raymond W. Ritland of Auburn University. "The Other Bicentennial" by Prof. Macaulay is also included in the book.

Russell Shannon (Prof) spoke on the topic "Inflation: Causes and Cures" to the Rotary Club, Pickens, Dec. 20.

Rodney H. Mabry (Assoc Prof) gave a talk Dec. 6 to a Leadership Greenville group, sponsored by the Greenville Chamber of Commerce. The topic was "Alternative Sources of Revenue for Local Governments in South Carolina."

Prof. Mabry and W. N. Baumann (Associate with Zuchelli-Hunter-Associates, Annapolis, MD) have had accepted for publication in the Spring 1979 issue of the Southern Journal of Criminal Justice an article entitled "The Relationship of Jail Population to Operating Costs in Southern County Jails."

Holley H. Ulbrich (Assoc Prof) spoke Jan. 10 to the Paul Hayne Literary Circle on "Women and Their Financial Affairs." Prof. Ulbrich also spoke Jan. 17 to the Greenville League of Women Voters on "Urban Economic Problems."

Prof. Shannon, Prof. Macaulay and Prof. Ulbrich presented an in-service program for teachers at Easley High School, Easley, Jan. 19 on current economic issues.

#### **ENGLISH**

Six members of the English faculty were on the program at the annual meeting of the Modern Language Association, New York, Dec. 27-30. Richard J. Calhoun (Alumni Prof) was a panelist in the session "Beyond the Text: Nonliterary American Studies in a Fulbright Context"; Harry Curtis (Asst Prof) in the session "Teaching Technical Writing in Two-Year and Community Colleges: Purpose and Projects Workshop"; and Robert Hill (Assoc Prof) in the session "Beauty as the Beast: From Traditional Stereotypes to Renewed Myths." John Idol (Assoc Prof) reported on "The Prophetic Pictures Project" to the annual meeting of the Nathaniel Hawthorne Society. Jack McLaughlin (Assoc Prof) read "Teaching Literature Psychoanalytically." Frederick W. Shilstone (Asst Prof) read "Byron's 'The Giaour': Oral Tradition and Romantic Cognitive Theory."

Prof. Idol and Sterling Eisiminger (Asst Prof) published "Hawthorne Sits for a Bust by Maria Louisa Lander" in Essex Institute Historical Collection, 114 (October 1978), 207-12.

Prof. Idol's "Untangling the Skein of Names" has been included in Activating the Passive Student (Urbana: National Council of Teachers of English, 1978), pp. 139-43. Prof. Idol was a member of the committee responsible for publishing a 1979 Hawthorne Calendar, and he has been selected as a consulting editor for the Thomas Wolfe Newsletter.

Jane Martin (Vstg Instr) published "Santa Claus in the Closet," a poem, in the Uwharrie Review, 3, No. 2 (1978), 22.

Roger Rollin (Lemon Prof) published "Son of 'Against Evaluation': A Reply to John Shelton Lawrence" in <a href="The Journal of Popular Culture">The Journal of Popular Culture</a>, 12, (Summer 1978), 113-117.

## FOOD SCIENCE

Joseph J. Jen (Assoc Prof) presented an invited seminar to faculty and graduate students of the Chemistry Department at Atlanta University, Atlanta, GA, Jan. 26, on "The Use of Enzymes in Food Processing."

Richard J. Dafler (Instr) presented an invited seminar to faculty and the senior nutrition class at Bob Jones University Jan. 8 on "Junk Food--Junk Food Habits."

Michael G. Johnson (Assoc Prof) was coauthor of three papers presented Nov. 2 at the fall meeting of the South Carolina Branch of the American Society for Microbiology in Charleston: "Fractionation of a Dermal Necrotic Factor from Cultures of Bacillus cereus," with K. L. Hellenga (Grad Res Asst); "Sensitivity of Heat-Stressed Cells of Shigella flexneri and Shigella sonnei to Bile Salts No. 3," with S. B. Tollison (Grad Res Asst); and "Effect of Fat Level in Peanut Milks on Acid Production by Starter Cultures," with Maryanne Tsivitse (Grad Res Asst).

## Recent publications include:

"Bacterial Counts on Surfaces of Carcasses and in Ground Beef from Carcasses Sprayed or Not Sprayed with Hypochlorous Acid" by M. G. Johnson (Assoc Prof), T. C. Titus (Assoc Prof), Linda H. McCaskill (Lab Tech) and J. C. Acton (Assoc Prof), <u>J</u>. Food <u>Science</u>, 44: 169-173 (1979).

"Microbial Persistence on Inoculated Beef Plates Sprayed with Aqueous Hypochlorous Acid" by Prof. Titus, Prof. Acton, Linda McCaskill, and Prof. Johnson, J. Food Protection 41: 606-612 (1978).

"Differences in Injury of Cells of Vibrio parahaemolyticus Strain 8700 Produced by Heat and Cold Stresses in Liquid and Solid Menstrua" by Christina Jost (former Grad Res Asst), and Prof. Johnson, J. Food Protection 41: 764-767 (1978).

"Bacteriological Survey of Raw Soul Foods Available in South Carolina," by Prof. Johnson in collaboration with Adelle W. Stewart (Assoc Prof, S. C. State College, Orangeburg), Annie F. Langford and Carolyn Hall (both of S. C. State College), J. Food Protection 41: 364-366.

## **HISTORY**

Joseph Arbena (Assoc Prof) participated by invitation in the 12th Annual Conference on United Nations Affairs hosted by Central Michigan University, Nov. 30-Dec. 2. At the conference Prof. Arbena lectured on "Human Rights and Development in Latin America" and "Civil Strife and the Threat to International Order: The Nicaraguan Case." He also participated in a roundtable discussion/forum on "Energy, Resources and the Future of Western Civilization."

Victor Matthews (Vstg Asst Prof) published a review of Angel Marzal, <u>Gleanings from</u> the <u>Wisdom of Mari</u>. (Studia Pohl No. 11 Rome: Biblical Institute Press, 1976) in <u>Journal of Near Eastern Studies</u>, Jan. 1979.

#### INDUSTRIAL MANAGEMENT

Hugh C. Hansworth (Vstg Instr) made a speech on "Inventory Record Accuracy" at the monthly meeting of the American Production and Inventory Control Society Chapter in Greenville Jan. 9.

Thomas W. Zimmerer (Prof) presented a paper, "Human Resources Planning in the Canadian Petrochemical Industry," at the Southern Division of the Academy of Management in New Orleans, LA, Nov. 23.

#### INTERDISCIPLINARY STUDIES

Joon Park (Assoc Prof) attended the "International Symposium on Biomaterials in Dentistry and Medicine" at UCLA, Los Angeles, CA, Dec. 27-29, and presented a paper, "Precoated Orthopedic Implants with Bone Cement," co-authored by A. F. von Recum (Prof) and M. G. E. Gratzick (Grad Stu).

#### MUSIC

Edith B. Card (Asst Prof) presented three programs on the Appalachian dulcimer to the 4th, 5th, and 6th grade classes at Morrison Elementary School in Clemson Jan. 5. She also conducted an In-Service Training Workshop for the Pickens County Elementary Music Teachers at Morrison Jan. 19.

#### NURSING

Kathryn E. Brock (Instr) attended the Second Annual Nurse Educator Conference in New York Dec. 3-6. She was an assistant to Carolyn Chambers Clark, R.N., Ed. D., in presenting a workshop on "Teaching Assertiveness."

#### PLANT PATHOLOGY AND PHYSIOLOGY

The following members of the department attended the 32nd Annual Meeting of the Southern Weed Science Society in Atlanta, GA, Jan. 22-24 and presented papers:

Jing-Shing Hsu (Grad Stu), "Effects of Selected Herbicides on Plant Hydrolytic Enzymes," co-authored by N. D. Camper (Prof).

Jeannette Doeller(Grad Stu), "Responses of Callus Tissue to Trifluralin, " coauthored by Prof. Camper.

Meg Sloan (Grad Stu), "Trifluralin Effects on Respiration of Callus Tissue," co-authored by Prof. Camper.

Kathryn Ellers (Grad Stu), "Effects of Trifluralin on Rates of Protein Synthesis in Cultured Tobacco Pith Tissue," co-authored by Prof. Camper. The presentation won first place honors in the graduate student contest in Section VI - Ecological, Physiological, and Edaphic Aspects of Weed Control.

Peggy Ellis (Grad Stu), "Degradation of the Herbicide, Diuron, by Pondwater Microorganisms," co-authored by Prof. Camper.

#### PHYSICS AND ASTRONOMY

P. B. Burt, H. W. Graben, J. R. Ray (Profs) and A. Sobczyk (Prof, Math) participated in the Eastern Conference on Theoretical Physics at the University of Georgia, Athens, Jan. 11-13.

Prof. Burt participated in the Annual Meeting of the American Mathematical Society, Biloxi, MS, Jan. 22-26.

## POLITICAL SCIENCE

Harold E. Albert (Prof) had published a review of Emerging Coalitions in American Politics, Seymour Lipset, ed., in Choice, Jan. 1979.

#### POULTRY SCIENCE

B. W. Bierer (Prof Emeritus) received a plaque at the National Turkey Federation annual meeting in San Diego, CA, Jan. 11, for "Outstanding Research with Turkeys." Illness prevented Prof. Bierer's attendance and the plaque was accepted on his behalf by B. D. Barnett (Prof & Hd). Awarding of the plaque was the "second installment" on the award. Prof. Bierer had earlier received a check for \$1000 and recognition at the Poultry Science Association meeting in Clemson in July 1978.

K. A. Holleman (Prof) was recognized at the annual meeting of the National Association of Extension 4-H Agents in Atlanta in December. He was cited for his contributions to 4-H in conducting inschool embryology programs and his overall poultry 4-H contributions. He received a plaque which was a certificate of merit. Prof. Holleman was one of the first two South Carolinians so honored.

Participation in the Poultry Section of the Southern Association of Agricultural Scientists Jan. 23-25 at the World Trade Center in Atlanta was as follows:

- C. L. Strong (Grad Res Asst) presented "Light Regimes for Turkey Poults from 0-4 weeks of Age," co-authored by J. E. Jones (Prof) and B. L. Hughes (Assoc Prof).
- D. P. Froman (Brice-Waters Fellow) presented "Effects of Testosterone Propionate on Semen Quality in the Domestic Turkey," co-authored by R. J. Thurston (Asst Prof).
- L. M. Potter (Grad Res Asst) presented "Serum Enzyme Activity in Rabbits Infected with <u>Eimeria Stiedae</u>," co-authored by J. W. Dick (Asst Prof).
- J. C. Oliver (Grad Res Asst) presented "Characterization of Mash Vs. Pellet Feed Utilization by Coturnix D<sub>1</sub> Quail," co-authored by Prof. Jones and Prof. Hughes.
- V. C. Waldrop (Res Tech) presented "The Effects of Harvesting Stress and Deboning on Processing Yields and Meat Quality of Turkeys," co-authored by K. K. Hale (Assoc Prof).
- S. W. Crawley (Grad Res Asst) presented "By-Product Processing Yields of Broilers at Six, Seven, and Eight Weeks of Age," co-authored by D. R. Sloan (Asst Prof) and Prof. Hale.
- W. D. Resseguie (Grad Res Asst) presented "Effect of Sex Ration and Bird Density on Reproductive Parameters of Caged Coturnix D. Quail," co-authored by J. E. Jones and B. L. Hughes.

R. J. Thurston (Asst Prof) presented "Seminal Plasma Proteins in White and Yellow Turkey Semen."

The final 1978 issue of <u>Poultry Science</u> contained papers as follows:

"Subcutaneous Vaccination of Chickens with a Live, Avirulent Pasteurella multocida, Vaccine" by John T. Rice (Former Grad Res Asst), J. W. Dick and B. W. Bierer (Prof Emeritus).

"Effect of Methionine on Copper Induces Growth Depression and Gizzard Erosion" by L. S. Jensen (Prof, U of GA) and D. V. Maurice (Asst Prof).

"Liver Lipid Deposition in Caged Layers as Influenced by Fermentation By-Products and Level of Dietary Fat" by D. V. Maurice and L. S. Jensen.

## PROFESSIONAL DEVELOPMENT

Jean Woodruff (Instr, IM) will chair a workshop, "Letter and Report Writing Workshop," to be held March 1-2 at the Sheraton-Palmetto Inn in Greenville.

Robert Rouse (Assoc Prof, Acct and Fin) will chair a seminar, "Profit and Cash Flow Management for Non-Financial Managers," to be held March 5-6 at the Sheraton-Palmetto Inn in Greenville.

Instr. Woodruff will be the course chairperson for a seminar, "Maximizing Your Job Performance," to be held March 7-9 at Clemson University.

Ralph D. Elliott (Assoc Prof, Economics and Dir, Prof Dev) will be program chairman for the SC Association for Higher Continuing Education's Spring Conference on "Opportunities in Life-Long Learning" to be held March 8-10 at Kiawah Island.

Kathryn S. Collins (Adm Asst) will speak at the SC Association for Higher Continuing Education's Spring Conference on "Opportunities in Life-Long Learning" March 10. Her topic will be "Increasing Enrollments through Effective Brochures."

## **TEXTILES**

Hassan M. Behery (Assoc Prof) will present a paper, "A Method for Evaluation of Fabric Performance Criteria for Use in Uniforms" at the 46th Annual Conference of the National Association of Uniform Manufacturers (NAUM) at Honolulu, HI, Feb. 11.

## FACULTY RESEARCH COMMITTEE

## Proposals Funded December 11, 1978

1.	C. H. Whitehurst, Jr. (Industrial Management)	The Local Airport as a Factor Influencing Industrial Development	\$	700
2.	D. C. Speckhard (Biochemistry)	Role of Zinc in Viral RNA Polymerase	\$	800
3.	J. W. Lawson (Microbiology)	Effects of Analgesic Drugs on Antibiotic Degrading Enzyme Biosynthesis	\$ \$	900
4.	F. J. Stutzenberger (Microbiology)	Evaluation of Thermomonospora curvata as an Agent in Hypersensitivity Pneumonitis	\$	900
5.	W. J. Barnett (Elec. & Comp. Engr.)	Voice Operated Equipment for Quadraplegics	\$	435
6.	S. S. Hayasaka (Microbiology)	Establishment of Rhizosphere Bacteria in Newly Transplanted Seagrasses	\$1,	,000
7.	J. S. Fisher (Civil Engineering)	Total Sediment Transport for a Forested Mountain Watershed	\$	900
8.	P. W. Wannamaker (Languages)	"Das Ewig-Weibliche" in Böll's Writings	\$	750
9.	J. P. Jarvis (Mathematics)	Documentation of Models for Urban Emergency Services	\$	240
10.	J. P. Wourms (Zoology)	Cellular Interactions During Fish Development	\$1,	,500
11.	A. W. Elzerman (Environ. Systems)	Anodic Stripping Voltammetry for Analysis of Diffuse-Source Trace Metals in Water Systems	\$1,	,200
12.	W. R. Boland (Mathematics)	New Methodology for Unconstrained Optimization	\$	600
13.	R. W. Hill (English)	Research in the James Dickey Papers, Washington Univ., St. Louis	\$	900
14.	E. L. Kline (Microbiology) C.S. Brown (Biochemistry) P. M. Kline (Nursing)	Regulatory Affects of Biogenic Amines	\$2,	,000
15.	J. E. Fairey III (Botany)	A Floristic Search for Rare, Threatened, and Endangered Vascular Plants and Bryophytes in the Trotter's Shoals Project Area	\$	965

16.	B. J. Parliman (Horticulture)	In Vitro Culture, Breeding & Genetics of Small Fruits	\$ 1,000
17.	D. C. Coston (Horticulture)	Investigation of Calcium-Related Disorders in Apple Fruits	\$ 750
18.	E. M. Lander Jr. (History)	Publication of MS "Reluctant Imperialists: Calhoun, the South Carolinians and the Mexican War"	\$ 2,000
19.	E. D. Carney (History)	Research on Alexander of Lynkestis at NYC Public Library	\$ 600
20.	R. J. Taylor (Zoology)	The Population Dynamics of a Laboratory Insect Host-Parasite System	\$ 1,270
21.	P. J. Flower (Physics)	The Stellar Content of Extragalactic Systems	\$ 1,400
.22.	D. G. Yardley (Zoology)	A Genetic Analysis of the <u>Gambusia</u> <u>affinis X G. heterochir</u> Hybrid Swarm	\$ 910
23.	G. E. Varenhorst (Planning Studies)	A Study of Local Government Planning in South Carolina	\$ 300
24.	M. V. Vatalaro (Visual Arts)	Variable Ceramic Sculpture Kiln	\$ 500
25.	E. C. Voelker (Visual Studies)	The Urban Plan of Pius IV, Rome 1559-1565	\$ 1,500
26.	J. P. Holschneider (Architecture)	The Architecture of Charles Moore	\$ 420
27.	E. E. Ruppert (Zoology)	Comparative Fine Structure of Inversion in Protozoa and Sponges	\$ 750
28.	J. B. Romeiser (Languages)	Critical Reception of André Malraux's L'Espoir in the French Press:	\$ 1,500
	t	December 1937-June 1940 Total	\$26,690

MINUTES OF THE UNIVERSITY AUDIO VISUAL COMMITTEE MEETING, NOVEMBER 30, 1978

Present: W. H. Owens, S. W. Thompson, T. E. Burke, B. R. Smith, W. H. Durham, D. W. Blair, R. G. Halfacre, W. A. Shain, T. F. Collins.

Chairman Owens called the meeting to order at 12:25 p.m.

The minutes of the Oct. 26, 1978, meeting were approved as presented.

Chairman Owens distributed a list of the subcommittees appointed for the "Communications Carnival" and asked that these subcommittees be entered in the minutes. A copy of the subcommittee appointments is attached. Owens then asked each subcommittee chairman for comments.

Bill Shain, chairman of the Equipment Display Subcommittee, indicated that the Palmetto Room had been reserved and reported that it had separate outlet circuits on each wall. Shain said he would inquire about the power requirements of each of the participants. It was suggested that a television camera could probably require additional power and that a one week advance notice would be required for extra power.

Tom Burke, chairman of the Instructional Packages Subcommittee, reported that he had a list of companies to contact for instructional packages displays and would send out initial letters in December. He requested the names of additional companies. Burke suggested we might work with student organizations to get the students involved and also that we might consider selling cokes. He asked if it would be possible to get rolls of white paper for table covers. Chairman Owens said that the equipment display subcommittee should inquire about getting tables and appropriate covers.

Subcommittee chairman Burke asked if other committee members thought he should contact film makers and Clemson University Extension Service and collect a library of slides. The general feeling was that

he should and that these things should emphasize communications skills but not be restricted to such.

Harry Durham said he thought it was important that those who were invited to participate in the displays be advised that we will attempt to get schools in the region to attend, and S. W. Thompson suggested that local hospitals be invited as well.

Sharon Thompson, chairperson of the Labs Subcommittee asked for suggestions as to how her subcommittee should proceed with the labs on campus.

Chairman Owens said some probably would not be able to participate and that each of the labs should be contacted to determine to what extent they would like to participate. It was decided that there should be a representative at the loggia to tell visitors about the nursing labs, and T. E. Burke suggested that perhaps there should be a slide presentation to show what is available at the nursing labs.

Bill Smith, chairman of the Publicity Subcommittee inquired about the budget for publicity and design of brochures. Harry Durham indicated that last year it cost about sixty dollars. Walton Owens said that the University Relations office at the Trustee House would provide that service and have records of last year's transactions.

The meeting was adjourned at 1:18 p.m.

Respectfully submitted,

T. F. Collins, Secretary

University Audio Visual Committee

Subcommittees For Academic Year 1978-79

Equipment Display:

Chair: Bill Shain
Dudley Blair
Richard Davenport
Harry Durham

## Instructional Packages:

Chair: Tom Burke

Jim Stockham

Labs:

Chair: Sharon Thompson

Sue Forsbery

Publicity:

Chair: Bill Smith

Gordon Halfacre Alan Groseclose

# MINUTES OF THE COUNCIL OF ACADEMIC DEANS MEETING, DECEMBER 18, 1978

In the absence of Dean Hurst, Dean Green called the meeting to order at 9 a.m. with the following persons present:
Dean Anderson, Dean McClure, Dean Landrith, Professor Edwards (for Dean Wilcox), Dean Box, Dean Trevillian, Dean Cox, Dean Labecki, Dean Vogel, Dean Schwartz, Dean Willis, and Dr. Steirer. Attending briefly were President Edwards, Vice President Melvin Barnette, and Assistant Vice President Jack Wilson.

President Edwards addressed the deans relative to a letter he had received from Ms. Jane C. Albertson, a reporter with the Jacksonville Journal. Ms. Albertson's letter listed several questions to guide the president in an upcoming telephone interview with her, the results of which will be printed in the December 30 edition of the Florida Times-Union, Jacksonville Journal. To assure President Edwards that the comments he shares will reflect the influence of the deans, he asked the deans to review the questions and to forward any input they might have to him by the morning of December 19.

Vice President Barnette and Assistant Vice President Wilson solicited comments from the deans relative to the current and future composition and operation of the Motor Pool. There was considerable discussion relative to procedures the deans would like to see implemented and also discussion regarding restrictions being placed upon us by Columbia.

Several suggestions were made by the deans that they felt would result in more efficient use of motor pool vehicles, and Mr. Barnette noted these and stated that he would check them out.

Dean Green asked for comments on the proposed new "Request for Motor Vehicle" form which was distributed to the deans Dec. 13. There was a motion and a second to approve the form, followed by discussion between the deans and Messrs. Barnette and Wilson. Several questions were posed which Mr. Barnette will look into.

It was the consensus of the Council of Academic Deans that the minutes should express the Council's appreciation to Messrs. Barnette and Wilson for their willingness to communicate openly with the deans, and to respond to questions and concerns they have relative to matters in the academic area.

The recommendations made by the Undergraduate Council at its Dec. 1, 1978, meeting, and the Graduate Council at its Dec. 15 meeting, relative to additions, deletions, and changes in courses and/or curricula, were approved by the Council of Academic Deans. In addition, the following courses have been approved by mail ballot in order to meet catalog and scheduling deadlines: RPA 811, Comp SC 680, Comp Sc 681, Comp SC 881, and Comp Sc 891. A change in prerequisites and descriptions was approved for Ch 821 and Ch 822.

Dean Landrith reported that Clemson's students had scored higher this year than ever before on the NTE. He also stated that the College of Education is expecting the NCATE accreditation team Feb. 4-7, 1979, and that all deans will receive an invitation to attend a reception to meet the committee members.

Dean Schwartz distributed and requested the approval of a revision of the "Advisory Committee and Major/Research Advisor" draft. The original draft was distributed at the Council of Academic Deans' meeting Oct. 27, 1978, and at that time was assigned to a subcommittee of Deans Anderson, Box, Landrith, McClure, and Wilcox for revisions. It was moved and seconded that this revised draft be approved, but in the ensuing discussion questions were raised by some deans who had not . previously seen the revision, and it was determined that a vote would not be taken until all had had ample time to review the changes.

Dean Willis distributed two items: (1) a questionnaire on "Continuing Education and Off-Campus Courses" which must be completed and returned to Dean Hurst by Jan. 8; (2) proposed "Procedures for Recruiting, Selecting, and Hiring Faculty" along with a "Record of Professional Qualifications" form. Any comments on these items should be communicated to Dean Willis by Jan. 1. After the first of the year, it will be moved on to the Faculty Senate.

The meeting was adjourned at 10:45 a.m.

Respectfully submitted,

Annette H. Kesler

## MINUTES OF THE EDUCATIONAL COUNCIL MEETING, JANUARY 15, 1979

Robert C. Edwards, presiding Present:

Ben W. Anderson Luther P. Anderson Melvin E. Barnette Benton H. Box

J. Ross Cornwell Jr.

H. Morris Cox Walter T. Cox

J. W. Gordon Gourlay

Claud B. Green Victor Hurst

Geraldine Labecki Harold F. Landrith Harlan E. McClure Stanley G. Nicholas A. E. Schwartz

William F. Steirer Jr. Wallace D. Trevillian

K. N. Vickery Henry E. Vogel Lyle C. Wilcox

E. N. Tyndall, secretary

## 1. Minutes

The minutes of the meeting of Dec. 4, 1978, were approved as submitted.

## 2. Academic Matters by Colleges:

Statement and Recommendations: The Dean of the University recommended the following:

COLLEGE OF AGRICULTURAL SCIENCES

Graduate Course Deletion:

AG EC 804 Water Resources Policies 3 cr (3,0)

COLLEGE OF ARCHITECTURE

## (1) Curriculum Revisions: Effective, Fall 1979

Bachelor of Science in Building Science

(ATTACHMENT 1) pp. 15-16

## (COLLEGE OF ARCHITECTURE)

Continued				Curriculum	Revisions:	Effective	F-11	1979	1
(colletifued.	•	•	•	Culliculum	VEATORIS.	ETTECTIVE,	Tall	エフノフ	,

Bachelor of Architecture

## (ATTACHMENT 2) p. 16

## C. COLLEGE OF FOREST AND RECREATION RESOURCES

## (1) New Graduate Course:

RPA	811	Research an	nd Evaluation	in Recreation	3 cr (3,0)
-----	-----	-------------	---------------	---------------	------------

D. COLLEGE OF SCIENCES

## (1) New Undergraduate Course:

CP SC 480 Fundamentals	of Com	outer Science	3 cr (	(3, 0)	))
------------------------	--------	---------------	--------	--------	----

## (2) New Graduate Courses:

CP SC	680	Fundamentals of Computer Science	3 cr (3,0)
CP SC	681	Special Topics in Computer Science	1-3(var) (1-3,0)
CP SC	881	Special Topics	1-3 (var)(1-3,0)
CP SC	891	Master's Thesis Research	(Credit to be arranged)

## (3) Undergraduate Course Changes:

BIOCH	101	Molecules and Man (Prerequisite change)	1 cr (1,0)
віосн	102	Molecules and Man (Description & prerequisite change)	1 cr (1,0)

## (4) Graduate Course Changes:

СН	821	Organic Chemistry I (Description & prerequisite change)	3 cr	(3,0)
СН	822	Organic Chemistry II (Description & prerequisite change)	3 cr	(3,0)

(continued . . . COLLEGE OF SCIENCES)

(5) Curriculum Revisions: Effective, Fall 1979

Prephysical Therapy

(ATTACHMENT 3) p. 17

Prepharmacy

(ATTACHMENT 4) pp. 17-18

Action: APPROVED

E. N. Tyndall, Secretary

## (ATTACHMENT 1)

## BACHELOR OF SCIENCE IN BUILDING SCIENCE

Effective: Fall 1979

## FRESHMAN YEAR

First Semester		Second Semester		
CA DS 151 Design Studies CA AH 115 Hist. of Art & Arch. ENGL 101 English Composition MATH 106 Cal. of One Var. I PHYS 115 Classical Physics I	I 3 (3,0)	CA DS 152 Design Studies CA AH 116 Hist. of Art & Arch. ENGL 102 English Composition MATH 301 Stat. Theory & Meth. PHYS 116 Classical Physics II	II 3 (3,0) 3 (3,0)	
	SOPHOMORE	YEAR		
CA BS 241 Constr. Mgt. I CA AH 215 Hist. of Art & Arch. CA BS 201 Bldg. Science COMP SC. 205 Elem. Comp. Prog. ECON 201 Prin. of Economics	III3 (3,0) 3 (2,3)	CA BS 242 Constr. Mgt. II CA AH 216 Hist. of Art & Arch. CA BS 202 Bldg. Science ACCT 200 Basic Accounting ECON 2021 Prin. of Economics	IV 3 (3,0) 3 (2,3)	
	JUNIOR	YEAR		
CA BS 341 Constr. Mgt. III CA BS 303 Bldg. Science CE 201 Surveying ENGLISH REQUIREMENT <sup>2</sup> ELECTIVE	5 (3,6) 3 (3,0) 3 (2,3) 3 (3,0) 3 17	CA BS 342 Constr. Mgt. IV BA BS 304 Bldg. Science LAW 312 Commercial Law ENGLISH REQUIREMENT <sup>2</sup> ELECTIVE	5 (3,6) 3 (3,0) 3 (3,0) 3 (3,0) 3 17	
	SENIOR	YEAR		
CA BS 441 Const. Mgt. VI CA BS 404 Bldg. Science CA AR 421 Arch Seminar ELECTIVE		CA BS 442 Constr. Mgt. VII CA BS 432 Constr. Mgt. V ELECTIVE	5 (3,6) 3 (3,0) 9 17	

## TOTAL SEMESTER HOURS = 135

 $<sup>^{1}\</sup>mathrm{Econ}$  200 and a 300-level economics course may be substituted for Econ 201 and 202.

 $<sup>\</sup>frac{2}{10}$  be selected from the following: Engl. 202, 203, 204, 205, 206, 207, 208, 209, 301.

## (ATTACHMENT 1, Continued)

CA AH 403 Hist. Mod. Arch.

ELECTIVE<sup>1</sup>

Major: To fulfill the requirements for a major in Building Science, students must take, in addition to specified courses, a minimum of 8 credits above the sophomore level in the areas of Accounting, Economics, Industrial Management, Building Science, or Planning Studies.

## (ATTACHMENT 2)

### BACHELOR OF ARCHITECTURE

Effective: Fall 1979

See Design curricula (Bachelor of Arts or Bachelor of Science)

## FIFTH YEAR

First Semester				Second Semester			
	Arch. Design History of Cities			CA AR 558 CA AR 481 ELECTIVE <sup>1</sup>		Design Office Practice	9 (3,18) 3 (3,0) 3 15
			SIXTH Y	EAR			
CA AR 559	Term. Proj. in Arch.	9	(1,24)				

3(3,0)

<sup>&</sup>lt;sup>1</sup>Electives shall be determined by each individual student in consultation with his major adviser to complement and reinforce the student's planned course of study.

## (ATTACHMENT 3)

### TWO-YEAR PREPHYSICAL THERAPY CURRICULUM

Effective: Fall 1979

First Semester		Second Semester		
*CH 101 General Chemistry BIOL 103 General Biology I BIOL 105 General Biology Lab I PSYCH 201 General Psychology ENGL 101 English Composition ELECTIVE	4 (3,3) 3 (3,0) 1 (0,3) 3 (3,0) 3 (3,0) $\frac{3}{17}$	CH 102 General Chemistry BIOL 104 General Biology II BIOL 106 General Biology Lab II PSYCH 321 Develop. Psychology ENGL 102 English Composition ELECTIVE	4 (3,3) 3 (3,0) 1 (0,3) 3 (3,0) 3 (3,0) 3 17	
Third Semester		Fourth Semester		
*PHYS 207 General Physics ZOOL 202 Vertebrate Zoology ELECTIVES	4 (3,2) 4 (3,3) 9 17		4 (3,2) 12 16	

TOTAL HOURS = 67

## (ATTACHMENT 4)

#### PREPHARMACY CURRICULUM

Effective: Fall 1979

### FIRST YEAR

First Semester	Second Se	Second Semester		
BIOL 103 General Biology BIOL 105 General Biology Lab CH 101 General Chemistry <sup>2</sup> ENGL 101 English Composition HIST 172 Western Civilization ELECTIVE	4 (3,3) CH 112 3 (3,0) ENGL 102	General Biology II 3 (3,0)  General Biology Lab II 1 (0,3)  General Chemistry 4 (3,3)  English Composition 3 (3,0)  Western Civilization 3 (3,0)  Cal. of One Var. I 4 (4,0)		
	SECOND YEAR			
CH 223 Organic Chemistry CH 227 Organic Chemistry La PHYS 207 General Physics I <sup>2</sup> SOC 201 Sociological Perspec	4 (3,2) PHYS 208	Organic Chemistry 3 (3,0) Organic Chemistry Lab 1 (0,3) General Physics II 4 (3,2) Social Problems 3 (3,0)		

<sup>\*</sup>Chemistry requires proficiency in Algebra, and Physics requires proficiency in Trigonometry; therefore, entering freshmen must present a score of 550 or above on Level II of the Mathematics Achievement Test or register in the first semester for Mathematics 105, Algebra and Trigonometry.

(ATTACHMENT 4, Continued)

LITERATURE REQUIREMENT ELECTIVE

 $\frac{3}{3}$  (3,0) LITERATURE REQUIREMENT<sup>1</sup> ELECTIVE

3(3,0)

TOTAL SEMESTER HOURS = 69

## MINUTES OF THE UNIVERSITY PLANNING COUNCIL MEETING, JANUARY 29, 1979

Present: C. A. Aas (GSA), S. W. Devanny (Stu. Gov.), M. A. King (Ed.), C. L. Lane (For. Chm.), R. H. Mabry (IM&TS), M. M. Ozburn (Stu. Gov.), J. L. Von-Rosenberg (Ch.), W. F. Steirer (Fac. Sen.), M. A. Wright (Comp. Pl.).

- 1. In reply to the Planning Council's recommendation concerning students and vehicular crossings, the University's administration indicated that a study by the University and the South Carolina Highway Department will be made to determine the best solution for providing pedestrian safety in crossing at the Clemson House and the new dormitory locations.
- 2. The Campus Planning Office reports that the Daniel Hall Annex construction has been completed. Renovation of Brackett Hall is scheduled for September if funds are available. The next building scheduled for construction is the fire station on Perimeter Road across from the new support facility. The pre-fab housing will be phased out by the fall of 1980. Most of them are in need of major renovation and the cost of repair would be prohibitive.
- 3. The report of the Tillman Hall Planning Committee was discussed. Dr.

Mabry is a member of the Tillman Hall Building Committee as a result of the Planning Council's interest in the use of Tillman Hall. Dr. Mabry indicated that a plan for renovation of Tillman auditorium has been submitted by the architects. The report of the Planning Council's Tillman Hall Study Committee follows.

UNIVERSITY PLANNING COUNCIL

Report on Tillman Hall

## INTRODUCTION

Because of its commanding architecture and historical significance to the University, Tillman Hall has become a symbol which represents the whole of Clemson University. We see its clock tower in our publications and on our parking stickers; we reproduce its image on souvenir mugs and other memorabilia; it inevitably appears in the opening and closing scenes of most of our public relations films and broadcasts. Tillman is also important as an example of late 19th century public buildings; such buildings with towers were used as county court hourses, city halls, U.S. Post Offices, and as in this case, college administrative buildings. These buildings are fast being replaced or destroyed in the name of progress. Those that are left

<sup>&</sup>lt;sup>1</sup>To be selected from the following: Engl 202, 203, 204, 205, 206, 207, 208, 209.

<sup>&</sup>lt;sup>2</sup>Chemistry requires proficiency in Algebra, and Physics requires proficiency in Trigonometry; therefore, entering freshmen must present a score of 550 or above on Level II of the Mathematics Achievement Test or register in the first semester for Mathematics 105, Algebra and Trigonometry.

are our few remaining examples of the "Romanesque Revival" which nearly became a national style between 1880 and 1910. Thus, Tillman is every inch a landmark, and it should be listed in the National Register of Historical Places and as a Landmark.

In discharging its responsibilities as an advisory body to the university administration, the University Planning Council has discussed at some length the future status of Tillman Hall. A special subcommittee of the council sought input from specific individuals and the faculty and staff they represent in order to better understand the context and progress of present renovation plans. From these discussions arose two viewpoints as to the most effective use of Tillman Hall.

#### USE BY COLLEGE OF EDUCATION

The first viewpoint recognizes the immediate pressing needs of the College of Education to provide more appropriate teaching and special laboratory space and to relieve overcrowding. These problems were recognized as early as 1969 when the College of Education was first designated to occupy Tillman Hall. Unless corrected, they may create difficulty in meeting accreditation standards by 1979. Discussions began almost a decade ago concerning the type and extent of modifications to Tillman which would correct these problems. current committee charged with the responsibility for the detailed program planning for renovations to Tillman Hall has completed its work. All concerned agree that a practical and workable program has resulted which will overcome the present difficulties and provide the teaching, special laboratory, and related office space necessary for the programs of the College of Education.

JSE AS RECEPTION CENTER AND STUDENT SERVICES CENTER

The second viewpoint recognizes that Tillman has the potential to make a

greater contribution to the university as a whole than would be possible if it were restricted to the exclusive use of any one college. Inasmuch as it commands first attention above other campus buildings it could best function as the "front door" to the campus. By nature of its architecture it bespeaks authority, institution, the center of a place. The tower is the first thing to draw ones attention to the campus and beckons the visitor to "start here." In addition, it is among the earliest of the buildings of Clemson University and bears the name of the statesman who brought the gift of Thomas Green Clemson and his courageous ideal to acceptance by the state of South Carolina. It is the logical place for the first time visitor to be welcomed by a receptionist and to have an opportunity to view collected examples of the greatness of Clemson's past accomplishments and contributions; here the visitor could also see displays depicting current academic life and programs. Should he wish further information, the visitor could then be directed to another part of the building where he could talk with an admissions counselor. Indeed located as it is, close to the Student Union complex and west campus student housing, Tillman would be a logical place to house all student-related services such as admissions, registrar, graduate school, financial aid, counseling, student bank, etc.

#### RECOMMENDATIONS

Although the two viewpoints stated above seem to represent conflicting and mutually exclusive uses for Tillman Hall, the University Planning Council believes that Clemson can derive the benefit of both uses with careful and thoughtful planning. A great deal of effective thought and work has gone into the present plan to renovate Tillman for better use by the College of Education. The Planning Council endorses this plan and commends those involved for the care they have taken to ensure that the historical value of the architecture be preserved. We believe that planned renovations should proceed with deliberate

speed to meet the pressing, practical needs of the College of Education.

At the same time, the University Planning Council strongly believes that the long range best use of Tillman would be to take full advantage of its architectural prominence, historical significance, and the natural magnetism which results by converting Tillman to a university reception center which also houses student-related service functions mentioned earlier. We believe that a reasonable and effective time frame to implement such a plan would be to rededicate Tillman as the university's "front door" as part of a centennial celebration in 1989.

In order to accomplish this, the University Planning Council makes the following specific recommendations:

- 1. Instruct the Tillman Hall architects who develop the renovation plans for use by the College of Education that every care should be taken to modify the building so as not to preclude its future use as a "landmark" university building.
- 2. Appoint a planning committee now to begin the planning process which will develop a new complex for the College of Education to accommodate functions now housed in Tillman, Godfrey and Freeman Halls.
- 3. Initiate immediately the search for the financial resources necessary to accomplish these goals.

#### CONCLUSION

In light of the fact that it will nave taken approximately ten years from conceptualization to implementation of renovation of Tillman for better use by the College of Education, it seems reasonable to believe that plans should begin immediately in order to meet the recommended goals in time for our centennial in 1989. As this recommendation becomes reality, three important benefits will be realized. First, the College of Education should end up with a complete facility that meets all its needs--even those presently left unmet or compromised in the current renovation Second, by moving student services offices out of Sikes Hall, critically needed breathing room will result in Sikes for the benefit of those offices remaining there. Third, by housing a reception center and related services in a place where our visitors naturally expect to find them, Clemson University will have a natural blend of architectural attraction with expected function. This thoughtful consideration allows Clemson to receive its visitors with hospitality and natural grace which can only be achieved through careful planning.

The Planning Council wishes to express its appreciation for the time given and interest expressed by the College of Education and the Office of Development. We firmly believe that the frank and open consideration of issues which has resulted from our meetings reflects that healthy interchange of ideas so necessary for the continued vitality of Clemson University.

## Calendar of Campus Events

- 15 -- English Hour Lecture: Best Graduate English Paper of 1978. Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
- 15 -- Seminar: Roger Moser, vice-president of Ethyl Corp. Sponsored by Department of Chemistry and Geology's Chemical Industry Business Seminar Series, 131 Brackett Hall, 7:30 p.m. Open to the public, no admission charge.

## CALENDAR OF CAMPUS EVENTS (Continued)

- 15-17 -- Art Exhibition: "Cage Nakayama--Photos of New York City." Sponsored by University Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
- 16,17 -- Live Entertainment in Edgar's: Kier Irmiter. Sponsored by University Union, Edgar's, 9 p.m. University I.D. and proof of age required, 50¢ admission charge.
  - 16 -- Puppet Show: "The Hobbit" by Hutsah Puppet Theatre. Sponsored by University Union, Tillman Auditorium, 8 p.m. Open to the public, admission charge to be announced.
- 19-24 -- Drama: "The Beaux' Stratagem" by George Farquhar. Presented by Clemson Players, Daniel Hall Auditorium, 8 p.m. Monday-Wednesday and Friday and Saturday, 3:30 p.m. Thursday. Open to the public, no admission charge.
- 19-25 -- Videotape: "Boxing's Greatest Champions." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
- 19-23 -- Art Exhibition: "Physics Club Science Exhibit." Sponsored by University Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday.

  Open to the public, no admission charge.
- 19,21,23 -- Short Course: "Advanced Job Control Language" Sections I and II. Taught
  26 by Academic Computing Support. Section I 19, 21, 23, M-102 Martin Hall,
  9:05-9:55 a.m.; Section II 26, M-105 Martin Hall, 6:30 p.m.-9 p.m.
  Open to the public. Call 656-3466 for more information or to register.
  - 19-22 -- Short Course: "SPEAKEASY." Taught by Academic Computing Support, M-3
    Martin Hall, 3:35-4:25 p.m. Open to the public. Call 656-3466 for more
    information or to register.
    - 21 -- Basketball: College of Charleston (Women), Littlejohn Coliseum, 5:15 p.m.
    - 21 -- Basketball: Duke University (Men), Littlejohn Coliseum, 7:30 p.m.
    - 21 -- Tennis: College of Charleston (Men), here, 2 p.m.
    - 22 -- Theatre Residency: "Tell-Tale Poe." Sponsored by University Union, workshops in afternoon, performance in Tillman Auditorium, 8 p.m.

      Open to the public, admission charge to be announced.
    - 24 -- Basketball: Claflin (Women), Littlejohn Coliseum, 5:15 p.m.
    - 24 -- Basketball: Buffalo State (Men), Littlejohn Coliseum, 7:30 p.m.
    - 24 -- Speakers Bureau Presentation: Allen Funt brings the most popular scenes from "Candid Camera." Tillman Auditorium, 8 p.m. Open to the public, no admission charge.
    - 26 -- Speaker: "Current Work" by Betty Hahn, Photographer/Printmaker from Albuquerque, New Mexico. Sponsored by the Clemson Architectural Foundation and the College of Architecture, Lee Hall Auditorium, 8 p.m. Open to the public, no admission charge.

## CALENDAR OF CAMPUS EVENTS (Continued)

- 26 -- Spanish Film: "Daughter of Deceit." Sponsored by Department of Languages, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 26 -- Trustees Medal: Finals of the annual competition for the Trustees Medal. Sponsored by Calhoun Forensic Society and Department of English, Daniel Hall Auditorium, 7 p.m. Open to the public, no admission charge.
- 26-3/4 -- Videotape: "National Lampoon Show." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
- 26-3/3 -- Art Exhibition: "Photos of Clemson University by John Hatfield."

  Sponsored by University Union, Union Gallery, 8 a.m.-5 p.m. MondaySaturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
- 26-3/16 -- Room Reservation Period: All continuing students who want to reserve a room in the residence halls for the 1979-80 school year should submit an application on their designated day.
  - 26,28, -- Short Course: "Utilities." Taught by Academic Computing Support, M-102 3/2 Martin Hall, 9:05-9:55 a.m. Open to the public. Call 656-3466 for more information or to register.
  - 26-3/1 -- Short Course: "CalComp Graphics" Sections I and II. Taught by Academic Computing Support. Section I 26-3/1, M-205 Martin Hall, 3:35-4:25 p.m.; Section II 27-28, 301 Kinard Lab, 6:30-8:30 p.m. Open to the public. Call 656-3466 for more information or to register.
    - 27 -- Concert: Leonard Bernstein's operetta "Candide." Sponsored by Department of Music's Chamber Music Series, Daniel Hall Auditorium, 8 p.m. Open to the public, no admission charge.
    - 27 -- Tennis: Western Carolina (Men), here, 2 p.m.
    - 28 -- Baseball: Georgia, here, 3 p.m.
    - 28 -- Tennis: Presbyterian College (Men), here, 2 p.m.
    - 28 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." An opportunity for staff members to enhance and/or modify their behaviors in the direction of better communication, mutual respect, and an increased awareness of consumer problems. Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.



## PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

February 26, 1979



CLEVE AT UNIVERSITY LIBRARY

## WILLIAM LEE ATCHLEY CHOSEN PRESIDENT-ELECT

William Lee Atchley -- engineer, athlete, administrator -- was tapped to be Clemson University's ninth president at a meeting of the Board of Trustees Feb. 24. He will succeed Robert Cook Edwards, who retires in June after 21 years as president.

Atchley, 47 this month, comes to Clemson from West Virginia University in Morgantown, West Va., where he is dean of the College of Engineering. He and his wife Pat were on campus Saturday to meet the press and Clemson officials following the announcement of the Board's decision by chairman Paul W. McAlister.

A native of Cape Girardeau, Mo., Atchley was a minor league pitcher with the New York Giants baseball organization and served two years in the Army before earning his B.S. degree in civil engineering at the University of Missouri at Rolla in 1957. He also received the M.S. degree in civil engineering from Missouri in 1959 and earned the Ph.D. degree from Texas A&M University in 1965.

He taught engineering mechanics at Missouri, developed the Doctor of Engineering program there, and served as associate dean of the School of Engineering from 1970 to 1975.

Since he became dean of engineering at West Virginia University in 1975, the college has enjoyed its largest enrollment in history and has become the largest research unit on the WVU campus. Research funds for the college in 1977 totaled \$6.7 million, more than all other academic units including the medical school.

Atchley and his wife Pat have three children. Julie, 21, is studying



THE PRESIDENT-ELECT -- Dr. William L. Atchley fields questions from the media at news conference announcing his election. He will take office in July.

special education; Pamela, 17, hopes to be an engineer; and David, 13, "can't decide whether to be a professional football, baseball or basketball player," Atchley said.

Atchley, who takes office July 1, was one of four final candidates chosen from a field of more than 330 applicants and nominees by special screening and selection committees appointed by the Board.

The full Board met in executive session Saturday beginning about 8:30 a.m. to vote on the candidates. After reaching a unanimous decision some two hours later, Chairman McAlister reconvened



EXECUTIVE SESSION -- (From left) Mrs. Pat Atchley, President-elect Bill Atchley, board chairman Paul W. McAlister and President Robert C. Edwards pose for a ''Clemson family'' portrait following news conference.

the board shortly after noon in the Alumni Center for a brief public meeting followed by Atchley's introduction to about 100 members of the press and the Clemson community.

Much of Atchley's professional activity at WVU has been directed toward energy research and development, but he compared the importance of agriculture in South Carolina to coal mining in West Virginia.

"With the world food problems and shortages we're having, agriculture must be given the spotlight in every way. It's an area where I have worked in research and in my background.

"I come from a farm area, I have a farm. My father-in-law is an agriculture teacher and raises cattle. I know what it is to work in agriculture, and I know some of the things we have to do.

Atchley said he was interested in the presidency at Clemson because of the school's "uniqueness" and the "high quality of its programs."

"Before I was ever interested in this job and was nominated for it, I recognized Clemson as an outstanding, high-quality institution. After I applied, I contacted friends throughout the nation in other institutions and I just asked them, 'What do you think of Clemson University?'

"The answer was always, 'High quality, a prestigious university. It's a great place to build from.' I don't think we'll take a back seat to anyone, in anything, anywhere."

## EXCERPTS FROM REMARKS BY PRESIDENT EDWARDS

In remarks at the news conference Saturday, President Edwards said: "The time for the responsibility for new leadership in the life of this institution is now. The problems that lie ahead are going to be far more difficult to solve than anything we have experienced in the 23 years that we've been privileged to be a part of Clemson. If there's anything we can do that will be of assistance, we certainly shall do so when requested.

"I think it is a great credit and a great tribute to President-elect Atchley and Mrs. Atchley that from a pool of some 300-plus individuals who would like to head this institution, they were chosen to provide that leadership. I, indeed, congratulate the board on the wisdom of its choice, and I congratulate Bill and Pat on their becoming a part of the Clemson family. And if he leaves here without his blood already becoming orange, then he probably will never get back to West Virginia safely.

"This is a day I've been looking forward to with much anticipation for quite a long time. No man has ever lived who has enjoyed a degree of cooperation and support from the board, faculty, staff and students, and the citizens of this state that can equal what I've been privileged to enjoy. Ladies and gentlemen, for everything you've meant to me, you will never know."

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

Vol. 18 No. 13

March 1, 1979



CLEMSON UNIVERSITY LILES



CLEMSON GETS DU PONT GRANTS -- A \$19,000 check representing three science and engineering grants to Clemson through Du Pont's 1979 educational aid program is presented to President Robert Edwards by R. T. Koffenberger of the Wilmington, DE, company. Representatives of the departments which will benefit from the gift are, left to right, Sidney Hays, head of entomology and economic zoology; Eugene Bishop, head of mechanical engineering; and William Barlage, head of chemical engineering. The awards can be used at the discretion of the departments to allow them to satisfy needs and to engage in activities that would not otherwise be possible.

### AG ENGINEERS EARN AWARDS

Providing career guidance for high school students in the state has earned a first place national award for South Carolina's agricultural engineering society, one of three top professional citations received by the group.

Their award-winning program included brochures, films, sponsorship of an agricultural engineering open house at Clemson, and participation in an annual Ag Careers Day.

In awards presented by the American Society of Agricultural Engineers at a New Orleans meeting, the South Carolina group also was honored for an increase in membership, highest in the southeast, and efforts in a public communications program.

## ANNUAL IPTAY GOLF TOURNAMENT SCHEDULED

The annual IPTAY Best Ball Golf Tournament, sponsored by the Anderson County Clemson Club, will be held at Pine Lake Golf Club in Anderson May 19 and 20. All faculty and staff members are invited to participate.

Proceeds from the two-day event are donated to IPTAY in the form of a \$500 scholarship.

Participants will be placed in a foursome

according to handicap. Prizes will be awarded to the winning foursome in each flight, and members of the championship foursome will receive watches. Participants who score a hole-in-one at any of the four par-three holes will also win a car. An IPTAY blanket will be awarded to the individual low scorer who is a paid-up 1979 IPTAY member.

The \$25 entry fee includes a practice round Thursday or Friday, May 17 or 18; Saturday and Sunday green fees; three golf balls; and a buffet dinner Sunday afternoon. Refreshments are complimentary on certain holes.

For further information and entry forms, contact George Bennett, assistant athletic director, at 2115. Deadline for entry is May 17.

## LANGUAGE DEPARTMENT SPONSORS DIONYSIA '79

Dionysia '79, the annual drama competition for foreign language students sponsored by the Department of Languages, will be held March 9-10.

Activities will begin on Friday, March 9, at 4 p.m. with an open house in the second floor Strode Tower Lounge. At 7:30 p.m. in Daniel Hall Auditorium, Dr. John Simon, drama critic for the New York Magazine and columnist for Esquire Magazine, will deliver the keynote address.

Immediately following the lecture, at 8:30 p.m. in Daniel Hall Auditorium, volunteers and students in the drama classes of the English Department will present in English The Forced Marriage by Moliere. A free performance of The Forced Marriage may also been seen at 8 p.m. in Daniel Hall Auditorium Saturday, March 10.

All day Saturday, March 10, the visiting students will compete in selections from various foreign plays. The event will be concluded with an awards ceremony in Daniel Hall Auditorium.

Everyone interested in drama or foreign languages is welcome to attend all of

these activities. For further information, please contact the Dionysia Committee, Department of Languages, 201 Strode Tower, or phone 656-3393.

## ACADEMIC COMPUTING SUPPORT

Susan Bengtson, Byron Lewis and Richard Nelson contributed two papers to the fourth annual SAS Users Group International Meeting. The papers were entitled "An On-Line System Report Generator" and "A Project Control System." Ms. Bengtson and Mr. Nelson attended the conference held Jan. 29-31 in Clearwater, FL.

#### CIVIL ENGINEERING

Parviz F. Rad (Assoc Prof), secretary of A.S.C.E. South Carolina section, attended the annual winter meeting of section's Board of Directors in Columbia Feb. 2. Prof. Rad, district chairman, and Michael Morrel (secretary) attended the annual councilors' meeting of the A.S.T.M. Carolinas District in Columbia Feb. 2.

## **ENGLISH**

Edward P. Willey (Assoc Prof) has an article, "A Late-Century Spectoreal Essayist and His Personae," included in The Dress of Works: Essays on Restoration and Eighteenth Century Literature in Honor of Richmond P. Bond, ed. Robert B. White, Jr., Library Series No. 42 (Lawrence: Univ. of Kansas, 1978), pp. 209-18.

Harold Woodell (Asst Prof) published "Justice Denied in the Old South: Three Novels by F. Colburn Adams" in <u>The Southern Literary Journal</u>, 11, no. 1 (1978), 54-63.

Three members of the English faculty were on the program at the Florida State Comparative Literature Conference Jan. 25-27; Joan Bobbitt (Asst Prof) read "The Myth of Self in the Diary of Anais Nin"; Bruce M. Firestone (Asst Prof) read "Setting This House on Fire: Lie

March 1, 1979

3

Down in Darkness as Domestic Tragedy";
and John J. McLaughlin (Assoc Prof) read
"Language as Order in Shakespearean
Comedy."

Two members of the faculty contributed to the South Carolina Review, 11 (November, 1978): Frank Day (Assoc Prof) reviewed James Atlas's Delmore Schwartz: The Life of an American Poet and Paul Ferris's Dylan Thomas: A Biography, pp. 133-4, and John Idol (Assoc Prof) reviewed John S. Phillipson's Thomas Wolfe: A Reference Guide, pp. 128-9.

#### ENVIRONMENTAL SYSTEMS ENGINEERING

T. M. Keinath (Prof and Hd) served as panelist for the National Science Foundation Jan. 18-19 in Washington, D.C. The panel reviewed all of the Engineering Research Initiation Grant proposals and selected those suitable for awards.

Alan W. Elzerman (Asst Prof) published "Enrichment of Zn, Cd, Pb, and Cu in the Surface Microlayer of Lakes Michigan, Ontario, and Mendota," in Limnology and Oceanography, Jan. 1979.

#### FORESTRY

J. L. Haymond (Instr) presented the program "Bottomland Hardwoods Research at Clemson University" at the Society of American Foresters, Edisto Chapter meeting in North Charleston Jan. 11.

## HISTORY

Joseph Arbena (Assoc Prof) chaired a panel on "The Historical Community in the Gran Colombian Countries" at the annual meeting of the American Historical Association in San Francisco Dec. 27-30. The session was sponsored by the Gran Colombian Studies Committee of which Prof. Arbena is the chairperson in 1979.

Charles H. Lippy (Asst Prof) published "The 1780 Massachusetts Constitution: Religious Establishment or Civil

Religion?" in <u>Journal of Church and</u> State, 20 (Autumn 1978): 533-49.

John Y. LeBourgeois (Asst Prof) and Jessee Scott (Stu) have been selected to participate in the Bell System College Visit Program on Science, Technology and Human Values at the Bell Telephone Laboratories, Murray Hill, NJ. The allexpense paid College Visit Program provides dialogue between non-science oriented students and faculty and Bell Lab scientists and engineers, with each visit focusing on a single, current telecommunications technology and its possible impact on society. Prof. LeBourgeois and Mr. Scott are the first combination of faculty and student from Clemson to be honored by selection to this program, which is limited to 30 participants selected from colleges and universities throughout the nation.

Prof. Arbena has published a review of <a href="The-Truth About Panama">The Truth About Panama</a>, by Denison Kitchel (Arlington House Publishers, 1978), in <a href="The-Hispanic American Historical Review">The Hispanic American Historical Review</a> (February 1979).

Flora Walker (Clerk-Steno) served as the voice of Jane Hunter in an hour long radio program devoted to assessing Mrs. Hunter's contributions to American life. The program, first in a projected series titled "Women Themselves!," aired over all of South Carolina's public radio stations Jan. 18 and again Jan. 20.

## MATHEMATICAL SCIENCES

The 85th Annual Meeting of the American Mathematical Society and MAA was held in Biloxi, MS, Jan. 22-28. There were special short courses and symposiums held during the week, and several of Clemson's mathematical sciences faculty were involved in those, as well as the general joint meeting of ASL, NCTM, MAA, and AMS. Their contributions were as follows:

C. V. Aucoin (Prof) addressed the symposium of the CBMS (Conference Board of the Mathematical Sciences) on computer science and graduate education in applied mathematics.

John D. Fulton (Prof and Hd) presented a paper, "Generalized Inverses of Matrices Over Fields of Characteristic Two" to the AMS meeting.

Renu C. Laskar (Prof) with William G. Frye (former Grad Stu) gave a paper, "Path Numbers of Multipartite Digraphs."

Calvin T. Long (Adj. Prof) presented a paper, "A Limited Arithmetic on Simple Continued Fractions, III."

David Lubbers (Vstg Instr) gave a talk, "Some Theorems on the Hankel Spectrum of a Function," a preliminary report.

Stanley M. Lukawecki (Prof) met with the Calculus Curriculum Committee of the MAA for an evaluation of the Calculus Readiness Test.

William H. Ruckle (Prof) presented an invited paper, "On the Construction of Solutions to Two Person Games."

Andrew F. Sobczyk (Maner Martin Prof) presented a paper, "Octonionic Linear Algebra."

Prof. Laskar and Bruce Auerbach (former Grad Stu) published a paper, "On Complementary Graphs with No Isolated Vertices," in <u>Discrete Mathematics</u>, vol. 24, (1978) pp. 113-118.

### PHYSICS AND ASTRONOMY

Beverly B. Bookmyer (Prof) has had a paper, "R and I Light Curves and Comparison of B and V Light Curves of AK Herculis," accepted for publication in the April issue of <u>Publications of the Astron. Society of the Pacific 91</u>, 1979. Ronald H. Kaitchuck, Indiana University, Bloomington, is co-author of the paper.

M. J. Skove (Alumni Prof) chaired a session at the annual meeting of the American Association of Physics Teachers at New York City Jan. 29.

### PROFESSIONAL DEVELOPMENT

Raymond Sawyer (Asst Prof, English) will chair a course, "How to Become a More Effective Speaker," to be held March 19-20 at Clemson.

Warren W. Menke (Prof, IM) is chairperson for a course, "How to Utilize the Computer to Improve Your Management Ability," to be held here March 20-21.

Robert W. Rouse (Asst Prof, Acct and Fin) will be the course chairperson for a program, "Cost Calculation and Control of Industrial Operations," to be held March 26-28 at Clemson.

Carleton Roberts (Prof, Tex) will cochair a course, "Textile Chemistry Put to Work," to be held here March 27-28.

John J. Porter (Prof, Tex) will co-chair an on-campus course, "Energy Conservation Practices for Plant Engineers," to be held March 29.

### RECREATION AND PARK ADMINISTRATION

John L. Stevenson (Prof) led two three-hour workshops on "Person-to-Person Communication" at the National Recreation and Park Association Regional Forum on Innovative Recreation Programming. This Sixth Annual Forum was held in Atlanta, Feb. 7-9. It was co-sponsored by Georgia State University.

### ZOOLOGY

John Wourms (Prof) and his graduate students have recently published the following series of five abstracts:

W. C. Hamlett and J. P. Wourms, "Differentiation of a Transient Larval Adaptation: Cement Secreting Glands of Angelfish," Amer. Zool. 18: 608.

J. Lombardi and J. P. Wourms, "SEM of Trophotaeniae, Embryonic Adaptation in an Aphidioid, <u>Microbrotula randalli</u> and other Viviparous Fishes," <u>Amer. Zool. 18</u>: 607.

March 1, 1979

5

D. L. Sponaugle and J. P. Wourms, "SEM of Secondary Egg Envelope Morphogenesis in Cyprinodont Fishes," Amer. Zool. 18: 607.

R. R. Wray and J. P. Wourms, "Egg Case Ultrastructure in Chimaeroid Fishes, a Morphogenetic Problem," Amer. Zool. 18: 601.

J. P. Wourms and W. C. Hamlett, "Cell Surfaces During Development of Shark Yolk Sac Placentae," <u>Amer. Zool.</u> 18: 641.

Prof. Edward E. Ruppert (Asst Prof) was recently elected to the steering committee of the Fifth International Conference on Meiofauna (FIMCO) to meet in August of 1980 in Columbia and to the Board of Reviewers for Transactions of the American Microscopical Society.

Prof. Ruppert presented a paper,
"Settlement, Metamorphosis and Ultrastructure of Turbellarian Larva," Oct.
28-30, 1978 at the Southeastern Estuarine
Research Society (SEERS) Meeting at Hilton
Head Island.

Prof. Ruppert presented the following
invited seminars:

"Reproduction in Marine Gastrotricha,"
Nov. 30, 1978, Presbyterian College,
Clinton; "Behind Closed Doors: Reproduction in Marine Gastrotricha," Dec. 6,
1978, Department of Zoology, University
of North Carolina, Chapel Hill, NC.

Prof. Ruppert chaired the Invertebrate Zoology/Ecology session and contributed a paper, "Reproduction in Gastrotricha Macrodasyida," at the American Society of Zoologists (ASZ) Meeting, Dec. 26-30, in Richmond, VA.

MINUTES OF THE UNIVERSITY ARCHIVES COMMITTEE MEETING, NOVEMBER 20, 1978

PRESENT: Robert S. Lambert (chairman), Olgun Ersenkal, Robert T. Benson, John W. Hubbard, J. W. Gordon Gourlay, B. N. Skardon, F. Marie Lense (secretary).

1. J. W. Gordon Gourlay, director,

called the meeting to order at 3 p.m.

### 2. Election of Officers

Professor Lambert was nominated by B. N. Skardon to be chairman. There were no other nominations. Professor Lambert was elected by voice vote. Professor Ersenkal was nominated by J. W. Hubbard to be secretary, but declined on the grounds that his mastery of English was not perfect. F. Marie Lense was nominated by B. N. Skardon to be secretary. There were no other nominations. Miss Lense was elected by voice vote.

### 3. Overall View of Special Collections by Priscilla H. Sutcliffe, Special Collections Librarian

Mrs. Sutcliffe stated that most of the smaller manuscript collections are donated to the library. The University Archives of greatest historical significance are the Littlejohn file, Harvey Gantt file, Hartwell Dam file, and Presidents' Papers.

Mrs. Sutcliffe used the James F.
Byrnes Papers to illustrate procedures
followed for special collections. She
gave the circumstances of their coming to
Clemson University and an account of the
way the papers were processed. Between
July 1, 1968, to June 30, 1978, 131
persons from many states and nine countries
came to Clemson to use the Byrnes Papers.

Mrs. Sutcliffe concluded her talk by mentioning certain theses and dissertations by scholars which are in the library.

The committee then visited the Archives Room of the library where many of the special collections are shelved.

A discussion period followed for members of the committee.

- 4. Professor B. N. Skardon moved to adjourn the meeting at 4:35 p.m. The motion was seconded and passed by voice vote.
- F. Marie Lense, Secretary University Archives Committee

### Calendar of Campus Events

- 1 -- Tennis: Presbyterian College (Women), here, 2 p.m.
- 1-3 -- ACC Basketball Tournament on Big Screen TV. Sponsored by University Union, Edgar's. Call 656-2461 for more information.
  - 3 -- Tiger Drill Meet. Military precision drill competition among all Navy, Air Force and Army junior ROTC units from high schools throughout S.C. Sponsored by Aerospace Studies and Military Science Departments, Littlejohn Coliseum, 9 a.m. Open to the public, no admission charge.
  - 4 -- Tennis: Penn State (Men), here, 1 p.m.
  - 5 -- German Play. Sponsored by Department of Languages, Daniel Hall Auditorium, 8 p.m. Open to the public, no admission charge.
  - 5 -- Lecture: "Semiology in Architecture" by Luigi Butera, Architect, Toronto, Ontario, and Venice, Italy. Sponsored by Clemson Architectural Foundation and College of Architecture, Lee Hall Auditorium, 8 p.m. Open to the public, no admission charge.
  - 5 -- Art Exhibition: "King Tut Film." Sponsored by University Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
  - 5 -- Short Course: "Utilities." Taught by Academic Computing Support, M-105 Martin Hall, 6:30-9 p.m. Open to all interested persons, no charge. Call 656-3466 for information or to register.
- 5,7, -- Short Course: "Introduction to Fortran." Taught by Academic Computing
  13 Support, M-205 Martin Hall, 3:35-4:25 p.m. Open to all interested persons,
  no charge. Call 656-3466 for information or to register.
- 5,7, -- Short Course: "Text Formatters." Taught by Academic Computing Support, 9,11 M-102 Martin Hall, 9:05-9:55 a.m. Open to all interested persons, no charge. Call 656-3466 for information or to register.
- 5-11 -- Videotape: "Take Five" with Stiller and Mera. Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
- 5-30 -- Art Exhibition: "Group Painting Show." Features South Carolina painters including David Freeman, Steven Gately and Danny Taylor. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
- 6,7 -- Baseball: East Carolina, here, 3 p.m.
  - 6 -- Tennis: Swarthmore (Men), here, 2 p.m.
- 6-7 -- Communications Carnival: Audio-Visual Equipment Display. Sponsored by University Audio-Visual Committee, Palmetto Room of University Union.

### CALENDAR OF CAMPUS EVENTS (Cont.)

- (6) noon-6 p.m., (7) 9 a.m.-4 p.m. Open to the public, no admission charge.
- 6-17 -- Art Exhibition: "Jim Stovall Graphics." Sponsored by University Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
  - 6,8 -- Short Course: "Tektronix Graphics." Taught by Academic Computing Support. (6,8) M-205 Martin Hall, 3:35-4:25 p.m.; (6) M-102 Martin Hall, 6:30-8:30 p.m. Open to all interested persons, no charge. Call 656-3466 for information or to register.
- 6-8 -- Liberal Arts Lecture Series: "The Making of the Public Mind." Sponsored by College of Liberal Arts. March 6 "The Presidency in the Media Age" by Richard Stout, Daniel Hall Auditorium, 4 p.m.; "The Transforming Powers of Print" by Elizabeth Eisenstein, Hardin Hall Auditorium, 8 p.m. March 7 "Can the Tribal Mind Turn Civil? American Religion and the Public Mind" by Martin E. Marty, Daniel Hall Auditorium, 4 p.m. March 8 "Modern Literature: Private Meaning and the Public Mind" by Bernard Benstock, Hardin Hall Auditorium, 8 p.m. Open to the public, no admission charge.
  - 7 -- Tennis: UNC-Charlotte (Men), here, 2 p.m.
  - 8 -- Baseball: Western Carolina, here, 3 p.m.
- 9-10 -- Dionysia '79. Drama competition in French, German, Russian and Spanish by students from universities and high schools in the southeastern states.

  March 9 Keynote address by Dr. John Simon, theatre critic for New York Magazine, Daniel Hall Auditorium, 7:30 p.m. Drama: The Forced Marriage by Molière will be presented by students in drama classes, Daniel Hall Auditorium, 8:30 p.m. March 10 Student competition begins at 9 a.m. The Awards and Prizes Ceremony will be held in Daniel Hall Auditorium upon completion of all contests. Another performance of The Forced Marriage will be presented at 8 p.m. in Daniel Hall Auditorium. All activities are open to the public, no admission charge.
- 9-10 -- Workshop: "Relaxation Therapy: Altering the Experience of Pain and Stress" conducted by Rothlyn Zahourek, M.S., R.N., private practitioner in psychiatric/mental health nursing and adjunct faculty, Lehman College, New York City. Sponsored by College of Nursing Continuing Education. Enrollment limited to registered nurses and other health care professionals with minimum of baccalaureate degree. Preregistration required. Call 656-3079 for more information.
- 9,10 -- Live Entertainment in Edgar's: Forecast (Jazz). Sponsored by University Union, Edgar's, 9 p.m. University I.D. and proof of age required, 50¢ admission charge.
  - 10 -- Baseball: Appalachian State, here, 2 p.m.
  - 10 -- Tennis: Duke University (Men), here, 1 p.m.
- 11-13 -- Baseball: Lewis University, here. (11) doubleheader, 1:30 p.m.; (12,13) 3 p.m.

### CALENDAR OF CAMPUS EVENTS (Cont.)

- 11 -- Department of Music Eaton-Freeman Piano Competition among Clemson Students. Sponsored by Department of Music, Daniel Hall Auditorium 3 p.m. Open to the public, no admission charge.
- 12 -- Lecture: "The Architecture of Mexico" by Max Cetto, Architect, Mexico.

  Sponsored by Clemson Architectural Foundation and College of Architecture,

  Lee Hall Auditorium, 8 p.m. Open to the public, no admission charge.
- 12 -- French Film: <u>Julie the Redhead</u>. Sponsored by Department of Languages, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
- 12-18 -- Videotape: "Soccer in Germany." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
- 12,14, -- Short Course: "Introduction to Job Control Language." Taught by Academic Computing Support, M-205 Martin Hall, 3:35-4:25 p.m. Open to all interested persons, no charge. Call 656-3466 for information or to register.
  - 12,13 -- Short Course: "Text Formatters." Taught by Academic Computing Support, M-105 Martin Hall, 6:30-8:30 p.m. Open to all interested persons, no charge. Call 656-3466 for information or to register.
    - 13 -- Tennis: Furman University (Women), here, 2 p.m.
    - 13 -- Seminar Discussion: "A Scientist on Capitol Hill--Helping Shape Public Policy." Dr. Ann Norbert, American Society for Microbiology 1978-79
      Congressional Fellow of Washington, D.C., will lead an informal discussion about her experiences serving on congressional committees responsible for drafting health and agricultural legislation. Sponsored by the Clemson Chapter of Gamma Sigma Delta and the Departments of Food Science and Microbiology, Auditorium of Plant and Animal Science Building, 3:30 p.m. Open to the public, undergraduate students are encouraged to attend, no admission charge.
- 13,14, -- Short Course: "BASIC." Taught by Academic Computing Support, M-3 Martin
  16 Hall, 10:10-11 a.m. Open to all interested persons, no charge. Call
  656-3466 for information or to register.
- 14,15 -- Baseball: Duke University, here, 3 p.m.
  - 14 -- Concert: Southwest German Chamber Orchestra with Michael Ponti, piano soloist. Sponsored by Clemson University Concert Series, Littlejohn Coliseum, 8 p.m. Open to the public, admission by season ticket, student use card or individual tickets on sale at Gate 5.
  - 14 -- Speakers Bureau Presentation: "Interviews I'll Never Forget" by David Frost, former talk-show host and one of television's most skillful interviewers. Includes discussion of famous Nixon interviews. Tillman Hall Auditorium, 8 p.m. Open to the public, no admission charge.

### NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

Vol. 18 No. 14

March 15, 1979



CLEMSON UNIVERSITY LIBRARY SOUTH CAROLINA ROOM

### FACULTY AND STAFF INVITED TO PARTICIPATE IN EDWARDS CAMPAIGN

Several hundred Clemson faculty and staff members have been enlisted to serve as solicitors for the upcoming University Family Campaign segment of the drive to establish a major endowment to honor President Robert C. Edwards.

Solicitors have been requested to attend any one of three training and kick-off meetings scheduled for March 28, 29 and 30 at Daniel Hall Auditorium. These sessions will begin at 3 p.m. and last about 30 minutes.

The volunteers will view a training film, be briefed on solicitation procedures and receive materials necessary to conduct their solicitations.

Following these sessions, a two-week concentrated effort will be made to solicit approximately 3,000 faculty and staff to give them an opportunity to make a pledge or gift. The campaign is seeking pledges payable over a three-year period.

Solicitors will have pledge cards as well as payroll deduction authorization forms for those who wish to take advantage of this convenience. Pledge payments can be deducted each pay period. For those who prefer to make a single, one-time gift, checks should be made payable to the Clemson University Foundation.

Clemson trustees authorized the establishment of The Robert Cook Edwards Endowment for Excellence in Science and Technology as a way to honor Clemson's eighth president for his outstanding accomplishments during his 21 years in office.

A minimum goal of \$1 million has been set for the Edwards Endowment campaign which

began last November. The campaign timetable calls for 100 percent of the dollar objective to be reached in May.

To date, \$700,000 has been subscribed in gifts and pledges from trustees, alumni, friends, foundations and corporations.

While honoring the achievements and leadership of President Edwards, the endowment will strengthen excellence within Clemson University, a quality which is a hallmark of his administration. Principally, the fund will enhance graduate programs throughout the University. The fund will also be used in other areas of the University, including professorships, research, public service programs and continuing education, as well as for graduate fellowships and scholarships.

### ANNUAL GOOD HEALTH APPEAL APPROVED FOR STATE EMPLOYEES

Have you ever given money to one charity, then regretted you couldn't afford to endow all of them equally?

You now can, through a new Annual Good Health Appeal set up by the Governor's office and the Commissioner of Labor, and approved for South Carolina state employees by the Budget and Control Board.

Stanley G. Nicholas, vice president for development and campaign manager for the 1979 Good Health Appeal at Clemson, says 13 health agencies will benefit from the new program. They are:

American Cancer Society American Diabetes Association American Heart Association Arthritis Foundation Cystic Fibrosis Foundation Muscular Dystrophy Association National Foundation-March of Dimes
National Hemophilia Foundation
National Kidney Foundation
National Multiple Sclerosis Society
National Easter Seal Society for Crippled
Children and Adults
National Association for Retarded Citizens
National Association for Sickle Cell
Disease

Nicholas says the Good Health Appeal and the United Way campaign are the only two umbrella charities authorized by the Budget and Control Board to receive payroll deductions from all state employees. The United Way appeal is in the fall each year while the Good Health Appeal will be an annual spring campaign.

Clemson's payroll system isn't yet set up to receive donations to the two charities, but will be in the future. In the meantime, employees can send donations to the Good Health Appeal to Nicholas's Office, 207 Sikes Hall. Clemson employees will be contacted by campus volunteers during the last two weeks in March.

The program is designed so individual contributions can be divided equally among the participating health agencies, or donors can designate one or more specific charities to benefit from their gifts.

The money will be used by the agencies to do research and provide care and services for victims of the disease. Says Nicholas, "I hope everyone at Clemson will participate in this new program since it's one that covers so many worthwhile individual campaigns. It can do a lot toward improving the health of all South Carolinians."

### HAZARDOUS WEATHER POLICY APPLIES TO FEBRUARY 19 AND 20

The Personnel Division has reminded all departments that the "Hazardous Weather Policy" applies to employees who missed work Feb. 19 or 20, when classes were suspended because of the snow.

The policy indicates that when an employee

is prevented from coming to work because of serious or emergency weather conditions or if such conditions develop during a workday, the employee may arrange for the time lost by:

- Making it up at a time scheduled by the employee's department;
- 2. Using annual leave;
- 3. Taking leave without pay.

The policy also states:

"Unless extremely serious weather or other emergency conditions prevail, no announcement will be made concerning the closing of State offices. Such announcements will be made through the President's office.

"...When unable to report to work due to weather conditions, employees should notify their supervisors if possible...

Those departments which must be staffed at all times should develop emergency plans for providing transportation to and from work for the necessary personnel who cannot arrange transportation on their own."

### MAINTAIN CURRENT MAILING ADDRESS WITH PERSONNEL

Has your address changed recently? If so be sure your personnel records reflect the change.

Go to the secretary in your department wh prepares the Personnel Action Form (CUBO 402), and give her your current mailing address. Changes in telephone numbers should be noted also.

### PUBLICATIONS OFFICE MOVES TO FIKE

The Publications Office of the University Relations Department has been moved from the Trustee House to 102 Fike Recreation Center. The telephone number is 656-2467

Staff members affected by the move are Boo Cheney, Doris Timmerman, Debbie Dunning, Marie Waters and Marian Wright. When renovation is complete, the department's graphics section, managed by Shirley Owens, will also be relocated in Fike.
Notice of the final move will be made.

### ACCOUNTING AND FINANCE

Alison C. Drews (Asst Prof) has been appointed chairman of publicity for the Carolinas Council of the National Association of Accountants for the 1979 council year. The council is an association of the 20 local NAA chapters in the Carolinas.

### AGRICULTURAL ENGINEERING

Jerry R. Lambert (Prof) visited Harga Engineering and the Bureau of Reclamation in Fresno, CA, where he discussed onfarm irrigation scheduling. Prof. Lambert is negotiating with USDA-SEA for continuation of research funding for Southeastern irrigation work.

Dan Wolf (Vstg Prof) and Prof. Lambert attended the Tulare Farm Machinery Show in California where they inspected tractors, tillage machinery and irrigation systems used in irrigated agriculture in Western USA.

Charles V. Privette (Assoc Prof) met on March 2 in Richmond, VA, with the Action Committee of the Eastern USA 4-H Engineering Event. Prof. Privette chairs the automotive section of the annual event.

Isaac Meirson (Vstg Instr) and Prof. Wolf visited the National Tillage Machinery Laboratory in Auburn, AL, to analyze soil tillage research results and to relate them to computer crop simulation. They also inspected computerized data acquisition and instrumentation systems which will be applied to future field research at Clemson.

### **CHEMISTRY**

Don C. Beer (Asst Prof) presented a seminar, "Cluster Compounds: Models for

Heterogeneous Catalysis," at Appalachian State University, Boone, NC, Dec. 8.

On Jan. 12 R. A. Abramovitch (Prof & Hd) presented a seminar, "Flash Vacuum Pyrolysis," at Furman University. On Jan. 18 he presented a seminar at Mercer University in Macon, GA, on the topic of "Chemistry, Medicine and Agriculture." Later that afternoon he presented an invited lecture at Emory University in Atlanta, GA, on "Nitrenes and Oxenium Ions." On Jan. 24 he spoke on the topic of "Chemistry, Medicine, and Agriculture" at Coker College in Hartsville and Claflin College in Orangeburg.

Prof. Piotr Tomaski, now at the University of Cracow and Prof. Abramovitch's counterpart in the NSF Cooperative Research Program between the American and Polish groups, spent three weeks in Clemson consulting and discussing his group's research and contributions to the cooperative research program. Part of this cooperative research has now been published. Prof. Abramovitch, Adrain L. Miller (Vstg Instr), Teresa Radzikowska, and Piotr Tomaski published a paper, "Azide-Catalyzed Rearrangement of N-Aryloxpyridinium Salts. Facile Synthesis of 3-(o-hydroxyphenyl) Pyridines," in J. Org. Chem. 1979, 44, 464.

J. W. Huffman (Prof) and W. W. McWhorter (Former Undergrad Stu) have published a paper, "The Dissolving Metal Reduction of Cyclic Ketones," <u>Journal of Organic Chemistry</u>, 44, 594 (1979).

A. R. Pinder (Calhoun Prof) gave a seminar, "Mass Spectrometry in Organic Chemistry," at Wofford College, Spartanburg, Feb. 26.

### CHEMICAL ENGINEERING

S. S. Melsheimer (Assoc Prof) presented invited lectures on "Mass Transfer in Donnan Dialysis" and "Direct-Contact Phase Change Thermal Energy Storage" at Tulane University Jan. 22. The latter presentation was also given at Auburn University Feb. 13.

F. C. Alley (Prof) presented a paper,
"Organic Emission Control to Meet
Present Regulations," at the Textile
Wastewater Treatment and Air Pollution
Control Conference at Hilton Head Jan. 26.

J. N. Beard (Assoc Prof) presented a paper, "Energy Conservation in Textile Driers," at a conference on "Energy Conservation in the Textile Industry" at Atlanta, GA, Feb. 13.

### CIVIL ENGINEERING

Parviz F. Rad (Assoc Prof) has been nominated by the South Carolina Section of the American Society of Civil Engineers to represent the section on the professional division committee of ASCE dealing with Engineering Management at the organizational level.

Prof. Rad and Marion C. Miller (former Grad Stu, Capt. U.S. Army Corp of Engr) are authors of a paper, "Trends in Use of Construction Management," in the December issue of the journal of the construction division of the American Society of Civil Engineers.

### **ECONOMICS**

Bruce Yandle (Prof) was a contributing editor to the November/December issue of Regulation which contained his analysis "HEW and DOT Confront Discrimination Against the Handicapped," pp. 7-10.

Holley Ulbrich (Assoc Prof) and Prof. Yandle have a textbook, <u>Managing</u>
<u>Personal Finance</u>, and its accompanying study guide published by Business Publications Incorporated.

Rodney H. Mabry (Assoc Prof) and Dudley Blair (Assoc Prof) received notice this month that their proposal to the National Science Foundation for a Student Service Training grant has been awarded. Rising seniors from upper South Carolina will come to the University in the summer for course work in basic economic concepts and will develop and complete economic research projects in the second

phase of the project.

Russell Shannon (Prof) spoke to the student chapter of the American Institute of Chemical Engineers (AIChE) in Earle Hall Jan. 23 on "Energy Economics."

### ENGINEERING TECHNOLOGY

Carl R. Lindenmeyer (Assoc Prof) was chairman for the February program meeting of the Greenville-Spartanburg Chapter of the American Institute of Industrial Engineers (AIIE) held at Clemson University. The program, organized by Engineering Technology students, was "Box Seat at a Labor-Management Dispute.' The role of the arbitrator was played by James A. Chisman (Prof and Acting Hd) and Prof. Lindenmeyer played the role of narrator. Five ET students also had roles in the play.

### ENVIRONMENTAL SYSTEMS ENGINEERING

T. J. Overcamp (Assoc Prof) and G. W. Israel (Technische Universitat Berlin) published a paper, "Sensitivity Analyses of a Salt Deposition Model for Natural Draft Cooling Towers," in the January 1979 issue of Atmospheric Environment.

### FOOD SCIENCE

The following papers were presented at the annual meeting of the Southern Association of Agricultural Scientists in New Orleans Feb. 4-7:

Joseph J. Jen (Assoc Prof) and W. H. Flurkey (Grad Stu), "Hydrophobic Chromatographic Separation of Soybean Oxidases."

James C. Acton (Assoc Prof) and R. L. Dick (Res Tech), "Sulfhydryl Groups of Soluble Protein Fractions from Fermented Dried Sausages."

Robert F. Borgman (Prof) and S. F. Lightsey (Res Tech), "The Influence of Feeding Hydrogenated Fats to Rats."

Syed S. H. Rizvi (Asst Prof), Terry C. Titus (Assoc Prof) and Prof. Acton, "Thermostabilized Peanut Kernels."

Prof. Acton served as chairman of the Food Science and Technology Section of SAAS at the New Orleans meeting.

Prof. Rizvi served on the jury for Student Scientist Awards of the Food Science and Technology Section.

Prof. Acton presented a seminar at East State Tennessee University in Johnson City, TN, Feb. 16-19 on "Food Additives: Functionality and Safety Testing."

Prof. Acton also attended the Meat Science Institute of NIMPA in Athens, GA, and presented a lecture, "Functional Properties of Raw Meat Materials," Feb. 18-21.

Charles V. Morr (Stender Prof) will be attending and serving as discussion leader in Palmerston North, New Zealand, March 30-April 9. The session will be on "Functionality of Whey and Whey Components" at the Whey Research Workshop II for international researchers working on cheese whey recovery, utilization and functional properties. The conference is sponsored by the National Science Foundation.

Robert G. Bursey (Assoc Prof) has been awarded a contract (\$147,841) with the South Carolina Department of Education, Office of School Food Services, to provide nutrition education training for 600-700 South Carolina elementary school teachers in 1979. The contract also calls for the development of a resource catalogue and course handbook for use by the teacher/participants and to provide content material and educational strategies for teaching nutrition to children in grades 1-6.

Recent publications include:

"Protein-Water Interactions and Functional Properties" by Prof. Morr and D. H. Chou, J. American Oil Chemists' Society 56 (1): 53A-62A (1979).

"Physiochemical Aspects of Texturization: Fiber Formation from Globular Proteins" by Prof. Morr and J. L. Shen, J. American Oil Chemists' Society 56 (1): 63A-70A (1979).

### **GEOLOGY**

Kenneth Bramlett (Grad Stu, Univ of South Carolina) and Villard S. Griffin Jr. (Prof) have recently published an article, "Geology of the Greer and Greenville-Spartanburg Airport Area, South Carolina," in Geologic Notes, v. 22.

### HISTORY

Charles H. Lippy (Asst Prof) served as local arrangements chairman for the annual meeting of the South Carolina Academy of Religion held at Clemson Feb. 24. At the meeting he presented a paper, "Paradise Regained Will Be a City," and was elected secretary-treasurer of the Association for the coming year.

Victor Matthews (Vstg Asst Prof) has published an article, "Government Involvement in the Religon of the Man: Kingdon," in the Journal Revue d'Assyriologue, volume 72 (1978), pages 151-156.

John W. Johnson (Asst Prof) delivered the 1979 National Heritage Week Address on the topic "Amendment by Convention: the Spectre of an Untried Alternative" at the annual meeting of the four Anderson Sertoma Clubs, Feb. 23.

Prof. Johnson participated in an hourlong program aired recently by WEPR on Roger Baldwin, the 95-year-old former head of the American Civil Liberties Union.

### HOME ECONOMICS

Veronica Carmack (Assoc Prof) attended the first AHEA Regional Meeting in Washington, DC, Feb. 16-19. She presided at one session and served as discussion leader at another. The meeting focused on an in-depth look at critical issues in legislation, careers and urbanization.

Prof. Carmack was installed as president of the South Carolina Home Economics Association during the annual meeting Feb. 23-24 at Myrtle Beach.

### INDUSTRIAL MANAGEMENT

John K. Butler Jr. (Asst Prof) presented a paper at the Southeast AIDS meeting in Nashville, TN, Feb. 23 on "Values, Value Importance, and Job Satisfaction: An Extension."

Earl W. Arp (Assoc Prof) presented two papers on "Exposure and Control in the Rubber Industry" to the URW-BFG Conference on Worker Health and Safety at the B. F. Goodrich Research Center in Brecksville, OH, Feb. 12-14.

### MATHEMATICAL SCIENCES

Joel V. Brawley (Prof) gave a lecture, "The Gambler's Ruin," at Baptist College in Charleston Feb. 26.

James P. Jarvis (Asst Prof) and Kenneth Chelst (Asst Prof, Wayne State Univ) had an article, "Estimating the Probability Distribution of Travel Times for Urban Emergency Service Systems," published in the January-February 1979 issue of Operations Research.

T. G. Proctor (Prof) presented a colloquium, "Some Mathematical Models Involving Nonlinear Differential Equations," at Northern Kentucky University Feb. 14. This talk was given as part of the Society for Industrial and Applied Mathematics Visiting Lecturers Program.

### MUSIC

Edith B. Card (Asst Prof) presented a program of dulcimer and Appalachian folk music at the Ninety-Six Music Lovers' Club Feb. 15. This was their Annual American Music Program for 1979.

### POULTRY SCIENCE

Denzil V. Maurice (Asst Prof) is coauthor of a paper with L. S. Jensen (Prof, Univ of GA) entitled "Influence of Sulfur Amino Acids on Copper Toxicity in Chicks," published in the January issue of the <u>Journal of</u> Nutrition.

### PROFESSIONAL DEVELOPMENT

Thomas B. Maertens (Instr, IM) will be the course chairperson for a program, "Supervisory and Foremanship Skills," to be held at Clemson April 3-4.

Edward Olson (Prof, Tex) will chair an on-campus conference, "Special Topics in Textile Printing," to be held April 3-5.

Claude S. Simpson (Instr, IM and Asst Dir, Prof Dev) will chair a two-day workshop, "Developing Skills and Attitudes for Personal and Professional Effectiveness," which will be held April 5-6 on campus.

John H. Marvin (Assoc Prof, Tex) will cochair an April 10-11 conference, "Yarn Preparation for Shuttleless Looms," to be held here.

### **TEXTILES**

Carleton W. Roberts (Prof) was appointed a member of the National Research Council Advisory Board on Military Personnel Supplies, Committee of Chemical Protective Clothing Systems.

Frederick T. Simon (Prof) presented a talk, "Instrumental Color Technology," to 1979 Chemists Meeting of United Merchants and Manufacturing Corporation in Greenville Feb. 2.

### ZOOLOGY

Darrell G. Yardley (Asst Prof) recently published a note, "Selection at the Amylase Locus of D. melanogaster: A Work of Caution," Evolution 32: 920-921.

Enrollment by Men and Women - Full Time and Part Time
Clemson University
Second Semester 1978-1979

UNIVERSITY TOTAL	Institutes Clemson-Furman MBA	CAMPUS TOTAL	TOTAL	Graduate - Masters Level Postgraduate Non-Degree Graduate - Ph.D. Level	TOTAL	1st Semester Senior 2nd Semester Senior Sub-Total	1st Semester Junior 2nd Semester Junior Sub-Total	1st Semester Sophomore 2nd Semester Sophomore Sub-Total	1st Semester Freshman 2nd Semester Freshman Sub-Total	Classification
5547	3	5544	592	415 36 7 134	4952	466 822 1288	575 666 1241	455 603 1058	623 742 1365	Full Time
970	217 132	621	367	309 24 3 3	254	20 98 118	21 25 46	16 39 55	31 4 35	Part Time
6517	217 135	6165	959	724 60 10 165	5206	486 920 1406	596 691 1287	471 642 1113	654 746 1400	Total
3249	0	3249	223	171 19 4 29	3026	196 500 696	263 470 733	215 500 715	401 481 882	WOMEN Full Time
1264	609	620	456	429 16 6	164	14 32 46	20 11 31	21 13 34	42 11 53	EN Part Time
4513	609	3869	679	600 35 10	3190	210 532 742	283 481 764	236 513 749	443 492 935	Total
8796	0	8793	815	586 55 11 163	7978	662 1322 1984	838 1136 1974	670 1103 1773	1024 1223 2247	Full Time
2234	826 167	1241	823	738 40 9	418	34 130 164	41 36 77	37 52 89	73 15 88	TOTAL Part Time
11030	826 170	10034	1638	1324 95 20 199	8396	696 1452 2148	879 1172 2051	707 1155 1862	1097 1238 2335	Total

## Clemson University Second Semester 1978-1979

∞ College Total	۷i	Pre-Architecture	Pre-Architecture (BA)	City and Regional Planning	Building Construction	Architecture	Architecture (Non-Degree)	College Total	- 7	S		Plant Physiology	Plant Pathology	Nutrition	Horticulture	Food Science	Entomology	Economic Zoology	Economic Biology	Dairy Science	Community & Rural Development	Applied Economics	Animal Science	Animal Physiology	Animal Industries	Animal & Food Industries	Agronomy	Agric Mech and Business	Agricultural Engineering	Agricultural Economics	Agriculture	Agriculture (Non-Degree)	6	Major Course	
26	0	13	4	0	9	0	0	48	2 -	ب د	0	0	0	0	19	Н	0	2	2	w	ᆫ	0	15	0	2	0	6	∞	10	7	5	0	1st	(Seme	
58	2	44	6	0	6	0	0	/1	;	2 2	0	0	0	0	15	w	0	∞	4	2	ᆫ	0	16	0	0	0	0	w	12	4	_	0	2nd	Freshman Semester)	
26	0	15	6	0	5	0	0	5/	; c	0	, 1	0	0	0	20	Н	0	7	1		2	0	6	0	0	0	∞	4	2	4	0	0	1st	Soph (Seme	
38	0	28	7	0	w	0	0	84	2 -	s 0-	0	0	0	0	· 17	5	ᆫ	7	2	0	0	0	20	0	0	0	10	∞	6	w	0	0	2nd	Sophomore (Semester)	
17	0	9	Н	0	6	H	0	TS	2 0	> 2	0	0	<u></u>	0	23		0	6	2	2	ᆫ	0	15	0	0	0	4	13	4	7	0	0	lst	Junior (Semest	
48	0	24	15	0	9	0	O,	131	2	2	0	0	0	0	43	ω	ω	11	2	4		0	14	0	_	0	18	9	9	10	_	0	2nd	Junior (Semester)	
17	0	5	4	0	7	Н	0	7.7	, c	) H	0	0	H	0	21	0	L	5	0	1	_	0	12	0	0	0	9	5	<u></u>	6	Н	0	1st	Sen (Seme	
17	0	31	26	0	20	0	0	T03	,	) o	0	0	0	0	48	9	4	18	1	6	4	0	23	0	0	0	9	13	10	12	0	0	2nd	Senior Semester)	
	0	w	2	0	Н	5	0	σ	\ C	0	0	0	0	0	w	0	0	0	0	0	0	0	0	0	0	0	0	0	_	0	2	0	1	Post	
96	10	0	0	28	0	55	ω	TAR	77	3 6	0	1	6	29	18	0	20	0	0	4	0	0	7	0	0	17	15	10	4	15	0	9		Mast	
C	0	0	0	0	0	0	0	00	) c	0	0	9	7	2	0	0	13	0	0	0	0	0	0	11	0	0	5	0	4	9	0	0		Ph D	
-	0	0	Н	0	0	0	0	c	o C	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		Unc 1	
415	12	172	72	28	66	62	ω	766	222	27	<u> </u>	10	15	31	227	23	42	64	14	23	11	0	128	11	ω	17	84	73	70	77	10	9	i i	Total	

Total Enrollment by Courses and Academic Classification Clemson University
Second Semester

(Non-Degration and ral Education and Idhood Education Education Services eaching (Peaching (Peac	Page Two	된 1000	hman				Tund	In in						
tion (Non-Degretion and istration and istration and ultural Educatic Childhood Educatic trial Education anel Services of Teaching (Pece Teach		(Seme	(Semester)	(Sem	(Semester)	(Semester	St	er)	$\overline{}$	er) (Semester)	$\overline{}$	) (Semester)	) (Semester) Grad	) (Semester) Grad Mast
tion (Non-Degretion and istration and ultural Education trial Education ce Teaching (Pose Teaching (P		1st	2nd	1st	2nd	1st	2nd	٩	d 1st		1st	1st	1st	1st
tion istration and ultural Educat Childhood Edu ntary Educatic trial Educatic trial Educatic trial Educatic trial Educatic trial Educatic trial Educatic crial Educatic crial Educatio nnel Services ce Teaching (P ce T	ion	0	0	0	0	0	0				0	0 2	0 2 167	0 2 167 0
istration and ultural Educatic Childhood Educatic trial Educatic fall Educatic trial Education fall Education fall Education fall Education fary Education f		1	0	0	0	0	0					1 1	1 1 0	1 1 0 0
Childhood Educatic Childhood Educatic trial Education ce Teaching (Poe Teaching		0	0	0	0	0	0				0	0 0	0 0 67	0 0 67 0
Childhood Ed ntary Educatitrial Educatitrial Educatitrial Educatitrial Educatitrial Educatitrial Educatitrial Educatitrial Educationnel Services of Teaching (ce Teaching (ce Teaching (ce Teaching (ce Teaching (ce Teaching (ce Teaching (dary Education) Education) dary Education dary Educatio	Educat	œ	0	⊢	7	œ	00				10	10 0	10 0 9	10 0 9 0
ntary Educati trial Educati ce Teaching ( dary Educatio	Childho	18	9	7	22	14	38		9	9	9 34	9 34 0 .	9 34 0 . 0	9 34 0 . 0 0
1 Educati 1 Educati 1 Educati 1 Educati 1 Educati 1 Educati 2 Services eaching (eaching (eaching (eaching Education) Education) Education	ntary Educa	38	ယ	28	44	35	65	٠.	31	31	31 79	31 79 3	31 79 3 123	31 79 3 123 0
1 Educati 1 Educati 1 Educati 2 Services eaching (eaching (eaching (eaching Education) Education		6	4	5	6	10	9	Ĭ	ω	ω	3 18	3 18 2	3 18 2 19	3 18 2 19 0
1 Educati 1 Educati 2 Services  Services  eaching (eaching Educatio Educati		4	⊢	ω	S	5		Oi	w	w	ω ω	3 3 0	3 0 0	3 3 0 0 0
Services Services Services eaching (eaching Educatio	trial	1	Ľ	ᆫ	5	4		5	4	4	4 2	4 2 0	4 2 0 0	4 2 0 0 0
Services eaching ( Educatio	Education (	2	Н	5	2	2		1	2	2	2 1	2 1 0	2 1 0 0	2 1 0 0 0
eaching (eaching (eac		0	0	0	0	0		0	0	0	0 0	0 0 0	0 0 0 115	0 0 0 115 0
eaching (eaching (eaching (eaching (eaching (eaching Educatio	ading	0	0	0	0	0	0	Ŭ	0	0	0 0	0 0 0	0 0 0 28	0 0 0 28 0
eaching (eaching (eaching (eaching (eaching feducatio Educatio		2	0	⊢	0	2			0	0	0 0	0 0 0	0 0 0	0 0 0 0 0
eaching (eaching (eaching (eaching (eaching (Education))) Education	Teaching (	4	2	_	4	0		5	0	0	0 5	0 5 0	0 5 0 0	0 5 0 0 0
eaching ( eaching ( eaching ( Education		0	0	ᆫ	0	0	0		0	0	0 0	0 0 1	0 0 1 0	0 0 1 0 0
eaching (eaching (Education Education Educatio	Teaching (	0	上	2	⊣	2	0				1	1 0	1 0 0	1 0 0 0
eaching ( Educatio Educatic		0	4	1	5	ω	2					2 0	2 0 0	2 0 0 0
Education (Education (	ience Teaching (Physical Sc)	0	0	Н	0	0	4				0	0 0	0 0 0	0 0 0 0
Education (		2	4	⊣	2	6	6				6	6 5	6 5 0	6 5 0 0
Education (		0	0	0	₽	0	0				0	0 0	0 0 0	0 0 0 0
Education (		7	0	4	9	5	4					3 0	3 0 3	3 0 3 0
Education (			2	1	6	4	00					13 0	_ 13 0 5	13 0 5 0
Education (		ω	00	2	4	_	5					7 0	7 0 4	7 0 4 0
Education ( Education ( Education ( Education ( Education ( Education (		2	0	0	0	0		J				0 0	0 0 0	0 0 0 0
Education ( Education ( Education ( Education ( Education (		0	0	0	0	0		0				0 0	0 0 0	0 0 0 0
Education ( Education ( Education ( Education (		0	0	0	0	0		Ü				3 0	3 0 0	3 0 0 0
Education ( Education ( Education (	Education (	0	0	1	_	Н		2			5	5 0	5 0 13	5 0 13 0
Education ( Education (		0	0	0	0	0	2				0	0 0	0 0 0	0 0 0 0
Education (	Education (	o 1-1	0 1	o />	O 10	0 %	0		o 1-	ο μ		<b>ာ</b> ယ	ο ω ο Ο	ω ω ο
College Total	Total	100	71 0	χο c	126	70,	170				106	106 1/	196 1/ 553	196 1/, 553 0

Page Three														
Mator Course	Fre	Freshman	Sopt	Sophomore	Jur	Junior	S	enior	Post	M 20 0 1	PhD	IInc 1	Total	
	1st	2nd	1st	2nd	1st	1st 2nd	1s	2nd	\$	2		i i	4	
Engineering (Non-Degree)	0	0	0	0	0	0		0	0	7	0	0	7	
	œ	7	w	尸	4	_		0	0	0	0	0	26	
Bio-Engineering	0	0	0	0	0	0		0	0	19	2	0	21	
Ceramic Engineering	ω	տ	10	13	10			7	0	w	0	0	69	
Chemical Engineering	18	78	20	44	32	43		53	0	12	Сī	0	327	
Civil Engineering	59	64	32	52	41	45		53	w	24	4	0	407	
Electrical Engineering	57	90	28	62	43			56	G	28	7	0	463	
Engineering Analysis	ω	4	2	0	2			10	0	0	0	0	27	
	0	0	0	0	0	0		0	0	4	ᆫ	0	G	
Engineering Technology	36	13	21	18	26	37		34	۲	0	0	0	210	
	0	0	0	0	0	0		0	0	36	10	0	46	
Materials Engineering	Q	0	0	0	0			0	0	2	0	0	2	
Mechanical Engineering	41	74	45	69	47	40		49	10	28	w	٢	425	
Systems Engineering	0	0	0	0	0			0	0	13	տ	0	18	
Water Resources Engineering	0	0	0	0	0,			0	0	ω	0	0	ω	
College Total	225	335	161	259	205	228	145	262	19	179	37	ľ	2056	
I M and T S (Non-Degree)	0	0	0	0	0			0	0	7	0	0	7	
Accounting	22	58	22	51	28			39	ω	0	0	0	274	
Administrative Management	122	113	93	116	103	105	92	138	0	0	0	0	882	
Economics (BA)	14	10	ω	4	G			6	0	1	0	Đ	54	
Economics	4	9	9	15	14			17	0	9	0	0	107	
Engineering Management	0	0	0	0	0			0	0	0	13	0	13	
Financial Management	68	88	41	53	29	43		37	0	0	0	0	381	
Industrial Management	21	15	25	20	25			22	0	0	0	⊢	169	
Management	0	0	0	0	0	0		0	0	33	0	0	33	
Management Science	0	0	0	0	0	0		0	1	0	11	0	12	
Textile and Polymer Science	0	0	0	0	0	0		0	0	1	00	0	9	
Textile Chemistry	0	7	w	7	2	$\vdash$		4	0	6	0	0	31	
Textile Science	ω	w	0	0	ᆫ	0		0	0	5	0	0	14	
Textile Technology	6	w	10	9	<b>∞</b>	4		9	ᆫ	0	0	0	62	
College Total	260	306	206	275	215	230		272	ر ا	62	32	1	2048	
- 1														1

Total Enrollment by Courses and Academic Classification Clemson University
Second Semester

ב מתרטנות ממווינט רלד													
Page Four	Fre	Freshman	Sopl	Sophomore	Jur	Junior		Senior Post	Post			,	
Major Course	(Sem	(Semester)	(Semo	(Semester)	(Sen	(Semester)		nester)	Grad	Mast	PhD	Uncl	Total
Liheral Arts (Non-Degree)	0	⊷	0	0	0	0	0	0	0	6	0	0	7
Arts	11	12	G	ω	4	0	1	₽	0	0	0	0	37
	23	17	11	21	17	23	18	28	1	40	0	1	200
French	₽	2	0	5	₽	ω	ω	7	0	0	0	0	22
German	1	0	0	2	0	0	0	0	0	0	0	0	ω
History	11	10	7	10	7	5	2	20	1	7	0	0	80
Political Science	18	24	13	20	19	23	19	34	0	0	0	1	171
Psychology	15	36	16	24	18	27	12	43	w	0	0	0	194
Sociology	12	10	∞	13	14	13	13	19	0	0	0	₽	103
Spanish	w	₽	1	4	2	ω	₽	4	0	0	0	0	19
College Total	95	113	61	102	82	97	69	156	G	53	0	Lu	836
Nursing (Non-Degree)	0	0	0	0	0	0	0	0	0	<b>-</b>	0	0	<b>—</b>
	9	19	9	18	16	6	G	ω	0	0	0	<b>–</b>	86
Nursing	63	14	19	51	20	65	22	74	4	14	0	0	346
College Total	72	33	28	69	36	71	27	77	4	15	0	þ	433
Sciences (Non-Degree)	0	0	0	0	0	0	0	0	0	13	0	0	13
Biochemistry	G	9	G	12	4	7	w	9	Н	10	6	0	71
Botany	4	2	» <u></u>	2	· w	0	· w	, ω	0	13	0	0	31
Chemistry (BA)	, 0	. 0	0	, w	. 0	, 0	, <sub> </sub>	) (	) C	, 0	, ,	) C	100
Chemistry	, L3	, /	2	نیا د	, <b>t</b>	, ∝	. 2	) V	) C	, 7.T	Σ	) C	1 a
Geology (BA)	· 0	ა ⊢	ى c	v C	ა 🔾	م ب ا	ა ⊢	1 2	o c	o c	o c	) C	25.0
Mathematics (BA)	ρ. 4	א נ	ب ر	<b>⊸</b> (	<b>&gt;</b> (	4	0 1	10	0 0	0 0	0 (	0 (	32
	23	49	G	36	19	24	10	28	Ľ	47	13	0	255
Medical Technology	7	9	w	10	w	13	w	0	0	0	0	0	48
Microbiology	10	19	00	19	16	19	14	32	2	21	0	, <del> </del>	161
Physics (BA)	0	1 0	, O	0	0	0 0	0	0	4 0	10	0	1 0	0
Pre-Dentistry	<b>)</b> (	J1 (	→ ⊦	<i>ې</i> ر	) (	o <b>、</b>	O t	O 1	0 +	0 +	0	O H	∞ <sup>1</sup>
Pre-Medicine	0	0	0	0	0	0	0	0	0	0	0	0	0
Pre-Medicine Core	25	40	ω	5	ω	1	L	2	0	0	0	0	80
Pre-Pharmacy	11	14	2	6	2	0	0	0	0	0	0	0	) W
Pre-Physical Tyerapy	9	14	w	6	5	0	Н	0	<u> </u>	0	0	0	; 39
	1 27 10	24	1 ~	21	70 10	26	6	30	\ C	177 TA	70 17	ა c	1123
Correge rotar	135	/07	4/	13/	19	TT3	TC	130	o	140	2	7	CATT

Second Semester Major Course Page Five UNIVERSITY TOTAL Non-Degree Wood Utilization Recreation and Park Adm Forest Management For & Rec Res (Non-Degree) College Total College Total 1097 1238 0 14 .49 .3 34 34 1st 2nd (Semester) Freshman 0 19 24 1 44 00 707 1155 14 36 33 1st 2nd (Semester) 00 Sophomore 20 42 65 00 879 1172 696 1452 50 50 60 1st 2nd (Semester) 00 Junior 16 68 0 84 00 0 18 37 4 59 1st 2nd (Semester) 00 Senior 0 58 58 2 118 Grad Post 95 23 20020 1324 199 Mast 2 14 21 0 37 00 PhD. 00 00000 Uncl 20 00000 10034 Total 385 19 588 2 182 69

Clemson University

Total Enrollment by Courses and Academic Classification

# Male Enrollment by Courses and Academic Classification

## Clemson University Second Semester 1978-1979

	Fres	Freshman	Soph	Sophomore	Jui	Junior	Ser	ior					
Major Course	(Seme	(Semester)	(Seme	(Semester)	(Sem	(Semester) lst 2nd	(Seme	(Semester)	Grad	Mast	PhD	Unc1	Total
Agriculture (Non-Degree)	0	0	0	0	0	0	0	0	0	С	0	0	S
	ω	1	0	0	0	1	0	0	2	0	0	0	7
Agricultural Economics	5	4	ω	ω	6	00	4	9	0	00	6	0	56
	10	12	2	6	4	8	6	00	1	4	4	0	65
מ	7	2	4	00	12	9	5	13	0	10	0	0	70
	6	0	6	<b>∞</b>	4	17	9	6	0	.10	5	0	71
Animal & Food Industries	0	0	0	0	0	0	0	0	0	12	0	0	12
Animal Industries	2	0	0	0	0	0	0	0	0	0	0	0	2
Animal Physiology	0	0	0	0	0	0	0	0	0	0	00	0	00
Animal Science	00	10	w	00	10	9	7	13	0	6	0	0	74
Applied Economics	0	0	0	0	0	0	0	0	0	0	0	0	0
Community & Rural Development	1	0	ᅡ	0	0	0	0	ω	0	0	0	0	G
Dairy Science	2	卢	0	0	0	4	0	5	0	w	0	0	15
Economic Biology	2	ω	1	٢	2	1	0	ᆫ	0	0	0	0	11
Economic Zoology	2	5	6	w	4	2	2	15	0	0	0	0	39
Entomology	0	0	0	0	0	ω	Ľ	4	0	17	9	0	34
Food Science	0	1	0	_	0	0	0	Ľ	0	0	0	0	ω
Horticulture	9	00	14	9	15	24	14	20	2	12	0	0	127
Nutrition	0	0	0	0	0	0	0	0	0	14	ᆫ	0	15
Plant Pathology	0	0	0	0	ᆫ	0	0	0	0	2	6	0	9
Plant Physiology	0	0	0	0	0	0	0	0	0	_	00	0	9
	0	0	٢	0	0	0	0	0	0	0	0	0	Ľ
Poultry Science	1	ᆫ	0	4	2	_	0	4	0	4	0	0	17
	0	0	0	0	0	0	0	0	0	19	0	0	19
College Total	58	48	41	51	60	87	48	102	5	127	47	0	674
Architecture (Non-Degree)	0	0	0	0	0	0	0	0	0	2	0	0	2
	0	0	0	0	ᆫ	0	Н	0	S	52	0	0	59
Building Construction	<u></u>	S	5	w	6	9	7	20	ᆫ	0	0	0	64
City and Regional Planning	0	0	0	0	0	0	0	0	0	17	0	0	17
rchi	2	2	ω	4	٢	9	ω	20	ᆫ	0	0	┙	46
Pre-Architecture	10	37	11	24	7	20	S	30	w	0	0	0	147
Visual Studies	0	0	0	0	0	0	0	0	0	7	0	0	7
College Total	20	44	19	31	15	38	16	70	10	78	0		342

Male Enrollment by Courses and Academic Classification Clemson University
Second Semester

Page Two														
	Fres	Freshman	Soph	Sophomore	Junior	or	Senic	ior	Post	X of	מאם	II ac 1	Total	1
	1st	2nd	1st	2nd	1st	2nd	1st	2nd			į	1	+ C	1
Fig. (Non-Dorror)	>	>	>	>	>	>	>	>	>	7.7	>	>	7.7	1
	<b>-</b> -	0	0	0	0	0	0	0	_	0	0	0	2	
Administration and Supervision	0	0	0	0	0	0	0	0	0	43	0	0	43	
Agricultural Education	œ	0	<u></u>	6	<u>∞</u>	7	4	9	0	9	0	0	52	
0	0	0	0	0	0	Ľ	0	Ľ	0	0	0	0	2	
Elementary Education	ω	<b>⊢</b>	Ľ	⊷	6	4	4	6	0	2	0	0	28	
Industrial Education	4	w	4	4	10	7	w	18	۳	19	0	0	73	
Industrial Education (Ind Art)	w	_	<u>_</u>	w	w	4	w	w	0	0	0	0	21	
Industrial Education (Indust)	_	₩	۳	w	4	4	4	<b>⊢</b>	0	0	0	0	19	
Industrial Education (Voc-Tec)	2	Н	4	2	2	⊣	2	0	0	0	0	0	14	
Personnel Services	0	0	0	0	0	0	0	0	0	37	0	0	37	
Reading	0	0	0	0	0	0	0	0	0	w	0	0	ω	
Science Teaching	0	0	۳	0	<b>⊢</b>	ы	0	0	0	0	0	0	ω	
Science Teaching (Biol Sci)	Н	0	0	2	0	w	0	2	0	0	0	0	8	
Science Teaching (Chemistry)	0	0	0	0	0	0	0	0	₩	0	0	0	1	
Science Teaching (Earth Sci)	0	0	2	H	ш	0	H	H	0	0	0	0	6	
Science Teaching (Mathematics)	0	2	0	w	2	0	H	0	0	0	0	0	8	
Science Teaching (Physical Sc)	0	0	⊢	0	0	0	0	0	0	0	0	0	1	
Secondary Education	⊢	0	↦	2	2	⊢	2	4	2	0	0	0	15	
Secondary Education (Econ)	0	0	0	Ľ	0	0	0	0	0	0	0	0	<b>L</b>	
Secondary Education (English)	<del></del>	0	⊣	0	₩	0	0	0	0	₩	0	0	4	
Secondary Education (History)	0	2	0	2	ω	6	0	10	0	, <u>, , , , , , , , , , , , , , , , , , </u>	0	0	24	
Secondary Education (Math)	₩.	0	⊷	0	0	2	0	0	0	0	0	0	4	
Education (	0	0	0	0	0	0	0	0	0	0	0	0	0	
Secondary Education (German)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Secondary Education (Spanish)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Secondary Education (Nat Sci)	0	0	0	0	0	0	Н	0	0	œ	0	0	9	
Secondary Education (Pol Sci)	0	0	0	0	0	2		0	0	0	0	0	2	
Secondary Education (Psych)	0	Н	₩	0	⊢	0	0	0	0	0	0	0	ω	
Secondary Education (Soc)	0	0	0	0	0	0	0	0	0	0	0	0	0	
College Total	26	12	20	30	44	43	25	55	5	170	0	0	430	

Male Enrollment by Courses and Academic Classification Clemson University Second Semester

	- 6
P	C
l Di	0000
00	(
0	(
1	2
딘	C
H	ζ
ות	(
O	
	(
	C
	-

Page Three													
	Fre	Freshman	Sop	Sophomore	Jı	Junior	Ser	ior	Post				
Major Course	(Sem	(Semester)	(Sen	(Semester)	(Ser	(Semester)	) (Sen	nester)	Grad	Mast	PhD	Unc1	Total
	1st	2nd	1st	2nd	1st	2nd	1st	2nd					
Engineering (Non-Degree)	0	0	0	0	0		0	0	0	6	0	0	6
	G	6	2	۳	w		2	0	0	0	0	0	20
Bio-Engineering	0	0	0	0	0		0	0	0	17	2	0	19
Ceramic Engineering	ω	4	10	13	9	6	11	7	0	w	0	0	66
Chemical Engineering	14	65	16	ა 8	26		21	47	0	12	G	0	280
Civil Engineering	51	55	32	41	35		28	50	w	- 24	w	0	364
Electrical Engineering	48	76	25	54	37	52	34	55	2	28	6	0	417
Engineering Analysis	ω	4	2	0	2		w	7	0	0	0	C	24
Engineering Mechanics	0	0	0	0	0		0	0	0	ယ	卢	0	4
Engineering Technology	32	10	19	15	23	36	24	31	٢	0	0	0	191
Environmental Systems Engr	0	0	0	0	0		0	0	0	29	10	0	39
Materials Engineering	0	0	0	0	0		0	0	0	2	0	0	2
Mechanical Engineering	41	71	44	66	45		17	49	9	28	w	1	412
Systems Engineering	0	0	0	0	0		0	0	0	9	G	0	14
Water Resources Engineering	0	0	0	0	0		0	0	0	2	0	0	2
College Total	197	291	150	228	180		140	246	15	163	35	P	1860
I M and T S (Non-Degree)	0	0	0	0	0		0	0	0	5	0	0	5
Accounting	15	23	9	25	18		16	24	2	0	0	0	149
Administrative Management	85	69	89	70	89		74	105	0	0	0	0	630
Economics (BA)	7	6	w	Н	G	5	w	5	0	-	0	0	36
Economics	4	5	7	9	11		9	15	0	7	0	0	81
Engineering Management	0	0	0	0	0		0	0	0	0	10	0	10
Financial Management	47	60	27	28	23		18	26	0	0	0	0	252
Industrial Management	15	12	25	15	23	20	17	19	0	0	0	0	146
Management	0	0	0	0	0	0	0	0	0	23	0	0	23
Management Science	0	0	0	0	0	0	0	0	۳	0	9	0	10
Textile and Polymer Science	0	0	0	0	0	0	0	0	0	0	6	0	6
Textile Chemistry	0	6	2	S	Н	Н	Н	4	0	5	0	0	25
Textile Science	ω	ω	0	0	0		2	0	0	Н	0	0	9
Textile Technology .	4	2	00	7	6	2	11	G	۲	0	0	0	46
College Total	180	186	149	160	176		151	203	4	42	25	0	1428

1 500														
Major Course	Fres	Freshman (Semester)	Sopt	Sophomore	Junior (Semester)		Senior (Semester)		Post	Mac+	n 4g	IInc 1	Total	
	1st	2nd	lst	2nd	lst		1st							
Liberal Arts (Non-Degree)	0	0	0	0	0	0	0	0	0	2	0	0	2	
Liberal Arts	7	2	w	0	_	0	۲	1	0	0	0	0	15	
English English	12	w	4	4	9	9	6	10	ᆫ	19	0	0	77	
French	0	0	0	0	0	0	0	1	0	0	0	0	1	
German	0	0	0	0	0	0	0	0	0	0	0	0	0	
History	7	7	4	7	4	4	2	11	0	2	0	0	48	
Political Science	14	15	10	13	<b>∞</b>	13	13	21	0	0	0	0	107	
Psychology	5	6	7	4	7	S	w	17	w	0	0	0	57	
Sociology	1	w	4	w	w	4	⊢	4	0	0	0	1	24	
Spanish	1	0	0	⊢	0	ᆫ	0	2	0	0	0	0	5	
College Total	47	36	32	32	32	36	26	67	4	23	0		336	
Nursing (Non-Degree)	0	0	0	0	0	0	0	0	0	0	0	0	0	
	_	2	0	0		0	1	0	0	0	0	0	5	
Nursing	0	0	2	0	0	1	ᆫ	w	一	0	0	0	00	
College Total	P	2	2	0	ŀ	F	2	ω	ŀ	0	0	0	13	1
Sciences (Non-Degree)	0	0	0	0	0	0	0	0	0	ω	0	0	ω	
Biochemistry	4	6	2	∞	w	6	w	5	_	7	w	0	48	
Botany	2	0	_	2	0	0	0	1	0	6	0	0	12	
Chemistry (BA)	0	0	0	w	0	0	0	0	0	0	0	0	ယ	
Chemistry	9	· (c	, –	, ш	ယ	6	. р	00	0	9	17	0	60	
Geology (BA)	0	0	0	. 0	0	, <u>—</u>	, <u> </u>	· —	0	0	0	0	, ω	
Geology	ىي د	2	> <b>-</b>	4 C	ني د	) N	) N	· ⊢	) C	) C	) C	) C	ST.	
	12	16	<b>⊢</b> (	14	14	15	7	14	0 (	32 32	9 (	0 (	134	
Medical Technology	1	그	0	ᆫ	0	w	一	0	0	0	0	0	7	
Microbiology	4	10	6	16	00	14 ,	10	18	⊢	15	0	⊢	103	
Physics (BA)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physics	7	S	· <u>-</u> -	G	G	7	<u> </u>	4	. —	10	12	, <u></u>	59	
Pre-Dentistry	0	4	, <u>—</u>	2	0	0	0	0	0	0	0	0	7	
Pre-Medicine	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pre-Medicine Core	17	34	2	· w	ယ	0	, —	2	0	0	0	) 0	62	
	، س	) (s	H	) <u></u>	0	0	0	0	· 0	0	0	0 0	10	
Pre-Physical Therapy	0	2	0	0	2	0	<del> </del>	0	ب	0	0	C	6	

Male Enrollment by Courses and Academic Classification Clemson University
Second Semester

UNIVERSITY TOTAL	Non-Degree College Total	Recreation and Park Adm Wood Utilization College Total	For & Rec Res (Non-Degree) Forest Management	Zoology College Total	Page Five Major Course
654	14 14	30 3 42	9	5	Fre (Sen
654 746 471 642	00	14 1 28	0	99	Freshman (Semester)
4 71	0 0	24 3 37	0	4 21	
642	00	17 2 34	0	16 76	Sophomore (Semester)
596	0 0	31 2	50	7 50	Ju (Se
691 4	00	36 0 49	0	17 71	Junior (Semester) 1st 2nd
486	00	22	0	6	]
920	0 0	34 2 91	55	25 83	Senior (Semester) lst 2nd
60	11	100	10	0	Post Grad
724	00	13 0 27	13	12 94	Mast
165	00	000	0 0	17 58	PhD
10	ഗ ഗ	000	00	0	Unc1
6165	30	221 17 391	1 152	117 661	Total

# Clemson University Second Semester 1978-1979

Semester		Freshman	man	Soph	omore	Junior		Senior		Os t				
Agriculture (Non-Degree)  Agricultural Economics Agricultural Engineering Animal Science Animal Industries Animal Industries Animal Science Applied Economics College Total Architecture (Non-Degree) Architecture (Non-Degree) Architecture (BA) Pre-Architecture (BA) Architecture (BA) Agricultural Engineering Animal States Animal		(Semes	ter) 2nd	(Seme	ster) 2nd	(Semes		(Sem	este 2r	(Semester) G 1st 2nd	ester) Grad 2nd		Grad	Grad Mast
Agricultural Economics Agricultural Engineering Animal & Food Industries Animal Industries Animal Industries Animal Physiology Animal Science Economic Engineering Econ	_	0	0	0	0	0		0		0		0	0 4	0 4 0
Agricultural Economics Agricultural Engineering Agric Mech and Business  A		2	0	0	0	0	0	ш		0		0	0 0	0 0 0
Agricultural Engineering Agricultural Engineering Agricultural Engineering Agricultural Mech and Business  1 1 1 0 0 0 0 0 1 Agronomy Animal Food Industries Animal Industries Animal Physiology Animal Science Community & Rural Development Dairy Science Economics Economics Biology Entomology Food Science Plant Pathology Plant Pathology Plant Pathology Plant Poilife Science Poultry		2	0	1	0	1	2	2		ω		0	0	0 7
Agric Mech and Business 1 1 1 0 0 1 1 0 Agronomy 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0	0	0	0	ᆫ	2		2		0	0 0	0 0 0
Agronomy Animal & Food Industries Animal Physiology Animal Physiology Factonomics Animal Physiology Animal Industries Animal Industries Animal Industries Animal Industries Animal Physiology An	Agric Mech and Business	1	<b>-</b>	0	0	₩	0	0		0		0	0 0	0 0 0
Animal & Food Industries  Animal	Agronomy	0	0	2	2	0	一	0		ω		0	0 5	0 5
Animal Industries  Animal Physiology  Animal Science  Applied Economics  Community & Rural Development  Dairy Science  Economic Biology  Entomology  Frood Science  Plant Pathology  Plant Physiology  Plant Science  Poultry Science  Poultry Science  Architecture (Non-Degree)  Pre-Architecture (BA)  Pre-Architecture (BA)  College Total  Accollege Total	& Food	0	0	0	0	0	0	0		0		0	0 5	0 5 0
Animal Physiology Animal Science Applied Economics Applied Economics Community & Rural Development Dairy Science Economic Biology Entomology Entomology Flood Science Floo		0	0	0	0	0	Н				0	0 0	0 0	0 0 0 0
Animal Science Applied Economics Community & Rural Development Dairy Science Economic Biology Economic Sology Entomology Food Science Nutrition Plant Physiology Plant Science Poultry Science Poultry Science O		0	0	0	0	0	0				0	0 0	0 0	0 0 0 3
Applied Economics  Applied Economics  Community & Rural Development  Dairy Science Economic Biology  Enconomic Zoology  Enconomic Zoology  Food Science  Horticulture  Nutrition  Plant Pathology  Plant Pathology  Plant Science  Poultry Science  Foultry Science  Poultry Poultry Poultry  Poultry P		7	6	w	12	5	5				10	10 0	10 0 1	10 0 1 0
Community & Rural Development     0     1     1     0     1     1       Dairy Science     1     1     1     1     0     2     0       Economic Biology     0     1     1     1     0     2     0       Economic Zoology     0     0     0     1     0     1     0     1       Food Science     1     2     1     4     1     3       Horticulture     0     0     0     0     0     0       Plant Pathology     1     2     1     4     1     3       Plant Physiology     0     0     0     0     0     0     0       Plant Science     2     1     0     0     0     0     0     0     0       Plant Science     2     1     0		0	0	0	0	0	0				0	0 0	0 0 0	0 0 0 0
Dairy Science     1     1     1     1     0     2       Economic Biology     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     1     0     0     0     0     1     0     1     0     1     0	ty & Rural	0	ш	_	0	ш	ㄴ				L	1 0	1 0 0	1 0 0 0
Economic Biology Economic Zoology Entomology Food Science Horticulture Nutrition Plant Pathology Plant Science Poultry Science Wildlife Biology College Total Pire-Architecture (BA) Pre-Architecture (College Total College Total		ᆫ		ᆫ	0	2	0				┙	1 0	1 0 1	1 0 1 0
Economic Zoology Entomology Entomology Food Science Horticulture Nutrition Plant Pathology Plant Physiology Plant Science Poultry Science Foultry Found Foultry Science Foultry Found Foultry Science Foultry Found Fo		0	<u> </u>	0	⊢	0	广				0	0 0	0 0 0	0 0 0 0
Entomology Food Science Food Sc	Economic Zoology	0	w	Ľ	4	2	9				ω	ω 0	ω 0	3 0 0 0
Food Science 1 2 1 4 1 3 Horticulture 10 7 6 8 8 19 Nutrition 0 0 0 0 0 0 0 0 Plant Pathology 0 0 0 0 0 0 0 0 Plant Science 0 0 0 0 0 0 0 0 0 Plant Science 0 0 0 0 0 0 0 0 Plant Science 0 0 0 0 0 0 0 0 0 Poultry Science 2 1 0 1 0 1 0 1 Wildlife Biology 0 0 0 0 0 0 0 0 Architecture (Non-Degree) 2 1 0 1 0 1 0 1 Architecture Science 0 0 0 0 0 0 0 0 Architecture (Non-Degree) 0 0 0 0 0 0 0 Pre-Architecture (BA) 2 4 3 3 0 6 Pre-Architecture (BA) 3 7 4 4 2 4 Visual Studies 0 1 1 7 7 2 10	Entomology ·	0	0	0	1	0	0				0	0 0	0 0	0 0 3 4
Horticulture     10     7     6     8     8     19       Nutrition     0     0     0     0     0     0     0       Plant Pathology     0     0     0     0     0     0     0     0       Plant Science     0     0     0     0     0     0     0     0     0       Plant Science     0     0     0     0     0     0     0     0     0     0       Plant Science     0		1	2	1	4	1	ω				8	8 0	8 0	8 0
Nutrition       0	Horticulture	10	7	6	∞	00	19				28	28 1	28 1 6	28 1 6 0
Plant Pathology       0	Nutrition	0	0	0	0	0	0				0	0 0	0 0 15	0 0 15
Plant Physiology       0		0	0	0	0	0	0				0	0 0	0 0 4	0 0 4
Plant Science       0       0       0       0       0       0       0         Poultry Science       2       1       0       1       0       1         Wildlife Biology       0       0       0       0       0       0       0       0       0         College Total       26       23       16       33       21       44         Architecture (Non-Degree)       0       0       0       0       0       0       0         Architecture       0		0	0	0	0	0	0			0 0		0 0	0 0	0 0 0
Poultry Science       2       1       0       1       0       1         Wildlife Biology       0		0	0	0	0	0	0				0	0 0	0 0 0	0 0 0
Wildlife Biology     0     0     0     0     0     0       College Total     26     23     16     33     21     44       Architecture (Non-Degree)     0     0     0     0     0     0     0       Architecture (Non-Degree)     0     0     0     0     0     0     0       Building Construction     1     1     0     0     0     0     0       City and Regional Planning     0     0     0     0     0     0       Pre-Architecture (BA)     2     4     3     3     0     6       Pre-Architecture     3     7     4     4     2     4       Visual Studies     0     2     0     0     0     0       College Total     6     14     7     7     2     10		2	<u></u>	0	尸	0					2	2 0	2 0 2	2 0 2 0
llege Total     26     23     16     33     21     44       itecture (Non-Degree)     0     0     0     0     0     0     0       itecture (Non-Degree)     0     0     0     0     0     0     0     0       itecture (Non-Degree)     0     0     0     0     0     0     0     0       itecture (Non-Degree)     0     0     0     0     0     0     0     0     0     0       itecture (Non-Degree)     0		0	0	0	0	0	0		0		0	0 0	0 0 3	0 0 3
itecture (Non-Degree)     0     0     0     0     0       itecture     0     0     0     0     0       ding Construction     1     1     0     0     0       and Regional Planning     0     0     0     0     0       Architecture (BA)     2     4     3     3     0       Architecture     3     7     4     4     2       al Studies     0     2     0     0     0       llege Total     6     14     7     7     2     1	College Total	26	23	16	ယ္ထ	21	44				61	61	61 1 56	61 1 56 13
itecture     0     0     0     0     0       ding Construction     1     1     0     0     0       and Regional Planning     0     0     0     0     0       Architecture (BA)     2     4     3     3     0       Architecture     3     7     4     4     2       al Studies     0     2     0     0     0       llege Total     6     14     7     7     2     1		0	0	0	0	0	0		0		0	0 0	0 0 1	0 0 1 0
ling Construction     1     1     0     0       and Regional Planning     0     0     0     0     0       Architecture (BA)     2     4     3     3     0       Architecture     3     7     4     4     2       al Studies     0     2     0     0     0       llege Total     6     14     7     7     2     1		0	0	0	0	0	0		0		0	0 0	0 0 3	0 0 3 0
and Regional Planning       0       0       0       0       0         Architecture (BA)       2       4       3       3       0         Architecture       3       7       4       4       2         al Studies       0       2       0       0       0         llege Total       6       14       7       7       2       1			一	0	0	0	0		0		0	0 0	0 0 0	0 0 0 0
(BA) 2 4 3 3 0 3 7 4 4 2 0 2 0 0 0 6 14 7 7 2 1	and Regional	0	0	0	0	0	0		0	0 0		0	0 0	0 0 11
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		2	4	ω	ω	0	6		1		6	6 1	6 1 0	6 1 0 0
Studies       0       2       0       0       0         ege Total       6       14       7       7       2       1	Pre-Architecture	ω	7	4	4	2	4		0		⊣	1 0	1 0 0	1 0 0 0
Total 6 14 7 7 2 1		0	2 .	0	0	0	0	_	O		0	0 0	0 0 3	0 0 3 0
	College Total	6	14	7	7	2	10		1		7	7 1	7 1 18	7 1 18 0

Female Enrollment by Courses and Academic Classification on Clemson University

Second Semester

Page Two													
- 1	Fre	reshman	Sopt	Sophomore	Jui	Junior	Ser	enior	Post				
Major Course	(Sem	(Semester)	(Seme	(Semester)	(Seme	(Semester)	(Seme	(Semester)	Grad	Mast	PhD	Unc1	Total
	Lst	Znd	Lst	2nd	Lst	2nd	Lst	2nd					
Education (Non-Degree)	0	0	0	0	0	0	0	0	2	120	0	0	122
	0	0	0	0	0	0	0	ᆫ	0	0	0	0	ᆫ
Administration and Supervision	0	0	0	0	0	0	0	0	0	24	0	0	24
Agricultural Education	0	0	0	屵	0	⊢	<b>_</b>		0	0	0	0	4
	18	9	7	22	14	37	9	ယ	0	0	0	0	149
ntary Educa	35	32	27	43	29	61	27	73	w	121	0	0	451
Industrial Education	2	一	屵	2	0	2	0	0	Н	0	0	0	9
Industrial Education (Ind Art)	屵	0	2	2	2	ᆫ	0	0	0	0	0	0	8
(Indu	0	0	0	2	0	ᆫ	0	ᆫ	0	0	0	0	4
Industrial Education (Voc-Tec)	0	0	<b>⊢</b> ⊷	0	0	0	0	一	0	0	0	0	2
Personnel Services	0	0	0	0	0	0	0	0	0	78	0	0	78
Reading	0	0	0	0	0	0	0	0	0	25	0	0	25
Science Teaching	2	0	0	0	尸	0	0	0	0	0	0	0	ω
Science Teaching (Biol Sci)	w	2	ᆫ	2	0	2	0	w	0	0	0	0	13
Science Teaching (Chemistry)	0	0	广	0	0	0	0	0	0	0	0	0	1
Science Teaching (Earth Sci)	0	ᆫ	0	0	宀	0	0	0	0	0	0	0	2
Science Teaching (Mathematics)	0	2	ᆫ	2	ᆫ	2	ட	2	0	0	0	0	11
$\overline{}$	0	0	0	0	0	4	0	0	0	0	0	0	4
Secondary Education	_	4	0	0	4	5	ᆫ	2	w	0	0	0	20
Secondary Education (Econ)	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary Education (English)	6	0	w	9	4	4	4	ω	0	2	0	0	35
Secondary Education (History)	<u></u>	0	_	4	Н	2	Н	ω	0	4	0	0	17
Secondary Education (Math)	2	∞	ᆫ	4	_	w	0	7	0	4	0	0	30
Secondary Education (French)	2	0	0	0	0	0	0	0	0	0	0	0	2
Secondary Education (German)	0	0	0	0	0	0	<b>_</b>	0	0	0	0	0	1
Secondary Education (Spanish)	0	0	0	0	0	0	0	w	0	0	0	0	w
Secondary Education (Nat Sci)	0	0	ᆫ	<b>⊢</b>	一	2	ᆫ	5	0	G	0	0	16
Secondary Education (Pol Sci)	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary Education (Psych)	_	0	ᆫ	2	Ь	0	_	w	0	0	0	0	9
Secondary Education (Soc)	0	0	0	0	0	0	0	0	0	0	0	0	0
College Total	74	59	48	96	60	127	47	141	9	383	0	0	1044

Administrative Management Accounting Systems Engineering Engineering Management Economics (BA) Water Resources Engineering Engineering Technology Textile Technology Textile Science Textile Chemistry Textile and Polymer Science Management Science Management Industrial Management Financial Management Economics Mechanical Engineering Materials Engineering Environmental Systems Engr Engineering Mechanics Engineering Analysis Electrical Engineering Civil Engineering Chemical Engineering Ceramic Bio-Engineering Engineering Engineering Major Course College Total College Total and T S Engineering (Non-Degree) (Non-Degree) (Semester) Freshman 2nd 35 44 44 44 0 0 0 0 lst (Semester) Sophomore 2nd 0 0 0 0 111 3 0 0 0 31 lst (Semester) Junior 2nd 118 0 0 1 1 0 0 0 0 0 0 lst (Semester) 5001000000211000 Senior 2nd 115 33 33 33 11 11 11 11 10 00 00 00 160 0 3 1 3 6 0 0 0 0 Grad Post H000000000000H0 Mast 20 10 10 10 10 10 10 7010000201 PhD 70002200030000 Unc 1 0000000000000 000000000000000 Total 129 23 10 2 3 6 16 125 252 18 26 1 6 2 2 3 447 447 119 119 119 113 113

Clemson University Second Semester

Female Enrollment by Courses and Academic Glassification

Female Enrollment by Courses and Academic Classification Clemson University Second Semester

r r nd	Post Post f) Grad Mast  1 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	r) Grad Mas  d 0 0 4 0 0 0 8 0 21 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Non-Degree Wood Utilization Recreation and Park Adm Zoology Second Semester UNIVERSITY TOTAL Forest Management For & Rec Res (Non-Degree) Pre-Physical Therapy Pre-Pharmacy Major Course Page Five College Total College Total College Total 443 20 0 5 19 0 24 9 5 66 1st (Semester) Freshman 492 9 12 16 108 2nd 0 6 10 16 00 236 12 16 1st 26 26 (Semester) 00 Sopnomore 513 2nd 5 6 5 0 5 25 1 31 00 283 1st 0 2 19 1 2 22 29 00 (Semester) Junior 2nd 481 32 35 0 0 42 00 210 lst 0 0 15 0 0 0 17 (Semester) 00 Senior 2nd 532 0 0 24 27 Grad Post 35 12 12 10010 2000 Mast 600 0 0 7 52 10 8 10 00 34 PhD 0 0 12 00 00000 Unc1 10 00 00000 0000 3869 Total 25 33 57 462 1 30 164 2 197 39

Clemson University

Female Enrollment by Courses and Academic Classification

### MINUTES OF HANDICAPPED STUDENT ADVISORY COMMITTEE MEETING, JANUARY 17, 1979

- 1. The meeting was called to order by Chairperson Wells at 2:05 p.m.
- 2. Those in attendance were Professors Von-Tungeln, Corder, Huey, Furry, Robinson, Ashworth, Steirer, Mr. Wood and Mr. Pace. Visitors included Dean Willis and Col. Tyndall.
- 3. The usual order of business was suspended so that Mr. Charles LaRosa, Jr., Special Services Coordinator, from the Department of Vocational Rehabilitation could speak about the implementation of Section 504 on our campus.
- 4. The meeting was adjourned at 3:35 p.m.

Respectfully submitted,

William H. Wells

MINUTES OF THE COUNCIL OF ACADEMIC DEANS MEETING, JANUARY 22, 1979

Dean Hurst called the meeting to order at 9 a.m. with the following persons present: Dean Anderson, Dean McClure, Dr. Earl Carpenter (for Dean Landrith), Dean Wilcox, Dean Box, Dr. B. J. Todd (for Dean Trevillian), Dean Cox, Dean Labecki, Dean Vogel, Dean Green, Dean Schwartz, and Dr. Steirer.

Dean Hurst stated that the Business Office had indicated there would be additional monies available on or about Feb. 1, 1979, for use in this fiscal year. He requested the deans to study their college's needs and to advise him by Feb. 1 of any emergency needs in their areas.

Dean Hurst briefed the group on plans for the R. C. Edwards Endowment Fund for Science and Technology although the final details relative to soliciting have not been worked out. Dean Walter T. Cox has been appointed to direct the campaign on the Clemson University campus. In the academic area, Dr. Steirer will be responsible for working

with the faculty and Dean Hurst will be responsible for getting the information to the deans, department heads and the classified staff in the academic area. All employees will have the opportunity to pledge and to have payroll deductions.

Dean Schwartz introduced the subject of "Advisory Committee and Major/Research Advisors," which had been discussed previously at the December meeting. Since there had been no changes requested since December, Dean Schwartz called for the approval of this statement. The statement was approved and will go forward to the Educational Council.

Dean Schwartz introduced a proposal regarding the Deadline Date for Filing the Final Form GS2. This proposal was approved by the Council of Academic Deans and will move forward to the Educational Council.

Dean Schwartz's proposal for an Amendment to the Policy on Incomplete Graduate Course Work was approved and will go forward to the Educational Council.

Dean Green discussed the matter of whether students taking Math 100 or English 100 should receive credit for these courses toward satisfying requirements for graduation. It is his feeling and that of the Office of Admissions and Registration that unless it is specifically excluded from a curriculum in the catalog, that the credits will be counted.

Dr. Steirer reported that the Presidential Selection Committee had almost completed its work and stated that February would be an important month with many decisions to be made.

The meeting adjourned at 10:15 a.m.

Respectfully submitted,

Annette H. Kesler

MINUTES OF THE UNIVERSITY AUDIO VISUAL COMMITTEE MEETING, JANUARY 25, 1979

Present: W. H. Owens, D. W. Blair, R. C. Davenport, T. E. Burke, S. W. Thompson,

M. S. Forsbery, R. G. Halfacre, J. A. Stockham, W. H. Durham, B. R. Smith and T. F. Collins

Chairman Owens called the meeting to order at 1:25 p.m.

The minutes of the Nov. 30, 1978, meeting were approved as presented.

Bill Shain reported that the Palmetto Room and the loggia space for the Communications Carnival had been confirmed. He stated that letters had been sent to a number of companies asking that they participate in the Carnival. He indicated that follow-up letters would be sent to any company that had not responded by Feb. 15 and asked the committee members for additional companies that might be contacted.

Tom Burke reported that half of his time this semester would be spent in Charleston and that the schedule had not been worked out. Burke and Jim Stockham agreed that they could contine with the Instructional Packages Subcommittee. Burke indicated that he had catalogs from several companies and asked for additional names to contact. Harry Durham suggested that some companies may offer to send samples but not participate to any greater extent.

Sherry Thompson indicated that most of the on-campus labs had been contacted and that most of them would participate to some extent. Thompson said that 10 a.m. and 2 p.m. would be the best time for tours of nursing facilities.

Bill Smith reported that the publicity posters and pamphlets cost about one hundred and thirty dollars last year. He asked that the other subcommittees supply information as soon as possible as the Public Relations office needs six to eight weeks to prepare the posters and pamphlets.

It was asked that exact times be established for the Carnival. It was agreed that the Carnival times would be Tuesday, March 6, noon-6:00 p.m.;

Wednesday, March 7, 9 a.m.-4 p.m.

It was agreed that there would not be special demonstrations as there were last year. Chairman Owens pointed out that the instructional packages displays were, in fact, a substitute for the demonstrations.

Chairman Owens suggested that the Committee meet on Feb. 15 and March 1 so that final preparations could be made for the Carnival. With the agreement of the members of the Committee, the meeting was adjourned at 2:20 p.m.

Respectfully submitted,

T. F. Collins, Secretary

MINUTES OF THE EDUCATIONAL COUNCIL MEETING, FEBRUARY 5, 1979

Present: Robert C. Edwards, presiding,
Ben W. Anderson, Melvin E. Barnette,
Benton H. Box, Michael J. Chapman, H.
Morris Cox, Walter T. Cox, J. W. Gordon
Gourlay, Claud B. Green, Victor Hurst,
Ernest J. Kozma, Geraldine Labecki,
Melvin C. Long, Harlan E. McClure,
Joseph B. McDevitt, Stanley G. Nicholas,
A. E. Schwartz, William F. Steirer, Jr.,
Wallace D. Trevillian, K. N. Vickery,
Henry E. Vogel, Lyle C. Wilcox, S. M.
Willis, E. N. Tyndall, secretary

### 1. Minutes

The minutes of the meeting of Jan. 15, 1979, were approved as submitted.

### 2. Graduate Studies at Clemson University

<u>Statement and Recommendations</u>: The Dean of the University recommended the following:

A. DEADLINE FOR FILING THE FINAL FORM GS-2

The deadline date for filing the final Form GS-2 (Graduate Degree Curriculum) shall coincide with that for Form GS-4 (Admission to Candidacy and Diploma Order). The Graduate School

catalog will reflect that the wording "filing" refers to filing with the Graduate School and not just with the department or college.

### B. POLICY ON INCOMPLETE GRADUATE COURSE WORK

Except for courses graded on a pass/fail basis, the grade of "incomplete"

(I) may be given for incomplete work for any graduate course in which work remains undone and the student is unable to fulfill all requirements because of circumstances beyond his or her control. This grade is not given in lieu of unsatisfactory or failing grades received for completed courses for the opportunity of improving the grade later.

It is the student's responsibility to contact the instructor regarding the work required to complete the course. Upon request by the student, the instructor shall provide a written statement of the work to be completed. The grade of "I" will be valid in normal lecture or laboratory courses for only 30 days after the beginning of the next semester or summer session. Within this period, the student must either complete his or her work, or request approval from the graduate dean for an extension of time by means of a petition (which has been endorsed by the instructor, department head, and dean of the college responsible for the course) which states the reason for the request and the length of time needed. Only one request for an extension of time for each grade of "I" will be considered by the graduate dean.

Students receiving a grade of "I" on courses such as "Special Problems" or other unstructured independent study courses must complete all work and receive a final grade within one year of completing enrollment in all other courses listed on their graduate degree curriculm, excluding thesis or dissertation research.

A graduate student will not be permitted to repeat any portion or reregister for any course for wich the grade of "I" has been given or register in any other course for the purpose of

removing the grade of "I". Should any work remain incomplete at the expiration of the appropriate deadline described in the previous paragraphs, a grade of "F" will be recorded on the student's permanent record. Although the Graduate School will attempt to bring the deadlines to the attention of the student and department head, it is the sole responsibility of the graduate student to comply with these regulations.

Students who receive a grade of "I" while enrolled in the Graduate School at Clemson University remain ineligible for graduation until the incomplete work has been made up and a letter grade submitted to the Office of Admissions and Registration.

### C. ADVISORY COMMITTEES AND MAJOR ADVISORS

Because department heads and college deans are directly aware of faculty members' academic and research experiences, competence and knowledge of departmental objectives and requirements, the major responsibility for determination of a faculty member's qualifications to serve as advisor (Major or Research) or as a member of an Advisory Committee resides with the related department and college.

The usual role of the Graduate School in selection and approval of committee members is twofold. First, the Graduate Dean must be assured that the composition of the Advisory Committee meets the minimum qualifications indicated below. Second, the Graduate Dean should make certain that committee members, and particularly advisors, understand their duties and responsibilities. The latter task should be performed by making a list of duties and responsibilities available at advisor's workshops and/or at the time a student's GS-2 Form is submitted to the Graduate School.

Selection and approval of committee members and particularly a major advisor should be approached cautiously. The major advisor serves the essential role of guiding a student's intellectual and professional development as well as

providing a student with skills, training and competence in research. Major advisors must be equally informed on matters related to curriculum, scheduling, departmental and Graduate School requirements as well as with the intricacies of research pursuit. Thus the major advisor must be a full-time. Clemson University faculty member with eligibility for tenure and with regular membership and participation in the student's major program and department.

In addition to the major advisor, the Advisory Committee for a master's student must have a minimum of two additional members, and the Advisory Committee for a Ph.D. student must have at least three additional members. Clemson University faculty who hold full-time faculty positions which carry eligibility for tenure can satisfy the requirements of minimal membership. Part-time or adjunct faculty may serve as members of Advisory Committees but may not be used to satisfy the requirements for minimal membership.

Both a major advisor and a research advisor may be appointed for students conducting their research on campus. These may be the same person. All faculty who are employed full-time by Clemson University in positions which carry eligibility for tenure may serve as major and/or research advisors. Parttime, visiting and adjunct faculty may serve as research advisors.

Selection of the major advisor and research advisor requires case consideration of the individual student's curricular and research objectives in order to create a balanced and harmonious graduate program. Among the specific duties and responsibilities of the two advisors are:

### MAJOR ADVISOR

- 1. Consult with the student to determine academic and research background and interests;
- 2. Assist the student in the initial formulation of a course of study and curriculum;

- 3. Advise the student in scheduling course work and research time to assure smooth and timely progress;
- 4. Assist in, recommend and approve the selection of the Advisory Committee and the Research Advisor:
  - 5. Chair the Advisory Committee meetings;
- 6. Submit Form GS-2;
- 7. When necessary act as intermediary among student, administration and committee members;
- 8. Make certain all departmental requirements are satisfied;
  - 9. Approve the research project;
- 10. Schedule qualifying and final oral examination;
- 11. Moderate the comprehensive portion of final oral examination;
- 12. Submit Form GS-7 and results of final oral examination.

### RESEARCH ADVISOR\*

- 1. Assist student in the forumlation of a research project;
- 2. Provide guidance and detailed recommendations concerning the development of the research project;
- 3. Exercise final judgment in matters related to the completion of research;
- 4. Approve all drafts of thesis prior to submission to the committee;
- 5. Moderate during the defense portion of the final oral examination.

\*If no research advisor is appointed, the major advisor assumes these duties.

Responsibilities and duties of the Advisory Committee:

1. Advise on and approve course of study (Form GS-2);

- Advise in matters related to research;
   Approve research projects;
   Establish guidelines, timetables and deadlines for research progress;
- 3. Perform functions as required by departmental policy (i.e., examinations, reviews, progress reports, evaluations);
- 4. Approve recommendations for admission to candidacy; Approve action related to dismissal;
  - 5. Accept final draft of thesis;
- 6. Serve as examiners at thesis defense.

Action: APPROVED

E. N. Tyndall, Secretary

MINUTES OF THE UNIVERSITY AUDIO VISUAL COMMITTEE MEETING, FEBRUARY 15, 1979

Present: W. H. Owens, B. R. Smith, T. E. Burke, S. W. Thompson, D. W. Blair, W. A. Shain, A. C. Groseclose, T. F. Collins.

Chairman Owens called the meeting to order at 1:25 p.m.

The minutes of the Jan. 25, 1979, meeting were approved as read.

Chairman Owens distributed a suspense calendar for the upcoming Communications Carnival. He then asked for the subcommittee reports.

Bill Shain reported that he had received only two replies to his inquiries. Modern Office Machines said they would not participate and Stones will participate. Shain indicated that he was sending out follow-up letters to those companies that had not responded.

Tom Burke reported that Lansford Publishing will not send representatives but will send materials. McGraw Hill and 3M will also be contacted and whatever materials we receive will be displayed.

Sherry Thompson indicated that all oncampus labs except one will participate. Chairman Owens suggested that the labs should be reminded the week before the carnival.

Chairman Owens distributed copies of a letter that would be sent to area schools and churches. They are to be mailed Feb. 26.

B. R. Smith said flyers and posters will be available at the March 1 meeting. Chairman Owens asked that each member ascertain the number of faculty and staff in his or her own college. Committee members will be asked to distribute them. There being no further business, the meeting was adjourned at 2:15 p.m.

Respectfully submitted,

T. F. Collins, Secretary

### MINUTES OF THE FACULTY SENATE

January 23, 1979

The Senate Chamber

### 1. Call to Order

The meeting was called to order by President Steirer at 3:35 p.m.

### 2. Approval of Minutes

There were no December minutes because of a lack of a quorum at the December 12 meeting.

The minutes of the November 21 meeting were approved with minor corrections.

### 3. Committee Reports

- a. Admissions and Scholarship Committee Senator Edie, Chairman, reported that the Admissions and Scholarship Committee met on January 9. Work was completed on two congratulatory letters and one resolution. These will be introduced under new business. The following topics were also discussed:
  - (1). <u>University Class Schedule</u> Senators Thompson and Grubb volunteered to gather data on University class schedule possibilities. This is in response to the request that we study our present as well as possible alternate class schedule possiblilties.
  - (2). Health Excuse Mechanism for Redfern We were requested to see if a student health excuse system could be implemented at Redfern. We talked to the staff at Redfern about their health excuse policy. We learned that any student who is admitted to Redfern for overnight treatment receives a certification of hospitalization slip which records time in and time out of Redfern. For any outpatient treatment, the professor can call Redfern and they will confirm the student's visit as well as any recovery time that the student requires. Written excuses for outpatient treatment were discontinued several years ago because of abuses.
  - (3). Academic Honesty Our subcommittee studying academic honesty has written to Auburn, Georgia Tech, V.P.I. and N.C. State to learn their policies and systems governing academic honesty problems.
  - (4). Mid-semester Grades Last month we were requested to consider the value of mid-semester grade reports and their possible elimination for upper level undergraduates. After considerable discussion we concluded that if mid-semester grades are not meaningful, it is perhaps the fault of the individual faculty member and not the mid-semester report concept. It was also noted that this mid-semester report creates an incentive for faculty to give exams before the midterm. We cannot, therefore, support the elimination of mid-semester grade reports.

- (5). Withdrawal Policy In 1976 the Faculty Senate passed a resolution requesting that the free drop period for classes be shortened from the present eight weeks to six weeks. This year the Undergraduate Council (at the advice of its own faculty representatives) recommended that it be shortened to seven weeks. At the November meeting the Faculty Senate (by a nearly unanimous vote) indicated that this was still too long a free drop period. Dean Hurst has stated that no change can now be included in next year's catalogue and the Faculty Senate and the Undergraduate Council must agree before he will consider a change.
- (6). Clemson University Admission Policy Mr. W. R. Mattox, Director, Admissions, will be invited to our committee meeting on February 6 at 3:30 pm in the library class room to discuss the University admissions policy.
- (7). <u>Identification of Major</u> The committee is sending out second letters to departments that have not as yet responded to the request for a definition of their major areas needed for each type of degree.
- b. Policy Committee Senator West, Chairman, reported that the Policy Committee met on November 27, 1978, to review the Faculty Manual Policy Statement dealing with "Faculty Participation in the Selection of Academic Administrators." The committee does not recommend a rewrite of the existing policy statement.

The committee has requested and received a list of academic administrators that the Dean of the University considers the policy statement to apply. The policy committee has reviewed this list and believes the list to include current positions considered academic administrative in function.

The policy committee has drafted a memorandum to Dean Hurst from the Faculty Senate (see attachment). The requested action by Dean Hurst will clear up the confusion as to which positions require faculty participation in the selection process.

The policy committee met with Mr. Mel Long, Mr. Ross Cornwell and Mr. Harry Durham on December 19, 1978. This meeting provided discussion of policies (written and unwritten) surrounding the University Public Relations Department and the problems these policies present to the Clemson Faculty.

During the ensuing discussion, questions were raised on the Faculty Manual policy statement regarding publication policies; censorship of faculty publications, and the basic differences between public relations and responsible intellectual publication from an enlightened University faculty.

- c. Research Committee Senator Fennell, Chairman, reported that the Research Committee met on January 10 and discussed the following:
  - (1). Due to a lack of understanding by Faculty, a review of University consulting policy was undertaken by the Faculty Senate Research Committee. Consulting practices by Faculty are covered by the outside work policy appearing on page 51 of the Faculty Manual and the conflict of interest policy, page 52. The guidelines in the Faculty Manual relate to remunerative part-time work which is mutually beneficial to the University and individual faculty.

To obtain a better understanding of current procedures, the College Deans responded to the following questions:

- (a) Does your College have a consulting policy supplementing the policy stated in the Faculty Manual.
- (b) Is this policy written and will you provide the Senate with a copy?
- (c) Is consulting encouraged within your College?
- (d) Do you have any suggestions to improve the statement on the consulting policy in the Faculty Manual?

Recognizing the individuality of each college, the Deans, for the most part, thought that the existing guidelines were adequate. Some Deans thought that additional guidelines were necessary in order to clarify special situations. Within bounds, consulting is encouraged across the University.

The Research Committee appreciates the response to the above questions and recommends that the Deans reiterate their comments in a written memorandum to Department Heads and Faculty in their Colleges.

- (2). The administration is considering procedures to standardize employment practices in order to contribute to an effective affirmative action program and ensure that necessary steps are taken to provide, and to document, equal employment opportunity in the filling of all faculty vacancies. President Steirer passed this matter on to the Research Committee for review.
- d. <u>Welfare Committee</u> Senator Burt, Chairman, filed the following report:
  - (1). The Welfare Committee did not meet in December. The next meeting will be Tuesday, January 30, at 3:30 in the library classroom. There are several items to report on and one resolution which will be introduced under new business.
  - (2). Retirement subcommittee report The study of the TIAA-CREF system is complete and will be distributed. Since this is a lengthy report with some subtle points to consider we will not ask for a Senate resolution this month. Instead, I will report that our principal conclusion is that Clemson faculty members should have the option to enroll in TIAA-CREF instead of the South Carolina Retirement System with the University making the same contribution to the employee's retirement that it now does. Since the employee death benefit is a separate item a separate plan will have to be developed for those faculty who elect TIAA-CREF. Similarly, a separate disability plan will have to be provided. We will also introduce a resolution based on the recommendations in the April 18, 1978, retirement Subcommittee report on the South Carolina Retirement System.

3. Academic Year Subcommittee: The rejoinder to the comments of the Dean of the University on the Committee's recommendations concerning Summer school employment is complete and will be distributed. A resolution on this rejoinder will be introduced. (tabled until February).

### e. Ad Hoc Committees

(1). Faculty Compensation - Senator Burt reported that the Ad Hoc Committee on Faculty Compensation has completed its study of compensation (salary plus fringe benefits) for Clemson Faculty. Our study supports the Welfare Committee's initial conclusions presented to the Senate on March 28, 1978. We have found that Clemson faculty members are significantly undercompensated relative to faculty of neighboring southeastern institutions and that this undercompensation has persisted for several years. The final report of the Committee, with recommendations, will be completed and distributed to the Senate this month. Since this is an especially sensitive matter it is imperative that all Senators acquaint their faculty with the findings and recommendations of the Committee in order that a resolution can be introduced at the next meeting.

### f. <u>University Committees</u>

(1). University Union Committee - Senator Young, Senate Representative, filed the following report:

The Cultural Committee ( a division of the Clemson University Union, Clemson University) is sponsoring a dinner theatre featuring a production of Mark Twain's musical commedy "The Diary of Adam and Eve."

The dinner theatre will be held in Edgar's on Thursday, January 18, 1979. Dinner will begin at 6:00 PM and the play will last until 9:00 PM. There will be a cash bar open beginning at 6:00.

Tickets for the dinner theatre are on advance sale only. The price is \$5.00 per person which includes both the buffet and the play. The tickets can be obtained at the Union Program Office (9 AM - 5PM, next to Information Desk) and will be available through January 17, 1979. There are only a limited number of tickets available.

"The Diary of Adam & Eve is a witty, nostalgic re-telling of the story of Eden. It's the first skirmish in the battle of the sexes, gleefully interpreted by Mark Twain and brought to life on the musical comedy stage. It's family entertainment for all."

The Clemson University Union sincerely hopes that this performance will be an elightening and entertaining experience.

The following items were discussed: There is a pending consideration of academic seating arrangements in the stadium; four university committees or councils -- The Affirmative Action Committee, The Disciplinary Committee, The Research Council, and The Extension Council have not met during the present academic year -- and the question was raised whether these groups were adequately representing the faculty.

# 4. President's Report

- (1). The Board of Trustees met this weekend. Four items are of special interest.
  - a. Tiger Brotherhood is celebrating its 50th anniversary this year, and as part of the celebration proposes to beautify the entrance to the campus from Sikes Hall éast to Route 76 along both sides of Route 93. The Board approved the idea of turning this area into a park. The action will occur gradually as Tiger Brotherhood raises the money needed.
  - b. A phased plan for the removal of the prefabs was approved. Once the new housing complex is completed in the fall of 1980 the prefabs will be offered at public sale, as they become available.
  - c. The low bid was accepted at \$3,417,000 to renovate Sirrine Hall.
  - d. The \$62,000 "seed money" for the development of a master plan for a university golf course has been used and the master plan is completed. The whole idea of building such a golf course "has been moved from the back burner to the front burner."
- (2). The state has changed its requirements on agency budgetary plans. As a result, Clemson University has developed a five year programmatic plan. This plan is far too complex even to summarize here, but it is a comprehensive statement of program deficiencies and objectives with plans to overcome those deficiencies and meet those objectives, plus a full listing of academic priorities. How accessible the report will be to faculty members I do not know, but it is worth reading carefully and thoughtfully.
- (3). The Presidential Selection Committee continues to pursue its objective of narrowing the list of presidential candidates to approximately five names by February 1. Now that the actual interviewing has begun I am as optimistic and confident as I have ever been, and as you know I have been consistently optimistic from the beginning.
  - I regret my inability to persuade my fellow faculty members that no conspiracy exists and that the selection process as originally outlined has been faithfully followed. The number of rumors to the contrary are legion, and I suppose that we will all just have to accept that.
- (4). The size of the small groups of faculty that will enter into dialogues with the Presidential candidates has been established. Each group will consist of five faculty members. I am directed to serve on each group in order to serve as a moderator and to provide continuity. My plans as of this moment are to use Faculty Senators as the faculty members especially making sure that each college will have at least one representative serving in at least one group.
- (5). The Faculty Club charter subscribers will meet on January 19 at noon in the Clemson House to elect a Board of Governors. This initial Board of Governors will establish policies on food operation, alcoholic beverages, programs, hours, etc., policies which will largely determine the success of the Faculty Club. It goes without saying that thoughtful participation is imperative.

- (6). One of our long-standing requests that payroll deduction be extended to cover various university and community fund-raising efforts has been achieved. Contributions to the R. C. Edwards Endowment Fund, the Alumni Fund, the University Foundation, IPTAY, and the United Fund can now all be made through payroll deduction, when the arrangements are made final.
- (7). The R. C. Edwards Endowment Fund for Science and Technology is being organized. I am responsible for coordinating the faculty solicitation. Each faculty member will be personally solicited and asked to pledge for a three year period. The following faculty members have accepted the responsibility of coordinating their respective colleges.

Ray Noblet -- College of Agricultural Sciences
Joe Young -- College of Architecture
John Walker -- College of Education
Charles Hester -- College of Engineering
Larry Gahan -- College of Forest and Recreation Resources
Russell Shannon -- College of Industrial Management and Textile Sciences
Ben Skardon -- College of Liberal Arts
David Fiste -- Library
Thelma Duffee -- College of Nursing
Tom McInnis -- College of Sciences

- (8). The Senate and the Faculty thank the Senators who made the reception for the Board of Trustees on Friday evening a success. Opportunities to interact with Board members are infrequent and need to be seized when they arise.
- (9). At the Council of Academic Deans meeting on December 18, an extensive discussion of the changes that are occurring in state automobile policies occurred. A new division of the Budget and Control Board, the Motor Pool Management Division, has been established as part of the continuing trend towards centralizing all operations in Columbia. Clemson is trying to maintain its independence in bidding on the next automobile purchase contract, but at this point it still looks as if the state wide contract will mean AMC Hornets are the next cars bought for the motor pool.
- (10). At that same meeting the Deans discussed the latest revision of the Graduate Advisory Committee and Major/Research Advisor draft. Because objections were raised to certain phrasing it was tabled, but it will come up again in January. The draft attempts to make explicit what has often been implicit. It outlines the specific duties and responsibilities of major and research advisors and of the advisory committee and limits the naming of major advisors to full-time faculty members who hold positions eligible for tenure while enabling part-time, visting and adjunct faculty to serve as research advisors.

# 5. Old Business

a. Senator Edie obatined the floor and stated that the Admissions and Scholarship Committee of the Senate met and discussed the Withdrawal Policy. During the ensuing discussion it was obvious that the Senate still wishes to reduce this period to a shorter time, preferring four weeks. Senator Hester made the following motion:

Be it resolved that the Admissions and Scholarship Committee establish a dialouge with the Undergraduate Council, and if these two groups can not come to some kind of mutually satisfactory agreement on the Withdrawal Policy, then members of the Undergraduate Council are to be invited to appear before the Senate.

Senator Lambert seconded the motion and the Senator unanimously approved it by voice vote.

b. Senator Burt introduced the "Rebuttal to Comments on Faculty Senate Report on Status of Academic Year Faculty Employed in Summer" and "Rebuttal to Comments on Faculty Senate Policy Statement on Summer Employment of Academic Faculty" and moved that the Faculty Senate accept and approve these from the Welfare Committee. The motion was seconded by Senator Lambert.

After a brief discussion, Senator Hester moved to table the motion, after the second the motion to table passed by voice vote (there was one dissenting vote).

c. Senator Worm, Chairman of an Ad Hoc Committee on Presidental Interviews presented a set of questions to be used during presidental interviews by faculty and made the motion that they be used by the faculty involved. The motion was seconded by Senator Burt. During the ensuing discussion it was suggested that the Senate should receive these questions as information only. The motion was defeated by voice vote, and the list will be utilized for information only.

# 6. New Business

a. FS-79-1-1 - On Consulting Policy. Senator Fennell presented the resolution and moved its acceptance. Senator Snipes seconded. After a period of discussion and some modification the following resolution was approved by voice vote:

# FS-79-1-1

# Resolution on Consulting

WHEREAS consulting activities by Faculty can enhance the prestige of the University and lead to further professional contacts, and

WHEREAS consulting activities provide an opportunity for Faculty to stay current in their field and to bring practical problems to the classroom,

BE IT RESOLVED that Dean Hurst direct the College Deans to issue a memorandum to their Department Heads and Faculty indicating endorsement of the current outside work guidelines on page 51 in the Faculty Manual or any additional clarifying procedures.

- b. FS-79-1-2 On Copyright Policy Withdrawn by Senator Fennell.
- c. FS-79-1-3 On Being Informed of Professional Test Scores. Senator Edie moved for passage of the resolution. Senator Burt seconded. After discussion, the resolution was approved by voice vote.

# FS-79-1-3

# On Being Informed of Professional Test Scores

WHEREAS, professional test scores by the students of various universities have attracted widespread publicity throughout the state, and

WHEREAS, one of the measures of the quality of our graduates is their performance on these test scores, and

WHEREAS, it is the duty of the faculty to be accurately informed of the results of their efforts in the education of their students;

BE IT, THEREFORE, RESOLVED, that the faculty be informed of the collective results of Clemson students on their respective professional examinations both by a dissemination of available data and by a study which would be conducted by the undergraduate council.

# d. Other new business

(1) Senator Burt proposed the following resolution FS-79-1-4:

Resolved: The Senate endorses the Budget and Control Board's proposal to increase Faculty salaries for 79-80 by and average of 11%; 6% to be cost of living adjustment and 5% to be merit increases.

The resolution was seconded by Senator Snipes.

During the discussion it was pointed out that there may be some room for misinterpretation, that the increase would barely keep up with the inflation rate, and that it might be a mistake to endorse it at this time. The resolution failed by voice vote.

(2) Senator West moved acceptance of resolution FS-79-1-5 concerning the Clemson University Cheerleading Squad:

WHEREAS, the Clemson University Cheerleading Squad is a valuable asset to the entire University in promoting school spirit and representing the University at various athletic events; and

WHEREAS, the participation of members of this squad in commercial ventures such as advertisements in the media is entirely out of keeping with the role of this squad and calls into question the squad's reputation and role as University representative;

BE IT THEREFORE RESOLVED that the Faculty Senate of Clemson University call upon the appropriate officials of the University to put an end to all such commercial ventures which have the effect of squad promotion or endorsement of products and/or services offered by non-public, profitoriented agencies, institutions and individuals.

The motion was seconded by Senator Howard. The ensuing discussion was spirited, and during the discussion it was pointed out that the cheerleaders do not receive compensation for this advertising. After a voice vote, the Chairman declared a division of the house and the motion failed 8 to 12.

- (3) Senator Edie moved that the Senate accept two letters of commendation (attached): To Mr. Dave Moorehead, President, Clemson University Alumni Association and to Dr. Jim Strom, Director, Office of Development. The motion was seconded by Senator Worm and was approved by voice vote.
- 7. The quorum was lost and the meeting was adjourned at 5:50 p.m.

Respectfully submitted.

T. R. Adkins, Jr. Secretary

Senators absent:

Agricultural Sciences

D. B. Smith

C. S. Thompson (J. W. Hubbard substituting)

Engineering

J. L. Prince

W. Baron

Forest and Recreation Resources

L. D. Reamer

Industrial Management and Textile Sciences

W. C. Whitten

Liberal Arts

C. A. Grubb

Sciences

H. F. Senter



FACULTY SENATE

January 12, 1979

Dr. Jim Strom, Director Office of Development Clemson University Clemson, SC 29631

Dear Sir:

The Faculty Senate of Clemson University has taken note that approximately four years ago, through the cooperative efforts of the Office of Development of Clemson University and the Clemson University Alumni Association, a Faculty-Staff Merit Scholarship of \$1500 for four years was established, and that this scholarship provides a way for non-alumni faculty and staff of Clemson University, as well as alumni, to make unrestricted gifts in support of academic excellence at Clemson University. Therefore, it is the consensus of the Faculty Senate that we should affirm our support of this and similar efforts, and we wish to commend those of you who were instrumental in the establishment of this scholarship and those faculty and staff who have made unrestricted gifts which made this scholarship possible.

Further be assured that the Faculty Senate will urge all faculty and staff of Clemson University to support an increase in the number of Faculty-Staff Merit Scholarships by making gifts to the Clemson University Foundation.

Sincerely yours,

Dr. William F. Steirer, President For the Faculty Senate



**FACULTY SENATE** 

January 12, 1979

Mr. Dave Moorehead, President Clemson University Alumni Association Clemson University Clemson, SC 29631

Dear Sir:

The Faculty Senate of Clemson University notes that the Clemson University Alumni Association has recently committed itself to assist in attracting superior students to Clemson University by establishing the Alumni Merit Scholar program and that during the 1977-78 academic year the sum of \$5000 was provided as an initial investment in this program. Also, we are pleased that 73 entering freshmen for the 1979-80 academic year have been designated as Alumni Merit Scholars. Therefore, we wish to take this opportunity to commend the Clemson University Alumni Association for your action. Further, we will urge an expansion of this effort by all University organizations interested in academic excellence at Clemson University.

Sincerely yours,

Dr. William F. Steirer, President For the Faculty Senate

# Calendar of Campus Events

- 15 -- Baseball: Duke University, here, 3 p.m.
- 15 -- English Hour Lecture: "Androgyny: The Complexities of Human Sex-Role Stereotyping" by Dr. Charles L. Montgomery, Jr. Sponsored by English Department, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
- 15-30 -- Art Exhibition: "Group Painting Show." Features South Carolina painters including David Freeman, Steven Gately and Danny Taylor. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
- 15-18 -- Videotape: "Soccer in Germany." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
  - 16 -- Spring holidays begin after last class.
  - 26 -- Classes resume.
- 26-28, -- Short Course: "Statistical Analysis System (SAS). Taught by Academic 30,4/2 Computing Support. (26, 28, 30, April 2) M-102 Martin Hall, 9:05-9:55 a.m.; (26, 27) 301 Kinard, 6:30-8:30 p.m. Open to all interested persons, no charge. Call 656-3466 for information or to register.
- 26,28, -- Short Course: "Intermediate Job Control Language." Taught by Academic Computing Support, M-205 Martin Hall, 3:35-4:25 p.m. Open to the public, no charge. Call 656-3466 for information or to register.
- 26-4/1 -- Videotape: "Pro Magic Show." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
- 26-31 -- Art Exhibition: Department of Entomology, Electron Microscope Photography. Sponsored by University Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
  - 27 -- Short Course: "Introduction to Simulation." Taught by Academic Computing Support, M-205 Martin Hall, 3:35-4:25 p.m. Open to the public, no charge. Call 656-3466 for information or to register.
- 27,28 -- Baseball: University of North Carolina, here, 3 p.m.
  - 27 -- Concert: Piano recital by Jane Palmer. Sponsored by Department of Music Chamber Music Series, Daniel Hall Auditorium, 8 p.m. Open to the public, no admission charge.
  - 27 -- Clemson Continuing Education begins. Call 654-2139 for more information.
  - 28 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." An opportunity for staff members to enhance and/or modify their behaviors in the direction of better communication, mutual respect, and an increased awareness of consumer problems. Sponsored by Counseling

# CALENDAR OF CAMPUS EVENTS (Con't.)

Center, 200 Tillman Hall, 8 a.m.-noon. Open to all faculty and staff, no charge.

- 29 -- Tennis: College of Charleston (Women), here, 2 p.m.
- 30-4/1 -- Tennis: Southeastern Women's Intercollegiate Invitational, here, all day each day.
  - 31 -- Baseball: N.C. State, here, 2 p.m.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

Vol. 18 No. 15

April 1, 1979



MIMK 29 1979

CLEMSON UNIVERSITY LIBRARY SOUTH CAROLINA ROOM

# FACULTY AND STAFF INVITED TO PARTICIPATE IN EDWARDS CAMPAIGN

A campus-wide solicitation effort is under way to give every faculty and staff member an opportunity to make a pledge or gift toward the \$1 million campaign to establish a major endowment to honor President Robert C. Edwards.

During the next two weeks 200 faculty and staff who were enlisted to serve as solicitors will be personally contacting fellow faculty and staff.

The University Family Campaign is iesigned to reach approximately 3,000 faculty and staff and will continue through April 14. The campaign is seeking pledges payable over a three-year period.

Solicitors will have pledge cards as well as payroll deduction authorization forms for those who wish to take advantage of this convenience. Pledge payments can be deducted each pay period. For those who prefer to make a single, one-time gift, checks should be made payable to the Clemson University Foundation.

Clemson trustees authorized the establishment of The Robert Cook Edwards Endowment for Excellence in Science and Cechnology as a way to honor Clemson's eighth president for his outstanding accomplishments during his 21 years in office.

Since the campaign began last November, \$749,000 has been subscribed in gifts and pledges from trustees, alumni, Friends, foundations and corporations. A minimum goal of \$1 million has been set.

Robert H. Yeargin, general campaign

chairman, said: "The Robert Cook Edwards Endowment is a rallying point for partnership—a partnership to assure Clemson will continue as the great University we know it to be."

# OPEN HOUSE TO BE HELD FOR ENGINEERING

The College of Engineering's open house will be held April 6 with over 3,000 junior high and high school students and school counselors expected to attend. All South Carolina high schools and many from neighboring states are invited to send general groups or math and science clubs to visit the varied laboratories and display areas provided. Last year over 75 exhibits and demonstrations were included which featured displays in each of the engineering buildings and represented all of the departments and programs of the college.

The entire Open House effort, which involves both students and faculty, has as its major objective the challenge of younger students with the prospect of an engineering education. Clemson students' engineering projects representing proposed solutions to current real world problems in areas such as energy, computers, transportation, communications and machine design are shown.

All engineering buildings will be open from 9 a.m. until 5 p.m. on Friday, April 6, with information stations at each main entrance to assist visitors. The general public is welcome.

For further information, contact Duncan Rabey, Director of Engineering Projects, 656-2371, or write to the College of Engineering, Office of the Dean, Clemson University, Clemson, SC 29631.

# ATCHLEY SUBMITS VIEWS ON HIGHER EDUCATION AND PERSONAL QUALIFICATIONS

President-elect William L. Atchley sumbitted this personal philosophy of higher education and his assessment of his personal qualifications as part of the presidential selection process.

## PERSONAL PHILOSOPHY OF HIGHER EDUCATION

Higher education has long been the "backbone" of this nation; but today, it is being challenged as it has never been before. Many people doubt that higher education serves the best needs of the people, and are looking to other educational alternatives, such as vocational schools. While I feel that there is need for a balance in educational offerings at all levels of learning, I believe that a well-rounded education is more necessary than at any other time in our history. With the many challenges this nation faces, both from within and from outside the country, higher education must prepare people to meet these challenges, and those involved in higher education must be more innovative in developing programs designed to solve the problems of today and of tommorrow.

We must continue to evaluate our programs to justify support during a time in our history when resources seem scarce and costs rise steeply and continuously. Those institutions of higher learning that fail to be both innovative and productive will suffer from a lack of support, both from the alumni and from the state.

A successful university must provide a proper balance among Instruction, Research, and Extension Education. It must also develop an evaluation and reward system that will establish a high quality educational environment which will attract and hold faculty with the highest possible qualifications. It must be aware of the needs of society and plan its future to meet those needs. Today's students seek

a higher education primarily to get good jobs and eventually to contribute to society. Thus a major challenge to higher education today is to integrate learning experiences in and out of the classroom in order to prepare a graduate with more flexibility in a changing job market.

Higher education will also have to answer the demand for continuing education through strong extension programs. There is a growing need to project educational opportunities beyond the campus. This mechanism has been widely used in agricultural extension programs in the past, and should be used extensively to meet the continuing education needs of our citizens in the future. This is a service that higher education must provide, especially at a land-grant institution.

Higher education today must take a long look at its graduate programs. In many areas the competition for graduate students is strong, and this has been brought about, in part, by a lack of jobs for the Ph.D. Programs will have to be made more attractive for potential graduate students if we are to attract them. Graduate education must address the many problems facing the United States and the world in energy, inflation, food shortages, management-labor relations, water, and social problems. Research programs involving our graduate students must be developed to provide solutions. vital to our nation if we are to continue as a world leader, and higher education must provide the impetus.

The final component, and to me the most important to any educational system, is effective teaching. Instruction is the conveying of knowledge, and without an effective system, higher education cannot succeed. We should always place a high priority on truly effective instruction and continually strive to implement systems which promote it.

In summary, higher education must develop the proper balance among these three main components—Instruction, Research, and Extension. It must be prepared to use these three components to solve the complex problems of the future and to develop the leaders who will implement the new solutions.

# ASSESSMENT OF PERSONAL QUALIFICATIONS

The Board of Trustees has stated the responsibilities and qualifications desired in the next President of Clemson University. These qualifications are extensive, but I feel my experience and education have prepared me to meet the challenge.

A land-grant university is a people's university, and one to which I relate well. My twenty years of educational experience have been with a land-grant, state-supported university.

A university president must understand the daily business of education. My first ten years were devoted to instruction, research, and extension; and during those years, I progressed through the professional ranks from instructor to full professor. My years as a teacher developed in me a sincere dedication to high-quality education, and gave me a base for my subsequent ten years in the administrative area. I have a good feeling for the classroom, as well as for the research laboratory and for extension; and this has enabled me to make sound decisions that affect faculty, staff, and students.

The president of a land-grant university must understand the mechanics of running a large organization and must be adept in presenting his university's viewpoint to the state. The years I have spent in administration have given me experience in planning, budgeting, and administration of research and extension programs. In addition, I have worked in the political area, presenting budget requests, and generally representing my college. During these ten years, I have also served as advisor to two university presidents, and these associations have given me valuable insights into the

operation of a large campus administration. In the political arena, I have gained broad experience by serving as Science and Technology Advisor to three governors and two state legislatures. I believe that this is important, since a university president must work comfortably and effectively with governing bodies. I feel that I am well trained in this vital area and have, indeed, been effective.

A university president must be a leader in his community, his state, and his nation. I have had wide experience with Chambers of Commerce. My public service has included assignments as Chairman of Energy Commissions, as a member of National Committee on Relations With Industry, and as a director of the American Society for Engineering Education. One example of my effective leadership in the community occurred during my term as President of the Industrial Development Corporation of the Chamber of Commerce. In that capacity, I created and led a team whose efforts resulted in the location of a \$700 million conversion plant in this area. The plant will have a tremendous impact on Morgantown, as well as on West Virginia University.

A university president must realize the importance of strong alumni and foundation organizations. I have gained experience in these areas by serving on the Board of Directors of the Alumni Association at the University of Missouri, and on the Board of its Foundation. In addition, I was Director of the University of Missouri's Centennial Events and fund raising. The Centennial Events proved so successful that many of the programs which I initiated at that time have developed into annual events in the state. I am presently involved in a large WVU Foundation drive and am serving as Chairman of the United Way campaign for the University. These experiences have made me knowledgeable as well as comfortable in working with alumni and fund raising activities.

A university president must realize the importance of good communication, not only with the public, but internally as

well. He should be able to communicate with all parts of the university from students to trustees. I served as advisor to student government for six years while in Missouri. At West Virginia, I have established regular informal meetings with students, faculty, and staff. These meetings have permitted me to get the input necessary in decision making as well as to keep a hand on the pulse of the people who work with me. I am deeply dedicated to good communication at all levels and can present evidence of my effectiveness in this area.

A land-grant university such as Clemson should have a president who has a good understanding of the problems faced by agricultural and forest-related businesses, and I feel that my farm background keeps me aware of these problems. I have worked closely with the Commissioners of Agriculture, both in Missouri and in West Virginia, and with the Dean of the College of Agriculture and Forestry here at WVU. Some of my early research was in the energy field as it related to agriculture, and I have given many speeches on production, soil conservation, and the effects of water

and energy shortages on agriculture. I am comfortable in the agricultural environment and realize its importance to the future of this nation and of the world.

The president of any university with an athletic tradition must realize the importance of intercollegiate and intramural athletics. These play a vital role in the overall educational experience of students. I have played football and basketball in college, and professional baseball with the New York Giants. Athletics has played an important role in my life, and I am dedicated to a well-balanced educational program that places athletics in its proper perspective.

There are many other areas in which a President of Clemson should have experience, and I anticipate with eagerness the challenge to develop and expand my own capabilities in any new or less familiar areas.

If I am fortunate enough to have the opportunity of serving as President of Clemson, I will dedicate my entire effort to upholding and enhancing its fine reputation.

## ANIMAL SCIENCE

Carl W. Ackerman (Assoc Prof) was presented with a certificate of meritorious service by Epsilon Sigma Phi, national honorary extension fraternity, at the annual meeting of S.C. Extension personnel.

The following presented papers at the Southern Section American Society of Animal Science, New Orleans, LA, Feb. 4-7.

"Reproduction of Polled Hereford-Angus, Charolais-Angus and Simmental-Angus Two-Year-Old Dams," C. E. Thompson (Assoc Prof), J. R. Hill Jr. (Prof), L. R. Allen (Assoc Prof, Agron and Soils) and L. W. Grimes (Asst Prof, Exp Stat).

"Micro-Computers and Programmable Calculators in Extension Programs," Jerry Lambert (Prof, Ag Engr), James Hill (Prof) and Bill Brown (Assoc Prof). "Effects of Amicloral and Monensin on <u>in</u> <u>vitro</u> Rumen Fermentation," R. L. Stewart (Former Grad Res Asst) and R. L. Edwards (Assoc Prof).

"Reproductive Performance of Gilts and Sows on Different Levels of Calcium and Phosphorus," D. J. McCrea (Former Grad Res Asst), D. L. Handlin (Assoc Prof), W. E. Johnston (Former Prof, Exp Stat) and J. C. Eargle (Ag Sci Assoc).

"Some Studies on the Bacterial County of Beef Rounds," C. R. Sligh (Former Grad Res Asst), G. C. Skelley (Prof) and M. G. Johnson (Assoc Prof, Food Sci and Micro).

#### **BIOCHEMISTRY**

Gary L. Powell (Assoc Prof) made two presentations to the South Carolina Heart Association Jan. 17 regarding his research on cardiolipin and cytochrome coxidase.

Prof. Powell presented a seminar Feb. 12 to Clemson bioengineering students and faculty on "Energy Metabolism in the Heart."

Prof. Powell made a breakfast presentation Feb. 1 to the Clemson Heart Association on "A Molecular Pump in the Living Heart Cell."

Richard H. Hilderman (Asst Prof) presented a seminar Jan. 31 at the University of Florida, Gainesville, FL, entitled "Purification and Partial Characterization of Arginyl- and lysyl-tRNA Synthetases from Rat Liver."

J. M. Shively (Prof and Hd) and R. M. Snead (Grad Stu) published a paper, "D-Ribulose-1,5-Biphosphate Carboxylase from Thiobacillus neapolitanus," in Current Microbiology, 1: 309-314.

Prof. Shively presented seminars on his CO<sub>2</sub> fixation and membrane biogenesis research at the State of New York Department of Health, Albany, NY; and the University of Connecticut, Storrs, CT; and the University of Delaware, Newark, DE, during the week of Feb. 26.

#### CHEMISTRY

Keith McDowell (Assoc Prof) has been awarded a \$4,500 grant from Research Corporation for the project "A Study of Perturbative Corrections to an Incomplete Basis Set."

R. A. Abramovitch (Prof and Hd) presented a seminar at the University of Tennessee in Chattanooga Feb. 13 on the topic of "Chemistry in Medicine and Agriculture." Prof. Abramovitch had been awarded a research grant by the National Institutes of General Medical Sciences HEW for work on "Biologically Active Compounds from N-Oxides and Ylides." The grant will be for a three-year period and has a value of \$162,872 plus overhead.

# CIVIL ENGINEERING

Subhash C. Anand (Prof) and Roger H. Shaw (Northrop Corp; former Grad Stu) are

co-authors of a paper, "Mesh-Refinement and Substructuring Technique in Elastic-Plastic Finite Element Analysis," that was presented by Prof. Anand at the 2nd International Conference on Computational Methods in Nonlinear Mechanics held at the University of Texas at Austin March 26-30.

Russell H. Brown (Assoc Prof) presented two papers at the International Symposium on Behavior of Building Systems and Building Components at Vanderbilt University March 9. Both papers, "Shear Friction Design in Reinforced Masonry and "Structural Properties of Hollow Brick Masonry," were also published in the conference proceedings.

Billy L. Edge (Prof) was one of 32 people honored at the 1979 Construction's Man of the Year Award ceremonies Feb. 14 in New York Engineering News-Record sponsors the award each year. Prof. Edge was recognized for warning of dangers inherent in a common method of building breakwaters. His work followed a probe of a breakwater failure at the deepwater port at Sines, Portugal.

Prof. Anand has received a \$29,966 grant from the National Science Foundation, Division of Problem-Focused Research Applications, to conduct research on "Seismic Behavior and Design of Urban Area Tunnel Livings Due to Earthquake Loads." This grant will last for a period of 18 months starting Jan. 1, 1979.

Prof. Anand has been invited by the American Society of Civil Engineers to serve on a panel (Panel B-4, Residency/Professional Development) at the ASCE Civil Engineering Education Conference to be held at the University of Wisconsin, Madison, April 19-21.

# ENGINEERING TECHNOLOGY

D. L. Ryan (Assoc Prof) chaired a two-day seminar on computer graphics Nov. 28-29. Professors Ryan and F. W. Croft (Univ of Louisville) presented papers at this seminar entitled "Automated Design Graphics, Its Current Application" and "Why Use Automated Graphics?" respectively.

# **ENGLISH**

Sterling Eisiminger (Asst Prof) published "Mnemonic Vocabulary Lore" in California English, 15 (Jan 1979), 14. Prof. Eisiminger also read "A Year with James Dickey" at St. Andrews Presbyterian College's Tradition and Transition in Southern Literature: A Symposium in Honor of Reynolds Price, March 2, Laurinberg, NC.

Robert W. Hill (Assoc Prof) published three poems -- "For Jay," "Morality and Parental Fears Again Enforced by Sudden and (as Always) Unexpected Back Strain" and "Night Walk in October" -- in Teaching English in the Two-Year Colleges, 5 (Winter, 1979), 139-41. He also published "Museum Mummies Behind Glass," a poem, in Southern Poetry Review, 18 (Fall, 1978), 65-6, and directed a Creative Writing Workshop for the Anderson College Continuing Education Program Feb. 26.

John Idol (Assoc Prof) and Sterling
Eisiminger (Asst Prof) edited Why Can't
They Write? A Symposium on the State of
Written Communication (Washington, D.C.:
University Press of America, 1979), drawn
from a symposium directed by the late
Thomas E. Douglass. Prof. Idol also
read a paper, "Fame and the Athlete in
Wolfe's Fiction," at the University of
Louisville Conference on Games in
Twentieth-Century Literature Feb. 22.

Ronald F. Lunsford (Asst Prof) read "Style: The Focal Point in Teaching Composition" at the Southeastern Conference on English in the Two-Year College Feb. 9 in Orlando.

Fred Shilstone (Asst Prof) read "Berlioz' 'One Work': An Interdisciplinary Approach to Romanticism" at the Southern Humanities Conference held at Converse College in Spartanburg Feb. 8-10.

David Tillinghast (Asst Prof) spoke on publishing in literary and "little" magazines and read selections from his poetry and fiction at the Greenville County Fine Arts Center Jan. 31. Prof. Tillinghast also read "The Merit in Writing Formula Fiction" to the Foothills Writers' Club in Greenville Feb. 27.

Seven members of the English faculty were on the program of the third annual meeting of The Philological Association of the Carolinas, North Carolina State, Raleigh, March 8-10. Richard Calhoun (Alumni Prof) presided in the Poetry and Fiction Reading and was elected president of the organization for 1979-80; Sterling Eisiminger (Asst Prof) read "The Cocktail Party: A Study in Theme"; Robert W. Hill (Assoc Prof) read from his poetry and presented a paper on "Recent American Poetry: Anti-Modernism by Intent"; John Idol (Assoc Prof) read "'The Collar'" A Fusion of Classical Heuristic Devices"; and Roger B. Rollin (Lemon Prof) read "Indoors with John Donne: A Psycho-Structural Approach to Seventeenth-Century Poetry."

# EXPERIMENTAL STATISTICS

Hoke S. Hill (Instr) and Jeannie M. Currin (Instr) contributed a paper, "Using SAS for Soil Test Reporting," to the fourth annual SAS Users Group International Conference. Prof. Hill attended the conference Jan. 29-31 in Clearwater, FL, for presentation of the paper.

# **FORESTRY**

- B. H. Box (Dean) presented a lead-off paper on communications, W. H. D. McGregor (Prof) moderated a communications workshop, and Robert Shaw (Stu) acted as recorder for the workshop at the recent annual Appalachian Section Meeting of the Society of American Foresters in Charleston. President R. C. Edwards was speaker at the awards luncheon.
- D. L. Ham (Asst Prof) served as program chairman for the International Society of Arboriculture Southern Chapter annual meeting held recently in Myrtle Beach. Prof. Ham was also voted as presidentelect for the Southern Chapter of ISA.
- R. M. Allen (Head) was made chairman

the Southern Region of the Association State College and University Forestry search Organizations.

of. Allen was elected to a two-year rm to the McIntire-Stennis Cooperative restry Research Advisory Board.

E. Nix (Assoc Prof) presented a paper, he Effects of Paraquat Treatment on ight Growth, Branch Extension, and mbial Activity of Loblolly Pine," at e Sixth Annual Lightwood Research nference of the Pulp Chemicals Associaon of America held Jan. 18 at Atlanta,

# STORY

V. Reel Jr. (Prof) presented an invited per, "The 14th Century: A View from gland," at the 22nd annual Missouri lley Historical Conference March 9 in aha, NB.

#### TERDISCIPLINARY STUDIES

rry H. Kenner (Assoc Prof) has been arded a contract by the Richards aufacturing Company, Memphis, TN, to aluate some new orthopedic bone cements. contract is for \$4,980 and runs from sch 1 to July 1.

W. Cooke (Prof and Hd) and J. B. Park soc Prof) recently participated in 25th Annual Meeting of the Orthopedic search Society held at San Francisco, Feb. 20-22. Prof. Cooke chaired a ssion on PMMA bone cements.

of. Park also presented a seminar in Department of Bioengineering, Univerty of Utah, Feb. 23, on "Implant cation by Electrical Stimulation."

# **NGUAGES**

lith M. Melton (Asst Prof) read a per Jan. 26 on "The Self-Created Woman the Works of Anais Nin" at the Florida ate Comparative Literature Conference. Patricia W. Wannamaker (Assoc Prof) also read a paper, "The Call of the Poet: A Comparative Study of von Hofmannsthal and Rilke," at the conference.

# MATHEMATICAL SCIENCES

W. Robert Boland (Prof) visited the Air Force Weapons Laboratory, Kirtland Air Force Base, NM, Feb. 21-22 to discuss the state of mathematical software with personnel in the Computational Division. He presented a colloquium Feb. 22 on "Conjugate Gradient Methodology for Unconstrained Optimization" at the University of New Mexico, Albuquerque. He also participated in a discussion session which focused on Clemson's highly successful graduate program in the mathematical sciences.

J. V. Brawley (Prof), as a lecturer for the Mathematical Association of America's Visiting Lecturers Program, gave an invited lecture, "Mathematics and Gambling," at North Carolina Central University in Durham, NC, March 12 and at Atlantic Christian College in Wilson, NC, March 13.

J. L. Flatt (Assoc Prof) served on the NASDEC Committee for the evaluation of the teachers education program at Presbyterian College Feb. 26-28.

Renu Laskar (Prof) and Robert B. Allan (Grad Stu) have published a paper, "On Domination and Some Related Concepts in Graph Theory," in the Proceedings of the Ninth S.E. Conference on Combinatorics, Graph Theory and Computing, pp. 43-56.

Calvin T. Long (Adj Prof) presented two invited addresses March 6 to Augusta College: "Properties of Second Order Linear Recurrences" and "On Squares Representable as Sums of Squares."

#### MUSTC

Lillian U. Harder (Instr) adjudicated the Pre-College Piano Scholarship Competition held at Converse College in Spartanburg March 10.

John H. Butler (Prof and Hd) adjudicated the District IV Georgia Music Educators Association Band Festival at DeKalb College in Atlanta March 8-10.

#### PHYSICS AND ASTRONOMY

Burt V. Bronk (Prof) and Joe Patton (Grad Stu) delivered a talk at the Biophysical Society meeting in Atlanta (Feb 1979) entitled "Thermal Inhibition of DNA Strand Break Rejoining in Chick Embryo Fibroblasts."

# PROFESSIONAL DEVELOPMENT

Thomas B. Maertens (Instr, IM) will chair a two-day seminar, "Improving Managerial Decision Making," to be held April 16-17 on campus.

John J. Porter (Prof, Tex) will chair a course, "Volatile Organic Compounds: Regulations, Compliance and Control," to be held April 17 in Atlanta, GA.

Warren W. Menke (Assoc Prof, IM) will chair a new two-day workshop, "Making Word Processing Work," to be held April 17-18 at the Sheraton Palmetto Inn in Greenville.

Leonard Berger (Assoc Prof, Psych) is chairperson for an on-campus course, "MBO: Management by Objectives," to be held April 17-18.

Claude S. Simpson Jr. (Instr, IM) will chair a two-day seminar, "How to Control Absenteeism," to be held April 25-26 on campus.

# SOCIOLOGY

Christopher M. Sieverdes (Asst Prof) presented a paper, "Juvenile Male and Female Roles and Adjustment in a Correctional Setting: A Descriptive Analysis," at the annual meeting of the Alpha Kappa Delta Sociological Research Symposium in Richmond, VA, Feb. 15-17. He also chaired sessions on Deviance and Criminal Corrections.

# FINAL ENROLLMENT IN GRADUATE SCHOOL, SECOND SEMESTER 1978-79

MAJOR	NON- DEGREE	PROF MAST	MA/MS	EDS	PHD	. <u>TOTAL</u>
College of Agricultural Sciences						
Agric (Undeclared)	10	0	0	0	0	10
Agric Econ	0	4	9	0	0	13
Agric Engr	0	0	4	0	4	8
Agric Mech	0	9	0	0	0	9
Agronomy	0	4	10	0	6	20
Animal & Food Ind	0	0	20	0	0	20
Animal Physiology	0	0	0	0	12	12
Animal Science	0	5	0	0	0	5
Applied Economics	0	0	0	0	11	11
Dairy Science	0	3	2	0	0	5
Entomology	0	1	18	0	13	32
Horticulture	0	1	18	0	0	19
Nutrition	0	16	12	0	2	30
Plant Pathology	0	1	4	0	8	13
Plant Physiology	0	0	0	0	10	10
Poultry Science	0	3	2	0	0	5
Wildlife Biology	0	0	22	0	0	22
Total Agricultural Sciences	10	47	121	0	66	244
College of Architecture						
Arch (Undeclared)	3	0	0	0	0	3
Architecture	0	56	0	0	0	56
City & Region Plan	0	28	0	0 '	0	28

MAJOR	NON- DEGREE	PROF MAST	MA/MS	EDS	PHD	TOTAL
Visual Studies	0	10	0	0	0	10
Total Architecture	3	94	0	0	0	97
College of Education						
Educ (Undeclared)	604	0	0	0	0	604
Adm & Supervision	0	64	0	40	0	104
Agric Educ	0	9	0	0	0	9
Elementary Educ	0	253	0	0	0	253
Industrial Educ	0	29	0	0	0	29
Personnel Services	0	177	0	0	0	177
Reading	0	57	0	0	0	57
Sec Educ (English)	0	9	0	0	0	9
Sec Educ (History)	0	7	0	0	0	7
Sec Educ (Math)	0	16	0	0	0	16
Sec Educ (Nat Sci)	0	14	0	0	0	14
Total Education	604	635	0	40	0	1279
College of Engineering						
Engineering (Undeclared)	8	0	0	0	0	8
Bioengineering	0	0	17	0	3	20
Ceramic Engr	0	0	3	0	0	3
Chemical Engr	0	2	10	0	4	16
Civil Engr	0	13	13	0	4	30
El & Comp Engr	0	12	18	0	8	38
Engr Mechanics	0	0	3	0	1	4
Envir Sys Engr	0	13	22	0	11	46
Materials Engr	0	0	2	0	0	2
Mechanical Engr	0	14	14	0	3	31
Systems Engr	0	0	11	0	7	18
Water Res Engr	0	1	2	0	Ó	3
Total Engineering	8	55	115	0	41	219
Total Engineering	Ŭ	99	113	Ŭ	41	21)
College of Ind Mgt & Textile Sci						
IM&TS (Undeclared)	5	0	0	0	0	5
Economics	0	0	10	0	0	10
Engr Management	0	0	0	0	16	16
Management	0	0	35	0	0	35
Management Science	0	0	0	0	11	11
Text & Poly Sci	0	0	0	0	9	9
Textile Chemistry	0	0	6	0	0	6
Textile Science	0	0	5	0	0	5
Total Ind Mgt & Textile Sci	5	0	56	0	36	97
College of Liberal Arts						
Liberal Arts (Undeclared)	7	0	0	0	0	7
English	0	0	40	0	0	40
History	0	0	8	0	0	8
Total Liberal Arts	7	0	48	0	0	55
College of Nursing						
Nursing (Undeclared)	1	0	0	0	0	1
Nursing	0	0	14	0	0	14
Total Nursing	1	0	14	0	0	15

MAJOR	NON- DEGREE	PROF MAST	MA/MS	EDS	PHD	TOTAL
College of Sciences						
Sci (Undeclared)	13	0	0	0	0	13
Biochemistry	0	0	9	0	8	17
Botany	0	0	12	0	0	12
Chemistry	Ò	0	11	0	19	30
Mathematical Sci	0	0	47	0	13	60
Microbiology	0	0	21	0	0	21
Physics	0	0	12	0	11	23
Zoology	0	0	19	0	22	41
Total Sciences	13	0	131	0	73	217
College of For & Rec Resources						
For & Rec Res (Undeclared)	2	0	0	0	0	2
Forestry	0	7	7	0	0	14
Rec & Park Adm	0	27	0	0	0	27
Total For & Rec Resources	2	34	7	0	0	43
				·		
Grand Total	653	865	492	40	216	2266
Clemson/Furman MBA		294				

# MINUTES OF THE UNIVERSITY LIBRARY COMMITTEE MEETING, FEBRUARY 12, 1979

Present: Ann W. Baxter (chairperson),
Alison C. Drews, R. R.
McGregor, Bill Smith, Garry
Haehnle, John V. Hamby,
Becky F. Campbell, Mable H.
Wynn, J.W. Gordon Gourlay
(secretary).

Minutes of the meeting of Nov. 13 had been approved by mail ballot.

- 1. Use of Library 11 p.m. 1 a.m.

  Statistics indicating persons leaving the library during the period from 11 p.m. 1 a.m. Sunday through Thursday Nov. 5, 1978 Feb. 8, 1979, were distributed.
- 2. Chairperson Baxter appointed an Ad Hoc Committee to recommend a library policy for on-line bibliographic searching. At the present time the service is available only to faculty and graduate students who can charge the search to departmental accounts. The library

anticipates receiving or has received requests from other persons, industries, institutions or agencies that need this service.

Members of the Ad Hoc Committee
Ann W. Baxter (chairperson), Alison C.
Drews, Bill R. Smith, J.W. Gordon
Gourlay (secretary.)

3. <u>Library Statistics</u>, <u>June 30, 1978</u>. The following statistics were distributed and commented on by Mr. Gourlay.

# Collections

Books and Periodicals.....729,757 Volume (of which 191,570 are government documents.)

MICCOLILII •	•	• •	•	• •	• •	•	•	•	• •	•	17,410	Reels
Microfiche			•	• •		•	•	•	• •		.302,795	Units
Microcards											31,504	Cards

Circulation of Materials of Library Users ......199,247

<u>Interlibrary Loans</u> - in original and reproduced format
Borrowed from other libraries2,294
Loaned to other libraries2,545
Circulation of Library Materials - 199,247 Transactions (Probably shelved 2,400,000 because of heavy use in library.)
Serials Titles Received - (Journals,
transactions, proceedings, annuals, etc)12,557
Library Staff
Professional Librarians19

# Library Expenditures, 1977-78

\$1,873,987

Books, Periodicals and Binding.....818,937

Patrons Leaving the Library, Historical Statistics

Count is made at Exit Desk

1973-7439	2,495334	days
1974-7543	8,347348	days
1975-7647		
1976-7743		
1977-7844		

# General Library Information June 30,1978

Library Instruction
In 1977-78 the library continued its
program of introducing students to
library resources through freshman
orientation lectures and library
assignments and classes in special subject areas. One hundred and forty-five
classes were conducted.

# Special Collections Special Collections has prepared a brochure describing ll major manuscript

collections, all of which have been reported to national and regional bibliographies, and draws attention to the wealth of other special materials in the Robert Muldrow Cooper Library. During the past two years these special collections have attracted researchers from 18 states, many representing prestigious institutions. A noteworthy highlight of the current year is that, among scholars coming to Clemson to examine the James F. Byrnes Papers, was a member of the faculty of York University, Ontario, Canada; a master's candidate from the University of Belgrade, Yugoslavia; a professor of history from the University of Helsinki, Finland; and an historian from the National Archives of the Federal Republic of Germany.

Microfilming of Agricultural Publications
The National Agricultural Library and
the Southeastern regional land-grant
institutions cooperated in a project
of microfilming the agricultural publications for each of the Southeastern
states which was completed this year.
The library now has a microfilm copy of
most of the publications published by
the South Carolina Agricultural Experiment Stations, South Carolina Extension
Service and the Clemson University
College of Agriculture from 1888 through
1969.

Computer Applications to Library Processes Computer Applications to library processes, library networks and the projected change by the Library of Congress from the traditional card catalog to a data base accessible through cathode ray tube terminals which will be put into effect by the Library of Congress January 1981 requires intensive study, training and planning on the part of the cataloging staff in order to keep abreast of new developments in the field of automation. It will not be too many years before Clemson will have to consider a similar innovation. The Acquisitions Department with the assistance of DAPS has been studying and investigating computer applications to the acquisition of books. There is particular interest in an online acquisitions system which is being

developed by a commercial firm and which should be ready for demonstration in 1979.

U.S. Government Documents
The U.S. Government documents publications, for which Clemson is a selective depository, is a heavily used collection and now numbers 191,266 volumes plus 43,912 units of microfiche. Each year new publications are selected with a view to strengthening the collections to support the curricula and the research that is done at Clemson.

5. Dr. Smith, Library Committee representative from the Faculty Senate, requested that the library try to secure copies of faculty manuals from the major state universities and landgrant institutions in each state in the Southeast and from a few other landgrant institutions throughout the nation.

Mr. Gourlay said that the request would be sent to the institutions and as the manuals were received they would be placed on a shelf in the reserve book room of the library.

- 6. Following the meeting, Mr. Gourlay conducted a tour of the lower level and basement of the library which hopefully will be available for use beginning with the fall semester.
- 7. Time of the next meeting: Monday, March 12, 3 p.m., Classroom, Ground Floor of the Library.

J.W. Gordon Gourlay, Secretary University Library Committee

MINUTES OF THE COUNCIL OF ACADEMIC DEANS MEETING, FEBRUARY 26, 1979

The Council of Academic Deans met Feb. 26, 1979, in Room 446 Sirrine Hall. Dean Hurst called the meeting to order at 9 a.m. with the following in attendance: Dean Anderson, Dean McClure, Professor Dalton, Dean Landrith, Dean Wilcox,

Dr. Allen (for Dean Box), Dean Trevillian, Dean Cox, Dean Labecki, Dean Vogel, Dean Green, Dean Schwartz, Dean Willis, and Dr. Steirer. Attending briefly from the Physical Plant were Mr. Walter Stone, director; Mr. Horace Gibson; and Mr. Thomas Trively.

Mr. Stone explained that the Physical Plant is in the process of transferring all their operations to an automated system. This system will provide more meaningful information to the Physical Plant and will result in their being able to make their services available to the University at lower rates and with improved efficiency. A sample printout was distributed showing the billing procedures that will replace the direct billing system currently in use. Mr. Trively, who has worked with DAPS for several months in developing the new procedures, explained in detail how all the new forms are to be completed. Several questions were posed by the deans and answered by Messrs. Stone, Gibson and Trively.

The recommendations made by the Undergraduate Council at its Feb. 2 meeting, and the Graduate Council at its Jan. 12 and Feb. 2 meetings, relative to additions, deletions and changes in courses and/or curricula, were approved. A Proposed Statement for Adoption which was developed by a committee of the Graduate Council relative to 600-level courses, was submitted to the Council of Deans. No action was taken, and after a brief discussion Dean Hurst appointed a committee consisting of Dean H. M. Cox (chairman), Dean Anderson, Dean Vogel, Dean Box, and Dean Schwartz (ex officio), to study the matter further.

Dean Hurst stated that the next evaluation of faculty by students will be held during the week of April 16. Dean Green will send out a notice when forms are available.

The deans approved the proposed Clemson University Calendar 1980-81, Fall Semester; Clemson University Calendar 1980-81, Spring Semester; and the Clemson University Calendar Summer Session 1981.

Dean Hurst asked the deans to be aware of the deadline dates for notifying their faculty by letter of their reappointment, or sending notice of non-renewal of appointment.

Dean Hurst announced that the Alumni Visiting Professorship for 1979-80 has been awarded to the College of Industrial Management and Textile Science.

Dean Hurst announced that for the first time, a Parents' Day will be held Nov. 3, 1979, which is a football Saturday. All colleges will be open for a few hours on that morning for parents to visit. More details will be available later.

Dean Hurst requested the deans to forward to him any comments they might have relative to <a href="The American Jewish Committee">The American Jewish Committee</a> correspondence that he had earlier distributed to them.

The meeting adjourned at 11 a.m.

Respectfully submitted,

Annette H. Kesler

# Calendar of Campus Events

- !-12 -- Art Exhibition: "Paris Prize Winners." Reproductions of Paris Prize Winners assembled by the National Institute for Architectural Education. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
- 2,3 -- Baseball: High Point College, here, 3 p.m.
- 2-9 -- Videotape: "World's Largest Indoor Country Show." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
- 2-7 -- Art Exhibition: "Janis Rogainis, NASCAR Racing Photos." Sponsored by University Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.
- ,3, -- Short Course: "Introduction to PL/1." Taught by Academic Computing Support.
  ,9 April 2, 4 and 9, M-104 Martin Hall, 2:30-3:20 p.m.; or April 3, M-102 Martin Hall, 6:30-9 p.m. Open to all interested persons, no charge. Call 656-3466 for more information or to register.
- ,4, -- Short Course: "Advanced Job Control Language." Taught by Academic Computing Support, M-205 Martin Hall, 3:35-4:25 p.m. Open to all interested persons, no charge. Call 656-3466 for more information or to register.
  - 2 -- Short Course: "Introduction to Fortran." Taught by Academic Computing Support, M-102 Martin Hall, 6:30-9 p.m. Open to all interested persons, no charge. Call 656-3466 for more information or to register.
  - 2 -- Lecture: "Towards a Humane Environment" by Allan Gowans, historian, Victoria, B.C. Canada. Sponsored by Clemson Architectural Foundation and College of Architecture, Lee Hall Auditorium, 8 p.m. Open to the public, no admission charge.

- 3 -- International Debates: Platform debate between teams from Clemson and New Zealand. Sponsored by Calhoun Forensic Society and Clemson Forensic Union, Daniel Hall Auditorium, 7 p.m. Open to the public, no admission charge.
- 3 -- Clemson Area Continuing Education continues. Call 654-2139 for more information.
- 4,5 -- Baseball: Howard University, here, 3 p.m.
  - 4 -- Tennis: Howard University (Men), here, 2 p.m.
- 4,6, -- Short Course: "SPEAKEASY." Taught by Academic Computing Support. April 4, 9,10, 6, 9 and 11, M-3 Martin Hall, 9:05-9:55 a.m.; or April 10, M-3 Martin Hall, 6:30-8:30 p.m. Open to all interested persons, no charge. Call 656-3466 for more information or to register.
  - 5 -- Tennis: North Carolina (Men), here, 2 p.m.
  - 6 -- Engineering Open House: Demonstrations and exhibits of engineering students' projects. Sponsored by College of Engineering, all engineering buildings, 9 a.m.-5 p.m. Open to the public, no admission charge.
  - 6-7 -- Dalton Land Music Festival: A country music festival beginning at 4:30 p.m. Friday in front of the Edgar A. Brown University Union. Includes a square-dance April 6 at 8 p.m. and workshops for guitar, dulcimer, hammer dulcimer and fiddle on April 6 and 7. Sponsored by University Union and Wesley Foundation. Call Bill Brown at 654-4547 for more information. Open to the public, no admission charge.
    - 7 -- Livestock Judging: "Future Farmers of America State Contest." Sixteen winning teams consisting of 64 participants from the FFA Federation elimination contests will compete for the state championship. Co-sponsored by Departments of Agricultural Education and Animal Science, brick barn across S.C. 76 from Tri-County Tec, 11:45 a.m.- 3:30 p.m. Open to the public, no admission charge.
    - 7 -- Engineer-In-Training Examination. Part I of the written examination required for professional engineering registration. Sponsored by College of Engineering 226 Riggs Hall, 7:30 a.m.-5 p.m.
  - 9-14 -- Drama: "The Eccentricities of a Nightingale" by Tennessee Williams. Presented by the Clemson Players, Daniel Hall Auditorium, 8 p.m. Monday-Wednesday and Friday, 3:30 p.m. Thursday. Open to the public, no admission charge.
    - 9 -- German Film: "Do You Know Urban?" Sponsored by Department of Languages, 315 Daniel Hall, 7:30 p.m. Open to the public, no admission charge.
  - 9-15 -- Videotape: "Comedy Shop." Sponsored by University Union, loggia, shown on request. Open to all students, faculty, staff and guests, no charge.
- 9,10,12 -- Short Course: "Utilities." Taught by Academic Computing Support, M-205 Martin Hall, 3:35-4:25 p.m. Open to all interested persons, no charge. Call 656-3466 for more information or to register.
  - 9-21 -- Art Exhibition: "TAPS Photos." Sponsored by University Union, Union Gallery, 8 a.m.-5 p.m. Monday-Saturday, noon-5 p.m. Sunday. Open to the public, no admission charge.

- 10 -- Concert: "Clemson University Concert Band Tour Concert." Sponsored by Department of Music, Tillman Hall Auditorium, 8 p.m. Open to the public, no admission charge.
- 10 -- Clemson Area Continuing Education continues. Call 654-2139 for more information.
- 10 -- Tennis: Georgia (Men), here, 2 p.m.
- 11 -- Honors and Awards Day; classes suspended at noon.
- 11 -- Air Force and Army ROTC Honors and Awards Ceremonies. Sponsored by Departments of Aerospace Studies and Military Science, Daniel Hall, 4 p.m. Open to the public, no admission charge.
- 11 -- English Hour Reading: A reading of student verse and fiction. Sponsored by Department of English, Strode Tower Lounge, 8 p.m. Open to the public, no admission charge.
- 11 -- Tennis: Georgia (Women), here, 2 p.m.
- 12 -- Concert: "University Chorus Tour Concert." Sponsored by Department of Music, Tillman Hall Auditorium, 8 p.m. Open to the public, no admission charge.
- 12 -- Sale and exhibit of student and faculty art work. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. Open to the public, no admission charge.
- 13,16, -- Short Course: "Calcomp Graphics." Taught by Academic Computing Support, 18,20 M-102 Martin Hall, 9:05-9:55 a.m. Open to all interested persons, no charge. Call 656-3466 for more information or to register.
- 14,15 -- Baseball: University of South Carolina, here, 2 p.m.
  - 14 -- Tennis: North Carolina State (Women), here, 9 a.m.

# SIGMA XI BANQUET TO HONOR INITIATES

The annual Initiation Banquet of Sigma Xi honor fraternity, dedicated to excellence in research, will be held April 5 at 7 p.m. at the Holiday Inn.

New initiates will be honored guests and winners of the high school mini-grants competition will be announced and recognized.

Dr. Jerome Weber, professor of weed science at North Carolina State University, will speak on "Weeds and Human Affairs," an exploration of the impact of common weeds on people through the ages. He will include references to weeds with allergenic, medicinal and hallucinatory affects on human beings.

(The following day, April 6, Dr. Weber will speak on PCBs in McAdams Auditorium at 10 a.m. His talk is open to the public.)

The annual Sigma Xi banquet is open to all interested faculty members as well as the community at large. Those wishing a ticket may contact Horace Skipper, 656-3102, by April 2.

# PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

CLEMSON UNIVERSITY APR 19 (379)

Vol. 18 No. 16

April 15, 1979

LEMSON UNIVERSITY LIBRARY SOUTH CAROLINA ROOM

CLEMSON BAND AND CHORUS TO SALUTE PRESIDENT EDWARDS

"A Salute to President Robert C. Edwards" public concert will be presented on Thursday, April 26, by the Clemson Concert Band and Chorus.

The program begins at 8 p.m. in Littlejohn Coliseum and admission is free.

"This will be a chance for the general public to show its appreciation for what President Edwards has done for Clemson University and the Clemson community during his 50-year association with the school and his 21 years service as president," says Music Department head John Butler.

Edwards entered Clemson as a freshman in 1929 at the age of 15 and graduated in 1933 with a degree in textile engineering. After a successful career in textile management, he returned to Clemson in 1956 as vice president for development. He was elected Clemson's eighth president in 1959 and will retire this June after more than 21 years in office.

The concert program will begin with "The President's March" played by the Concert Band. Piano soloist Lillian Harder and the band will then perform Carl Maria von Weber's "Konzertstueck in F Minor," and the Chorus will join them for Beethoven's "Choral Fantasy in C."

The Band and Chorus will also perform Sibelius' "Finlandia" and Brahms' "Academic Festival Overture."

The Chorus alone will sing three selections by Stephen Foster--"Some Folks," "Oh, Susanna" and "De Camptown Races"-- and selections from Randall Thompson's "Frostiana" with words by Robert Frost.

Of course, to pay tribute to a man "whose blood runs orange," the program will close with the Clemson Alma Mater and "Tiger Rag."

# F. L. SPRINGS FOUNDATION MAKES GRANT TO EDWARDS ENDOWMENT CAMPAIGN

The Frances Ley Springs Foundation, Inc., has made a \$25,000 grant to the University to be applied to The Robert Cook Edwards Endowment for Excellence in Science and Technology.

The endowment, which has a minimum goal of \$1 million, was established by the Clemson Board of Trustees to honor President Robert C. Edwards, who will retire in June.

Annual income from the endowment will provide such things as graduate fellowships, scholarships, professorships, visiting professors, research and public service programs and continuing education. The endowment will be managed by the Clemson University Foundation.

The Frances Ley Springs Foundation was organized in 1969 and makes grants in several fields, but devotes a large part of its resources to four-year colleges and universities. It is headquartered in Lancaster. H. W. Close is chairman of the board and Charles A. Bundy is president.

Bundy said the Foundation's board "was glad to support this major campaign for Clemson. This fund will honor a longtime leader responsible for much of the growth and development of Clemson over the past 21 years. At the same time it helps to build new strength to meet the needs of the future. We are glad to be a part of this effort."

Robert H. Yeargin of Greenville, general chairman for the Edwards campaign, said the endowment program would enhance the economic life and well-being of the people of South Carolina. "The continued excellence of Clemson depends on the funds available to do those things 'over and above' what it can do through normal channels," he said.

Yeargin said while Clemson would continue to rely on the state for basic ongoing funding, it must look to friends in the private sector for the funds to provide "that margin of excellence" to serve future generations. "This generous contribution of the Springs Foundation is very important to us because of the many ties between Clemson and the Springs organization," he said.

# TURNER NAMED HEAD OF COMPUTER SCIENCE DEPARTMENT

Albert J. (Joe) Turner Jr. has been named head of the new Computer Science Department. He had been acting head since July 1, 1978, when creation of the department was approved by the Board of Trustees.

According to Henry Vogel, dean of the College of Sciences, the department was created in response to a growing need for computer specialists in South Carolina business and industry.

The department, with six faculty members including Turner, teaches computer science courses in support of other departments but does not offer its own degree program. Vogel said a proposal to institute B.S. and M.S. degree curriculums in computer science is awaiting approval by the South Carolina Commission on Higher Education.

Turner, 41, is a native of Arcadia, FL, and has taught in the Department of Mathematical Sciences at Clemson since 1975.

He holds B.S. and M.S. degrees in mathematics from the Georgia Institute of

Technology and M.S. and Ph.D. degrees in computer science from the University of Maryland.

He previously served as systems manager of the computer center at West Georgia College, where he taught mathematics and computer science for six years in the late 1960s before returning to graduate school in Maryland.

# ENDOWED SCHOLARSHIP FUND TO BENEFIT ENGINEERING STUDENTS

Saying his mother "had a keen awareness of the value of education," a Colorado man and his wife have established an endowed scholarship fund in her memory at Clemson.

The Marion Killian Arthur Memorial Scholarship will be awarded for the first time next fall to an undergraduate student in the College of Engineering.

The scholarship was begun with a gift of \$17,000 from William C. and Helen K. Arthur to the Clemson University Foundation, which will invest the money and transfer the income each year to Clemson's scholarship fund.

Arthur, a 1953 Clemson graduate in mechanical engineering, is now assistant to the president of Storage Technology Corp. in Boulder, CO.

In setting up the memorial scholarship Arthur said, "We feel a need to help others improve their economic situation. We feel blessed for this opportunity.

"We selected Clemson since a Clemson educa tion has benefited several members of our family."

Arthur's mother, Marion Killian Arthur, was a native of Killian in Richland County

Her husband, brother and two of her sons all graduated from Clemson.

# TRADE OF MOTOR POOL FLEET DELAYED

Melvin Barnette, vice president for business and finance, has announced that trading of the Motor Pool fleet has been deferred until fall.

The decision to wait until 1980 models are bid was made to prevent turning the present fleet over to the State Property Disposal Division for sale--a process which has been estimated to result in thousands of dollars loss to the University.

Barnette says the present fleet will be used for most of the fall semester and will have approximately 110,000 miles on each vehicle at the time of trade. Users of Motor Pool passenger cars are requested to be patient and continue to cooperate with Motor Pool personnel in this matter.

Next fall it may become necessary to consider using alternate means of transportation for long trips of approximately 500 to 600 miles or longer one way. Notice will be made if this becomes necessary.

# SEMINAR ON SAFEGUARDS OF NUCLEAR FUELS TO BE HELD

A nationally recognized expert in mass transfer systems as applied to nuclear fuel reprocessing will be the featured speaker of a seminar to be held on campus April 25.

Dr. L. E. Burkhart, professor of chemical engineering at Iowa State University and program director for materials chemistry at Ames Laboratory USDOE, will present details of a new mathematical model for nuclear fuel reprocessing by pulse columns at the seminar on "Safeguards and the Reprocessing of Nuclear Fuels."

Sponsored jointly by Los Alamos National Laboratory and the Clemson departments of Chemistry and Geology, Chemical Engineering and Electrical and Computer Engineering, the seminar is the result of a joint study initiated last year between Clemson University and the Los Alamos Scientific Laboratory at Los Alamos, New Mexico.

Scientists from the national laboratories at Savannah River, Barnwell, Los Alamos, and Oak Ridge will be participating in the seminar.

The seminar will begin at 10 a.m. in 302 Rhodes Engineering Research Center. Dr. Burkhart will give a lecture on "Safeguards and Nuclear Fuel Reprocessing" in 131 Brackett Hall at 4 p.m.

All faculty, staff and students are invited to attend. For further information, contact Dr. A. L. Beyerlein at the Chemistry and Geology Department or Dr. John E. Bennett at the Electrical and Computer Engineering Department.

# INTERNATIONAL SERVICES HAS NEW TELEPHONE NUMBER

The new telephone number for the International Services Office, Holtzendorff YMCA, is 656-2457. Mr. Otis Nelson, director and principal advisor to Clemson foreign students, may be reached at this number.

# COMPETITION OPENS FOR BIOMEDICAL RESEARCH SUPPORT GRANT FUNDS

An institution with a minimum of \$200,000 in Public Health Service (PHS) sponsored research grants and awards is eligible to make application to the National Institutes of Health (NIH) for a Biomedical Research Support Grant (BRSG). The University has qualified for, applied for, and anticipates receiving a BRSG of approximately \$20,000. The NIH requires that an ad hoc committee of scientific and administrative personnel, qualified by training and experience, must be established to advise on the intra University allocation of BRSG funds. This Committee, recommended by appropriate college deans and appointed by the Vice-

President for Academic Affairs, includes Drs. J. D. Hatcher, R. W. Henningson (chairman), D. M. Henricks, L. I. Park, G. L. Powell, G. A. Tanner, and J. B. Park. The Committee is responsible for deciding how BRSG funds will be utilized and establishing a mechanism for such use.

The Committee, consistent with Clemson University health related research interests and NIH policies, has decided that the BRSG funds will be utilized to support pilot biomedical or behavioral research by young investigators. The following mechanism has been established to allocate the BRSG funds within the University.

DEFINITIONS: A young investigator is one generally not more than five years past the Ph.D. Pilot research explores new ideas to test their validity and to provide preliminary findings necessary to support research project grant applications.

APPLICATIONS: Applications for support of biomedical or behavioral, health related, pilot research projects will be accepted from young investigators; from faculty affiliating with Clemson University subsequent to Aug. 15, 1977; and from mature investigators reorienting the direction of their research. Applications, utilizing NIH 398 (available from the Office of University Research) forms and format, should be in the Office of University Research prior to May 1, 1979. Interdisciplinary projects are encouraged. Proposals should be completed to facilitate peer review. Budgets should contain only items requested from BRSG funds, and each item should be well justified. is tacitly understood that a subsequent proposal, seeking sponsored support and based on the proposed or similar work, will be forthcoming if funds are allocated.

PEER REVIEW: The BRSG Committee will expedite competitive peer review of all proposals received prior to May 1, 1979. Peer review will include conformance to application requirements, quality of the research proposed, and an evaluation

of the potential of the proposed project for subsequent sponsored support.

ALLOCATION OF FUNDS: The BRSG funds will be awarded, not later than June 1, 1979, on the basis of the competitive peer review. The BRSG Committee anticipates making five or six awards from the approximately \$20,000 available to the Committee. Anonymous peer review comments will be available to the investigators of unfunded applications.

Questions concerning the BRSG, the application process, and/or the eligibility to apply for BRSG funds should be directed to the Office of University Research (Ext. 2375).

# ACCOUNTING AND FINANCE

Jimmy D. Sheriff (Assoc Prof) has been notified that an abstract of his research concerning "Attitudes Toward Current Values" has been included in the <a href="Executive's Digest of Financial Research">Executive's Digest of Financial Research</a> published by the Financial Executive's Institute.

C. Don Wiggins (Asst Prof) acted as a paper discussant in the Investments session of the Southwestern Finance Associations Annual Meeting held in Houston, TX, March 14-17.

# AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

The following faculty members participated in the annual meeting of the Southern Association of Agricultural Scientists in New Orleans, LA, Feb. 4-7:

S. E. Miller (Asst Prof) presented a paper, "The Response of Futures Prices to New Market Information: The Case of Live Hogs."

G. J. Wells (Asst Prof) presented a paper, "Investigation of the Normality of Gross Revenues for Selected U.S. and South Carolina Crops."

Participating in the Rural Sociology Section of the SAAS meetings in New Orleans were:

E. L. McLean (Prof), who was elected president of the Rural Sociology Section, presented a paper, "Utilization and Evaluation of Banking Services by Suburban and Small/Town Residents," and served as a resource person in the "Social Organization for Development of Rural Counties" session at the SAAS meetings.

Adrian L. Padgett (Asst Prof) delivered a paper, "Applied Research as an Integral Phase of Community Development."

Robert Pomeroy (Vstg Instr) presented a paper, "Title V Extension and Research: A Comparison of Two Approaches." Coauthors were Stephen Lilley (Vstg Asst Prof), John Rutledge (Vstg Instr) and Nelson Jacob (Asst Prof, Texas A&M Univ). Messrs. Lilley, Pomeroy and Rutledge also served as discussants for the Rural Sociology Section.

- E. D. Wynn (Assoc Prof) participated in a Rural Industrialization Seminar at the SAAS meetings in New Orleans.
- H. M. Harris Jr. (Prof) addressed the 28th Annual North Carolina Dairymen's Conference on the subject "How Will Milk be Marketed in the 1980's?" in Raleigh, NC, Feb. 28.
- E. L. McLean (Prof) published a review of "The Gecekondu: Rural Migration and Urbanization" by Karpat in Rural Sociology, 43 (3):526-527, Fall 1978.
- J. C. O. Nyankori (Asst Prof) participated in the TVA Alternative Marketing Symposium in Atlanta, GA, Feb. 19-21.

## AGRICULTURAL ENGINEERING

Dr. Yekutiel Alper of the Institute of Agricultural Engineering, Bet Dagan, Israel, who was a Visiting Assistant Professor in the Clemson University Department of Agricultural Engineering in 1974-75, visited with B. K. Webb (Prof & Hd) and C. E. Hood (Prof) recently on fruit and vegetable mechanization.

Darrell L. Roberts (Assoc Prof) attended the National Gasohol Commission Meeting in Denver, CO, March 17-19 where developmental research and governmental presentations were given on small plant design for production of alcohol fuels from agricultural products.

## CHEMISTRY

Keith McDowell (Assoc Prof) attended the 1979 Sanibel Conference on Theoretical Chemistry during the week of March 11. He presented a paper, "The Incomplete Basis Set Problem. III. Virtial Orbitals and the CIBS Expansion of Hartree-Fock Energies," which will be published in International Journal of Quantum Chemistry Symposia.

R. A. Abramovitch (Prof & Hd) was a coauthor of a paper presented at the American Chemical Society/Chemical Society of Japan Chemical Congress in Honolulu April 4. The paper, "The Reaction of Sulfonyl Azides with Alkylidenecycloalkanes. Steric and Electronic Effects in the Addition and Hydrolysis," was co-authored by Dr. S. P. McManus (Ph.D. Clemson, 1964) and M. Ortiz both of the University of Alabama in Huntsville.

W. Leo Johnson (former Grad Stu, now DOE Post-doctoral Fellow) and John F. Geldard (Assoc Prof) published a paper, "Bidentate Chelate Compounds 3. Cobalt (III) Chemistry of 2,2 -Dipyridylamine," in <a href="Inorganic Chemistry">Inorganic Chemistry</a>, 18 664 (1979).

#### CIVIL ENGINEERING

Parviz F. Rad (Assoc Prof) is the author of a paper, "Delays in Construction of Nuclear Power Plants," published in the January issue of the Journal of the Energy Division of American Society of Civil Engineers.

Prof. Rad and Paul K. Foster (Grad Stu) are authors of a research-in-progress paper, "Causes & Preventions of Structural Failures," presented at the Construction Research Council session of the annual meeting of the American Society of Civil Engineers.

## DAIRY SCIENCE

The following papers were presented at the American Dairy Science Association, Southern Division, New Orleans, LA, Feb. 4-7:

"Energy and Nitrogen Equivalent Rations with Soybean Oil Meal, Urea, or Ammonium Sulfate for Growing Dairy Animals,"
G. D. O'Dell (Prof), H. J. van Dijk (Grad Stu) and B. F. Jenny (Assoc Prof).

"In vitro Mycotoxin Binding to Bovine Endometrial Steroid Hormone Receptors,"
L. T. Blankenship (Grad Stu), A. B.
Bodine (Asst Prof) and J. F. Dickey (Prof).

"An Analysis of Cells Derived from the Bovine Endometrium Grown in Monolayer Culture," M. F. McGrath (Grad Asst) and Prof. Dickey.

"Blood Mineral Profile of Lactating Dairy Cows," P. A. Ballew (Grad Stu) and Prof. 0'Dell.

"Effect of Certain Ambient Environmental Parameters on Survival Rate of Selected Bacterial Populations in Dairy Waste Fiber," J. R. Bishop (Grad Stu), J. J. Janzen (Prof) and Prof. Bodine.

"The Effect of Acidity and Flavoring Concentration on Consumer Acceptance of a Flavored, Sweetened, Cultured Milk Product," Prof. Bodine and J. H. Martin (Prof and Dept Hd).

"A Catalog of Young Bulls," W. L. Northern (Prof) and F. E. Pardue (Prof).

"Lactation Response from Dairy Cows and Ration Digestibility and Mineral Balance in Steers Fed an Ensiled Complete Ration," Prof. O'Dell and H. J. van Dijk (Grad Stu). "The Ultrastructure of the Developing Ovine Seminiferous Tubules," K. B. Bryan (Grad Asst), Prof. Dickey and J. R. Hill Jr. (Prof, An Sci).

"The 4-H Dairy Heifer Project," Prof. Northern and Prof. Pardue.

"Compensatory Hypertrophy in Unilaterally Castrated Holstein Bulls," M. A. Barnes (Asst Prof) and C. O. Woody and J. W. Riesen (Univ of Connecticut, Storrs).

"The Effects of Feeding a Sublethal Level of Aflatoxin B<sub>1</sub> on Fetal and Early Neonatal Development in the Bovine,"
S. L. Milliken (Grad Asst), Prof. Bodine and Prof. Dickey.

"A Probable Example of Aflatoxin Stress-Induced Pasteurellosis in Male Lambs," R. D. Halman (Grad Stu), Prof. Dickey, Prof. Bodine, and Prof. Hill.

"Aflatoxin B<sub>1</sub> Metabolism by the Liver Soluble Reductase System in the Young Dairy Calf: Production of Aflatoxicol," Prof. Bodine, Prof. O'Dell and Prof. Janzen.

The following papers were presented at the Southern Division, American Society of Animal Science, New Orleans, LA, Feb. 4-7:

"Ultrastructure Comparison of Mouse Blastocysts Developed in vivo and in vitro," G. M. Lindner (Grad Asst) and Prof. Dickey.

"A Preliminary Study of the Morphodynamic Changes of Early Bovine Implantation," F. G. Carll (Grad Asst) and Prof. Dickey.

Prof. Jenny and Prof. O'Dell have received a \$4,200 grant-in-aid from Dupont de Nemours & Co. to support work on the use of methionine hydroxy analogue calcium as a partial replacement for crude protein in complete feeds.

April 15, 1979

# **ECONOMICS**

Ralph D. Elliott (Assoc Prof and Dir, Prof Dev) has been elected to the Executive Committee of the South Carolina Association of Continuing Higher Education for the Academic Year 1979-1980.

Holley Ulbrich (Assoc Prof) published an article, "The Message from California," in the Winter Issue of the <u>Collegiate</u> Review.

Bruce Yandle (Prof) has an article, "Buying and Selling for Cleaner Air," in <u>Business</u>, March/April 1979, pp. 33-36.

Hugh H. Macaulay (Alumni Prof) and Prof. Yandle presented papers at a conference on economic incentives in environmental control held by the Manufacturers Chemists Association in Washington, DC, Feb. 26-27. Prof. Macaulay's paper was titled "Alternative Solutions to the Environmental Problem." Prof. Yandle's paper was entitled "Evolution of the Environmental Regulation Problem: An Economic Perspective."

# ENGINEERING TECHNOLOGY

David V. Hutton (Assoc Prof) participated in a conference, "State Energy Audit Impact '79," sponsored by U. S. Department of Energy in Dallas, TX, March 5-7.

Prof. Hutton participated in the Society of Manufacturing Engineers Exposition and Tool Show in St. Louis, MO, Feb. 13-14.

Carl R. Lindenmeyer (Assoc Prof) was the spring seminar director for the Greenville-Spartanburg Chapter of the American Institute of Industrial Engineers (AIIE). Dr. Gene Woolsey was the featured seminar speaker who spoke on "Production and Inventory Control Techniques - A Quick and Dirty Approach." The seminar, which was held on March 10, was also attended by J. A. Chisman (Prof & Acting Hd) and E. R. Baker IV (Asst Prof).

Prof. Lindenmeyer gave a paper, "A Work

Sampling Training Tool," co-authored by Prof. Chisman at the 2nd National Conference on Computers and Industrial Engineering. The conference was held at the Raddison Chicago Hotel March 14-16.

#### **ENGLISH**

Loretta Carrillo (Vstg Instr) read "The Search for Selfhood in Contemporary Chicano Prose Fiction" at the College English Association, Savannah, GA, March 22-24.

William Koon (Assoc Prof) read "Flannery O'Connor's Subjectivity" at St. Andrews Presbyterian College's Tradition and Transition in Southern Literature: A Symposium in Honor of Reynolds Price, held March 2 in Laurinberg, NC.

Jane B. Martin (Vstg Instr) published "Sunglasses and Starry Eyes," a poem, in <u>California State Poetry Quarterly</u>, 6 (Winter 1979), 30.

## ENTOMOLOGY AND ECONOMIC ZOOLOGY

The following paper was presented at the S. C. Fisheries Workers Association meeting in Columbia Feb. 21-22: "Survival and Growth of Hard Clams in Protected Trays" by Arnold G. Eversole (Assoc Prof) and Peter J. Eldridge (N.M.F.S. - Charleston).

- S. B. Hays (Prof & Hd) attended and participated in the Executive Committee meeting for RPAR research grants held in New Orleans, LA, Jan. 28-30.
- T. T. Fendley (Asst Prof) presented woodduck research findings to the National Research Council, Commission on Natural Resources, Committee on Radioactive Waste Management, held in Augusta, GA, Feb. 20-21.
- T. M. Brown (Asst Prof) participated in the University Pesticide Research Meeting of the Southern Agricultural Experiment Stations held in Atlanta, GA, March 15-16.

S. B. Hays (Prof & Hd) participated in a comprehensive review of the Entomology Department, University of Arkansas, Fayetteville, March 11-16. Seven entomologists from across the U. S. served on the team which reviewed the instruction, research and extension programs. On March 26 Prof. Hays attended and participated in the RPAR Executive Committee meeting for research held in Atlanta, GA.

S. G. Turnipseed (Prof) attended the World Soybean Research Conference, chaired the entomology session and discussed cooperative research in soybean pest management held in Raleigh, NC, March 26-28.

The following papers were presented at the S. C.-Ga. Entomological Society meeting held at Hilton Head Island March 21-23, 1979:

"A Preliminary Field Test of the Efficacy of Nematode and Fungal Pathogens of the Red Imported Fire Ant" by Edwin C. Quattlebaum (Grad Res Asst) and Gerald R. Carner (Prof).

"Effects of a Nuclear Polyhedrosis Virus on Soybean Leaf Comsumption by the Velvetbean Caterpillar" by J. L. Bernhardt (Grad Res Asst) and Prof. Carner.

"The Effects of Insect Hormones on Entomogenous Fungi" by David W. Kraus (Grad Asst) and Raymond Noblet (Assoc Prof).

"Recovery of <u>Bathyplectes</u> <u>curculionis</u> from Alfalfa Weevil Larvae in S. C." by Louis C. Hearn (Grad Asst) and T. E. Skelton (Prof).

"Male Chromosomes in Three Species of Celithemis (Odonata: Libellulidae)" by Tina R. White (Grad Res Asst) and R. C. Fox (Prof).

"Population Densities of Four Predators of <u>Tetranychus urticae</u> in Peach Orchards" by Glenn T. Lee (Principal Grad Asst) and Clyde S. Gorsuch (Asst Prof).

"Bioassay of the Effects of Multiple In-

fections by <u>Bacillus</u> <u>thuringiensis</u>, <u>Beauveria</u> <u>bassiana</u>, and <u>Nomuraea</u> <u>rileyi</u> on Fall Armyworm Larvae" by Wayne A. Gardner (Univ of Ga) and Prof. Noblet.

"The Insects of Upper Three Runs Creek, Savannah River Plant" by John C. Morse (Assoc Prof), Jay W. Chapin (Asst Prof), David D. Herlong (former Grad Res Asst) and Ray Harvey (SRP, Aiken).

"Food Transfer Investigations in the Imported Fire Ant Using Rubidium as a Marker" by Roy M. Sutton (former Grad Res Asst) and Prof. Noblet.

"Imported Fire Ant Foraging Area and Colony Movement Studies" by David Stanley (former Grad Asst) and Prof. Hays.

"The Effect of the Addition of Toxaphene on the Residual Activity of Pyrethroid Insecticides in Cotton" by T. M. Brown (Asst Prof).

"The Insects of Eden" by Edwin W. King (Prof).

"Observations on Sex Ratios of Blackfaced Leafhopper Vectors of Maize Chlorotic Dwarf Virus in Georgia Epicenters' by David R. Alverson (Asst Prof) and John N. All (Univ of Ga).

"The Impact of the <u>Heliothis</u> Complex on Cotton Production in S. C." by D. R. Johnson (Asst Prof).

"Progress of Plant Resistance Program in Soybean" by M. J. Sullivan (Assoc Prof).

"Resurgence of Lepidopterous Pests in Soybean Following Pesticide Application" by Prof. Turnipseed and John Hopkins (Grad Res Asst).

#### HISTORY

Charles H. Lippy (Asst Prof) was critic for a paper, "The Phenomenology of Eliade and the Study of American Religious Groups, by Prof. Samuel S. Hill of the University of Florida, and participated in a symposium on "The Revival Tradition in America" at the annual meeting of the American Academy of Religion, Southeastern Region, in Atlanta March 6.

Jerome V. Reel Jr. (Prof) served as evaluator for the Conference on the Child in Opera sponsored by the Kennedy Center: Aesthetic Education Learning Center, Opera America and the National Opera Association, March 30-April 1 in Washington, DC.

Joseph L. Arbena (Assoc Prof) participated in the review and evaluation of applications for U.S. Office of Education assistance for Foreign Language and Area Studies Fellowships and International Studies Centers under Title VI of the National Defense Education Act. The Review Panel met in Arlington, VA, March 12-15.

## INDUSTRIAL MANAGEMENT

Hugh C. Haynsworth (Vstg Instr) presented a paper, "A Model for Determining the Cost of a Stock Record Inaccuracy," at the 9th Annual Meeting of the Southeast Region of the American Institute for Decision Sciences Feb. 21-23.

Carl Gooding (Assoc Prof) chaired the session "Decision Science Applications in Sports" at the annual meeting of Southeast ADIS in Nashville, TN, Feb. 13-14. Prof. Gooding also was a discussant in the "Facility Location Analysis" session at the same meeting.

# DIVISION OF INFORMATION SYSTEMS DEVELOPMENT

John C. Peck (Dir) attended Database '79 of the IDMS User Association in Houston on March 11-14. In addition to serving as chairman of the IDMS Technical Advisory Committee, he served on a panel dealing with database standards. He also chaired two special interest group sessions, one dealing with shared user software and the other with database productivity aids.

# MATHEMATICAL SCIENCES

John Kenelly (Prof) served as an invited consultant March 20 with the Mathematical Sciences Faculty at the Air Force Academy in Colorado Springs, CO. In addition to reviewing the academy's mathematics testing program, he gave an invited talk, "Standardization Procedures in Large Scale Testing Programs." On March 22 at Salt Lake City, UT, he participated in a College Board sponsored conference for Utah mathematics teachers. At the meeting he gave an invited address, "Grading the Advanced Placement Examinations." On March 23 at Seattle, WA, he attended a similar conference for Washington mathematics teachers and gave an invited talk, "Change's Change--The Trend Marker."

On April 2-3 Prof. Kenelly visited Indiana State University at Terre Haute as a Mathematical Association of America curriculum consultant. The Association has recognized 31 individuals as designated curriculum consultants to assist institutions in the evaluation of their mathematical sciences programs. In addition to this two-day review, he also gave an invited talk to the faculty on "Current Curriculum Trends in Mathematics and Computer Science."

Stanley M. Lukawecki (Prof) talked to the Hanna High School Math Club in Anderson March 6 concerning careers in mathematical sciences.

On March 19-22 Prof. Lukawecki, as a member of the Southern Association of Colleges and Schools Visiting Committee, went to Lamar to evaluate Spaulding High School.

W. H. Ruckle (Prof) presented a paper at the SIAM Meeting at Florida State University in Tallahassee, FL, March 24. The paper was entitled "Schauder Decompositions Approximization and Optimization."

H. F. Senter (Asst Prof) presented a talk to the Mu Alpha Theta Math Club at Southside High School in Greenville April 2 on "Aspects of Probability."

## MUSIC

Edith B. Card (Asst Prof) conducted several music education workshops: on March 15, for the independent kindergarten teachers of Buncombe, Henderson and Haywood counties in Canton, NC; on March 16, for the 4-year old kindergarten of the First Baptist Church of Canton; and on March 19, for seven sections of youngsters in the Seneca Preschool and 5-year old kindergarten with all teachers observing.

Martha Hamilton (Vstg Instr), flutist, and Lillian U. Harder (Instr), pianist, participated in a recital of music for flute and piano for the AAUW on March 18 at the Clemson United Methodist Church. The proceeds of this recital will go to educational fellowships for women in AAUW.

### NURSING

Judith J. Chodil (Assoc Prof and Dir of Cont Educ) presented a paper, "The Topographic Device: Analytic Tool or Source of Artifacts," at the New York University Sigma Theta Tau Research Day held in New York City March 16.

#### PHYSICS AND ASTRONOMY

Beverly B. Bookmyer (Prof) presented an invited talk at a colloquium of the Department of Chemical Engineering March 29. The topic of Prof. Bookmyer's talk was "Eclipsing Binary Stars."

Philip B. Burt (Prof) was an invited lecturer at the Einstein Centennial, Memphis State University, March 14-16. Prof. Burt's talk was on "Do Massive Gravitons Exist?" In addition, along with Prof. R. Marchini (former Grad Stu) of Memphis State, Prof. Burt participated in a discussion of relativity on radio station WWEE of Memphis.

A. L. Laskar (Prof) participated in the American Physical Society meeting held in Chicago March 19-23. The following

two papers were contributed: "Relaxation Modes of Impurity-Vacancy Dipoles in KN<sub>3</sub> and RbN<sub>3</sub>" by Prof. Laskar and W. J. Mealing (former Grad Stu); "Thermally Stimulated Depolarization in NH<sub>4</sub>Br" by Prof. Laskar and B. E. Taylor (former Grad Stu).

# POLITICAL SCIENCE

Michael A. Morris (Asst Prof) presented a paper, "UNCLOS III: Implications for the Third World," at the annual meeting of the International Studies Association, Toronto, Canada, March 21-24.

Martin Slann (Assoc Prof) has reviewed Raymond William Barker, Egypt's Uncertain Revolution Under Nasser and Sadat in Perspective, Vol. 8, No. 1 (January/February, 1979), pp. 22-23.

# PREPROFESSIONAL HEALTH EDUCATION

Frank A. Burtner (Prof) served on a panel concerning the recruitment of medical students and also as a discussant considering the rites of passage in medical education at the regional joint meeting of the Southern Group on Student Affairs, Association of American Medical Colleges, and the Southeastern Association of Advisers for the Health Professions at the University of Arkansas College of Medicine.

### PROFESSIONAL DEVELOPMENT

E. Earl Burch (Prof, IM) and Carl Gooding (Assoc Prof, IM) will be speakers for a course on "MRP: The Key to Effective Manufacturing Control" to be held May 2-3 at Clemson.

Thomas B. Maertens (Instr, IM) is the chairperson for a course, "How to Delegate Effectively," to be held at the Sheraton Palmetto Inn in Greenville May 7-8. He is also chairperson for a course, "Communications and Interviewing Skills for Supervisors," to be held May 9 at the Sheraton Palmetto Inn in Greenville.

Carleton W. Roberts (Prof, Text) will cochair a two-day seminar, "Textile Laboratory Safety," to be held May 9-10 at Clemson.

Claude S. Simpson Jr. (Instr, IM) is chairperson for a course, "Fundamentals of Management for Warehouse Supervisors," to be held May 10-11 at the Ramada Inn in Greenville.

James M. McDonald (Asst Prof, IM) is chairperson for a course, "Managing the Unsatisfactory Performer," to be held at the Sheraton Palmetto Inn in Greenville May 10-11. Prof. McDonald will also chair a course, "Productivity and Performance in Health Care," to be held May 14-15 at Clemson.

## PSYCHOLOGY

David J. Senn (Assoc Prof) and Rosemary H. Lowe (Asst Prof) conducted a two-day workshop on program evaluation techniques in mental health for state Community Mental Health Center evaluators. workshop is the first of two training sessions funded through a technical assistance contract with the National Institute of Mental Health. Profs. Senn and Lowe collaborated with Dr. Richard Cohen of the Anderson-Oconee-Pickens Mental Health Center, to which the contract was awarded. The workshop was held in Columbia March 19 and 20; the follow-up session is scheduled for May 21 and 22. On-site consultation will be provided in the interim for participants who are conducting program evaluation projects in their local Centers.

Edwin Brainerd (Asst Prof) and Lauretta Park (Asst Prof) presented a paper, "Changes in Reactions to Violation of Personal Space as a Function of Sex," at the 25th Annual Southeastern Psychological Association held March 27-30 in New Orleans, LA.

# RECREATION AND PARK ADMINISTRATION

Mike Ellerbrock (Instr) presented a paper he co-authored with Jeff McNeill (Assoc Dir, Alumni Relations) and Pradeep Ganguly (Grad Res Asst, Ag Econ & Rural Soc) on "The Effectiveness of Increasing Alumni Gifts Through the Alumni Educational Travel Program" at the Council for the Advancement and Support of Education's Special Workshop on Continuing Education in Kansas City, MO, March 21-23.

#### **TEXTILES**

Christine W. Jarvis (Asst Prof) presented a paper co-authored by Pamela A. Danforth (Grad Stu), Barbara A. Kolinofsky (Grad Stu) and Edward A. Vaughn (Dept IId) on "A Comparison of Foam and Saturate Bonded Nonwovens: Effects of Fiber and Binder Blends" to the 7th Annual Technical Symposium of INDA in New Orleans, LA, March 7.

# - UNIVERSITY RELATIONS

Ross Cornwell (Asst Dir) and Beulah R. Cheney (Univ Pubs Ed) edited and designed two recent books, Indicator Organisms and Nutrients, published by the U.S. Environmental Protection Agency. The books, which will be used as learner's guides for trainees in water quality monitoring programs, contain 67 instructional modules in mathematics, chemistry, environmental science and laboratory procedures. The books are an outgrowth of A Two-Year Water Monitoring Curriculum (1975) and Learner's Guide: Water Quality Monitoring (1978), also edited and designed by Cornwell and Cheney. The EPA project was directed by Ulster County Community College, New York.

MINUTES OF THE HANDICAPPED-STUDENT ADVISORY COMMITTEE MEETING, FEBRUARY 14, 1979

Committee Members Present -- Wells (chairman), Ashworth, Furry, Huey, Pace,

Patterson, Robinson, Steirer, Von Tungeln, Wallenius (for James), Wood.

- 1. Chairman Wells called the meeting to order at 2:38 p.m. in Room 300, Sikes Hall, Feb. 14, 1979.
- 2. The minutes of the Jan. 17, 1979, meeting were approved unanimously.

#### 3. Sub-Committee Reports

- a. <u>Procedures</u>: Steirer moved and Von Tungeln seconded that the revised procedures be approved. The motion passed unanimously. The revised procedures will become the committee's operating procedures effective immediately.
- b. <u>Workshop</u>: Furry requested that the names of potential workshop leaders, consultants and other resource people now being compiled be completed.

The idea of multi-faceted workshops at the beginning of the educational process was preferred by those present in response to the question of what types of workshops should be presented.

The workshop sub-committee will take responsibility for keeping up with TV and other materials of interest as they become available. It will contact Harry Durham about the availability of video cassettes and other tapes for committee purposes.

The sub-committee would like to plan a Handicap Awareness period. It would assume the responsibility for this. No formal approval was given although the possibility of various people sitting in wheelchairs and travelling on crutches in order to experience what being handicapped entails was advanced. It was noted that while the Transition Plan provides for motorized wheelchairs none have yet been bought.

What kind of budget is provided for workshops, was asked. The answer seems to be that proposals for workshops should include costs, and be sent to E. W. Tyndall for evaluation. The same thing

was observed to be in effect for cassettes and other materials.

#### 4. Old Business

a. The drafting of an information booklet for faculty use was discussed. Because the type of information provided for faculty members would necessarily be rather specific while information for students would be general, two different vehicles for information will be needed.

Student information will be put into the Student Handbook. The possibility of setting one sector of the library aside for faculty use in learning appropriate teaching techniques was raised although not determined. At this point Steirer moved and Patterson seconded that a subcommittee should be formed in order to draft a Faculty Information Booklet. The motion passed. Ashworth will chair a sub-committee consisting of Robinson and Huey in addition to himself. The subcommittee will also have the initial responsibility for deciding what information will be included in the Student Handbook.

#### 5. New Business

- a. Chairman Wells talked of the possibility of hiring a graduate assistant to aid in disseminating and gathering the information necessary for the committee to function. The committee approved by consensus without formal motion.
- b. The raising of the first individual case for committee discussion prompted a discussion of how the case files for committee use will be handled. One file will be established for each individual, and this file will be available for review by all authorized persons. Of course, each member of the Committee will be so authorized. As such information comes up in committee meetings, it will not be included in the minutes.
- c. Discussion occurred after the question was asked, if English language deficiencies in foreign students constitute a handicap. The general sentiment was

expressed that such deficiencies do not constitute handicaps according to the language of Section 504. A few members voiced doubts, however, so the committee arrived at no definitive answer to the question.

6. Adjournment came at 3:55 p.m.

Respectfully submitted,

William F. Steirer, Jr.

#### Attachment

- I. The University Handicapped Student Advisory Committee (hereafter, Committee) should exercise the following responsibilities:
- l. Educating faculty members in proper perspectives and functional skills in dealing with handicapped students. In so far as is feasible, the Committee should encourage and urge faculty members to acquire these perspectives and skills before handicapped students become members of their classes.
- 2. Disseminating all available information concerning handicapped students to faculty members. This would not only include desirable teaching techniques but also federal requirements relative to handicapped students in the classroom.

- 3. Reviewing the needs of and advising handicapped students, if possible, before such students have indicated a desired academic discipline and also reviewing in conjunction with the sudents' advisors and/or major departments, if appropriate, the students' selection of a curriculum to assure proper planning for access to academic courses and the students' continuing academic program.
- 4. Working closely with the Admissions Office in becoming aware of the needs of prospective and admitted handicapped students.
- 5. Reviewing and adjudicating between handicapped students and faculty, advisors or departments any disputes or allegations of discrimination, provided that such disputes or alleged discriminations have not been adjusted previously. In this connection the Committee would act as a complement to, but not a substitute for, the Student Grievance Committee and the Student Relations Committee.
- 6. Calling upon the remainder of the academic community for aid and assistance in attaining its objectives and performing its duties.
- II. Amendments to these procedures shall be approved by a majority of the members of this Committee. A quorum for these purposes shall consist of 2/3 of the members.

Clemson University Clemson, South Carolina

## MINUTES

of the Meeting of

#### THE EDUCATIONAL COUNCIL

March 5, 1979

Present:	Robert C. Edwards, presiding	Melvin C. Long
	Robert M. Allen	Harlan E. McCLure
	Ben W. Anderson	Stanley G. Nicholas
	Luther P. Anderson	A. E. Schwartz
	Melvin E. Barnette	William F. Steirer, Jr.
	H. Morris Cox	Wallace D. Trevillian
	Walter T. Cox	K. N. Vickery
	J. W. Gordon Gourlay	Henry E. Vogel
	Claud B. Green	Lyle C. Wilcox
	Victor Hurst	S. M. Willis
	Geraldine Labecki	E. N. Tyndall, Secretary
	Harold F. Landrith	

## 1. Minutes

The minutes of the meeting of February 5, 1979, were approved as submitted.

## 2. Transfer and Re-designation of Course Offerings between Colleges:

Statement and Recommendations: The Dean of the University recommended the following:

Α.	Forest Entor	mology		
Ent	307	Forest Entomology (From the College of Agricultural Sciences to)	3 cr	(2,3)
For	301	Forest Entomology (in the College of Forest and Recreation Resources)	3 cr	(2,3)
В.	Forest Path	ology		
D1 D	405/H405/60	5 Forest Pathology	3 cr	(2.3)

P1 Pa 405/H405/605	Forest Pathology (from the College of Agricultural	3 cr (2,3)
For 407/607	Sciences to) Forest Pathology (in the College of Forest and Recreation Resources)	3 cr (2,3)

Action: APPROVED

## 3. Academic Matters by Colleges:

Statement and Recommendations: The Dean of the University recommended the following:

#### A. COLLEGE OF AGRICULTURAL SCIENCES

## (1) Undergraduate Course Credit Change:

Pl Pa 401/H401 Plant Pathology 3 cr (2,2) (Change of lab hours from 3 to 2)

## (2) Graduate Course Credit Change:

Pl Pa 601 Plant Pathology 3 cr (2,2) (Change lab hours from 3 to 2)

#### B. COLLEGE OF ARCHITECTURE

## (1) Department Designation Changes:

D	0		D 11	1.0	0
в.	٥.	ın	Bull	ding	Science

(	CA BS	241	Construction	Management	I	5 cr	(3,6)
(	CA BS	242	Construction	Management	II	5 cr	(3,6)
(	CA BS	341	Construction	Management	III	5 cr	(3,6)
(	CA BS	342	Construction	Management	IV	5 cr	(3,6)
(	CA BS	432	Construction	Management	V	3 cr	(3,0)
(	CA BS	442	Construction	Management	VII	5 cr	(3,6)
(	CA BS	461	Construction	Economic Se	eminar	3 cr	(3,0)

## (2) Undergraduate Course Change:

CA BS 441 Construction Management VI 5 cr (3,6) (Department designation & prerequisite change)

## (3) Graduate Course Changes:

CA BS	632	Construction Management V (Department designation change)	3 cr (3,0)
CA BS	661	Construction Economic Seminar	3 cr (3,0)

	Undergrad	uate Cours	e Changes:		
	IN ED	350	Industrial Cooperative Experience (Change of lab hours)	6 cr	(0,18)
	IN ED	450	Industrial Cooperative Experience (Change of lab hours)	6 cr	(0,18)
	D. COL	LEGE OF FO	REST & RECREATION RESOURCES		
(1)	New Under	graduate C	ourse:		
	For	405	Forest Influences	2 cr	(2,0)
(2)	New Gradu	ate Course	;		
	For	605	Forest Influences	2 cr	(2,0)
•	E. COL	LEGE OF IN	DUSTRIAL MANAGEMENT AND TEXTILE SCIENCE		
	New Gradu	ate Course	<u>s</u> :		
	CF	812	Financial Markets and Institutions	3 cr	(3,0)
	CF	813	Industrial Relations	3 cr	(3,0)
	F. COL	LEGE OF SC	IENCES		
(1)	New Under	graduate C	ourse:		
	Comp Sc	220	Introduction to Information Processing Systems	3 cr	(3,0)
(2)	Undergrad	uate Cours	e Changes:		
	MICRO	412/H412	Bacterial Physiology (Prerequisite change)	4 cr	(3,3)
	ZOOL	340/H340	Cell Biology (Credit & description changes)	4 cr	(3,3)
	ZOOL	405/H405	Animal Histology (Title, description, lab & theory changes)	4 cr	(3,3)
	ZOOL	421	Advanced Invertebrate Zoology (Description & prerequisite changes)	4 cr	(3,3)

# (3) New Graduate Courses:

MATH	856	Applicable Algebra	3 cr	(3,0)
MICRO	806	Pathogenesis and Infectious Diseases	3 cr	(3,0)
ZOOL	865	Advanced Ornithology	3 cr	(3,0)
ZOOL	883	Special Topics in Evolutionary Biology	1-4 cr	(1-3,0-3)
ZOOL	884	Special Topics in Physiology	1-4 cr	(1-3,0-3)
ZOOL	885	Special Topics in Ecology	1-4 cr	(1-3,0-3)
ZOOL	886	Special Topics in Animal Behavior	1-4 cr	(1-3,0-3)
ZOOL	887	Special Topics in Cellular and Development. Biology		(1-3,0-3)
ZOOL	888	Special Topics in Organismal Biology	1-4 cr	(1-3,0-3)

# (4) Graduate Course Changes:

MICRO	612	Bacterial Physiology (Prerequisite change)	4 cr (3,3)
ZOOL	605	Animal Histology (Title, description, theory, and change in lab hours)	4 cr (3,3)
ZOOL	621	Advanced Invertebrate Zoology (Description and prerequisite changes)	4 cr (3,3)
ZOOL	881	Methods in Developmental Biology (Number and description change)	2 cr (0,6)

# (5) Curriculum Revision: Effective, Fall 1980

Department of Zoology

# (ATTACHMENT 1)

Action: APPROVED

## 4. Clemson University Calendar 1980-1981

<u>Statement and Recommendation</u>: The Dean of the University recommended approval of the Clemson University Calendar 1980-1981.

(ATTACHMENT 2)

Action: APPROVED

E. N. Tyndall, Secretary

#### ZOOLOGY

Effective: Fall 1980

#### FRESHMAN YEAR

No Change

#### SOPHOMORE YEAR

Change in footnote 1 (below)

#### JUNIOR YEAR

rirst Semester	Second Sen	lester		
GEN 305 Intro. Mol. Genetics PHYS 207 General Physics ZOOL 340 Cell Biology Botany Elective Elective <sup>3</sup>	s 4 (3,3) 4 (3,2) 4 (3,3) 3 3 18	MATH 301 PHYS 208 Zool 350 Elective <sup>3</sup>	Stat. Theory & Methods General Physics Developmental Biology	4 (3,2)
ZOOL 420 Evolution ZOOL 459 Systems Physiology <sup>2</sup> Elective <sup>3</sup>	SENIOR YEA  3 (3,0) 4 (3,3)  10 17		Animal Ecology	4 (3,3) 12 16

#### TOTAL SEMESTER HOURS = 135

- 1. To be selected form the following: ENGL 203, 204, 205, 206, 207, 208, 209
- 2. ZOOL 457 or 458 may substitute for Zool 459 with the approval of the advisor.

## 3. Electives:

- a) A minimum of 6 elective hours must be chosen from course offerings in the Social Sciences (Economics, History, Political Sciences, Psychology, and Sociology).
- b) A minimum of 6 elective hours must be chosen from course offerings in the Humanities (Foreign Languages, Humanities, Literature, Philosophy, and Religion).
- c) A minimum of 4 elective hours must be chosen from course offerings in the Department of Zoology. An additional 6 hours may be taken either in the Department of Zoology or in departments offering zoology related courses approved by the student's advisor.

# CLEMSON UNIVERSITY CALENDAR 1980-1981

# Fall Semester

# (73 Class Days)

August 18-19	Monday-TuesdayOrientation, new students
August 20	WednesdayRegistration, all students
August 21	ThursdayLate registration
August 22	FridayLate registration fee applies
August 22	FridayClasses begin regular schedule
August 28	ThursdayLast day for registration
August 28	ThursdayLast day to add a subject
September 11	ThursdayLast day to order diploma for midyear graduation
September 18	ThursdayLast day to drop a subject without record
October 13	MondayPreliminary reports due
October 29	WednesdayLast day to drop a subject or withdraw from the Unversity without receiving final grades
November 4	TuesdayElection day; classes suspended
November 10-14	Monday-FridayPreregistration
November 26	WednesdayThanksgiving holidays begin after last class
December 1.	Monday-Classes resume
December 8	MondayExaminations begin
December 18	ThursdayMidyear graduation

## (ATTACHMENT 2)

(University Calendar 1980-81)

# Spring Semester

(72 Class Days)

January 5	MondayOrientation, new students
January 6	TuesdayRegistration, all students
January 7	WednesdayLate registration
January 8	ThursdayLate registration fee applies
January 8	Thursday-Classes begin regular schedule
January 14	WednesdayLast day for registration
January 14	WednesdayLast day to add a subject
January 28	WednesdayLast day to order diploma for May graduation
February 4	WednesdayLast day to drop a subject without record
March 2	MondayPreliminary reports due
March 13	FridayLast day to drop a subject or withdraw from the University without receiving final grades
March 13	FridaySpring holidays begin after last class
March 23	MondayClasses resume
April 8	WednesdayHonors and Awards Day; classes suspended at 12 noon
April 13-17	Monday-FridayPreregistration
April 27	MondayExaminations begin
May 8	FridayCommencement

Note: In 1981 Easter falls on April 19.

(University Calendar 1980-81)

# SUMMER SESSION 1981

(26 Class Days Each Session)

(Classes Meet Monday-Friday Except as Indicated)

## First Session

May 18	MondayRegistration
May 19	TuesdayClasses begin
June 24-25	Wednesday-ThursdayExaminations

# Second Session

June 29	MondayOrientation, new students
June 30	TuesdayRegistration
July 1	WednesdayClasses begin
July 25	SaturdayClasses meet
August 5-6	Wednesday-ThursdayExaminations
August 8	SaturdayGraduation

April 15, 1979

# Calendar of Campus Events

16-21 -- Greek Week. Competition among fraternity chapters in athletic and other events. April 19, Fraternity Sing, Tillman Auditorium, 6 p.m. Open to the public, no admission charge. April 21, Greek Games.

- 16-22 -- Videotape: "Frisbee Dynamics and Techniques." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
  - 17 -- Clemson Area Continuing Education continues. Call 654-2139 for more information.
  - 18 -- Baseball: Georgia Tech, here, 3 p.m.
- 21,22 -- Baseball: Georgia Southern, here. (21) 2 p.m.; (22) doubleheader, 1:30 p.m.
- 23-29 -- Videotape: "Remarkable American Women." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
- 23-30 -- Art Exhibition: "MFA Thesis Exhibits." Thesis work by three MFA students:
  Marcia Bugg, ceramics; Terry Dimond, fiber sculpture; Jim Meaders, paintings.
  Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m. 4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
- 24,25 -- Applied Music Students Recital. Students taking private instruction in piano, voice, brass and woodwinds perform in lieu of a final exam. Sponsored by Music Department, Daniel Hall Auditorium. (24) 7:30 p.m., (25) 4 p.m. Open to the public, no admission charge.
  - 24 -- Clemson Area Continuing Education continues. Call 654-2139 for more information.
  - 25 -- Workshop: "Human Relations and Communication Workshop for Office Personnel." An opportunity for staff members to enhance and/or modify their behaviors in the direction of better communication, mutual respect, and an increased awareness of consumer problems. Sponsored by Counseling Center, 200 Tillman Hall, 8 a.m. noon. Open to all faculty and staff, no charge.
  - 25 -- Seminar: "Safeguards and the Reprocessing of Nuclear Fuels." Featured speaker is Dr. L. E. Burkhart, professor of chemical engineering at Iowa State University and program director for materials chemistry at Ames Laboratory USDOE. Sponsored by departments of Chemistry and Geology, Chemical Engineering, and Electrical and Computer Engineering, 302 Rhodes Engineering Research Center, 10 a.m. Dr. Burkhart will also give a lecture on the same topic in 131 Brackett Hall, 4 p.m. Open to the public, no admission charge.
  - 26 -- Concert: "A Salute to President Robert C. Edwards." Presented by the Clemson University Chorus, Clemson University Concert Band and Lillian Harder, piano soloist. Sponsored by Music Department, Littlejohn Coliseum, 8 p.m. Open to the public, no admission charge.

## CALENDAR OF CAMPUS EVENTS (Cont.)

- 27-5/1 -- Symposium: "11th Annual International Biomaterials Symposium." Approximately 400 bioengineers and physicians working to extend the frontiers of research in developing artificial body parts will be on campus to hear four world-famous scientists and present about 100 technical papers on the latest research developments in biomaterials. For more information, call Prof. Francis W. Cooke at 656-3051.
  - 30 -- Examinations begin.

#### 12 INITIATED BY SIGMA XI

Twelve Clemson University researchers -- faculty members, alumni and graduate students -- were initiated by Sigma Xi honorary society at its annual banquet April 5 at Holiday Inn.

Elected to full membership in the society, which honors excellence in research, were David Roy Alverson, Richard O. Hegg, James C. Hite, Carl Ray Lindenmeyer, William Clarence Maddox and Hideak Kaneko.

Associate members initiated were Thomas Clinton Gore, Michael Frederick Gretner, Katherine Wylie Richards, Pamela Alice Sperling, David Michael Talbert and Richard Albert Schmalz, an alumnus now living in Springfield, Va.

Sigma Xi President Rudy Elling, professor of civil engineering, presided over the annual session. Robert Edwards, associate professor of animal science, accepted the gavel for the coming year.

Addendum

to the

CLEMSON UNIVERSITY NEWSLETTER

April 15, 1979

CLEMSON UNIVERSITY LIBRARY
SOUTH CAROLINA ROOM

APR 19 1979

Minutes of the
Faculty Senate Meeting
February 20, 1979

#### MINUTES OF THE FACULTY SENATE

February 20, 1979

The Senate Chamber

## 1. Call to Order

The meeting was called to order by President Steirer at 3:30 p.m.

## 2. Approval of Minutes

The minutes of the January 23 meeting were unanimously approved with minor corrections.

## 3. <u>Committee Reports</u>

a. Admissions and Scholarship Committee - Senator Edie, Chairman, filed the following report:

#### 1. Withdrawal Period

On Friday, February 2, the committee met with the faculty representatives on the Undergraduate Council. The undergraduate withdrawal policy was discussed. The overwhelming majority of the Council was in agreement that the drop period should be shortened. After considerable discussion, it became apparent that a four-week withdrawal period would encounter considerable opposition on the Council, but a six-week withdrawal period would be supported by a comfortable majority of the faculty representatives on the Council. We will introduce a resolution on this subject under new business.

## 2. Definition of Major

All department heads have provided the requested information on a definition of major courses within their programs except the following:

- W. P. Williams, Head Department of Food Science
- R. F. Wheeler, Head Department of Animal Science
- E. J. Kozma, Head Department of Elementary and Secondary Education
- M. B. Bishop, Director Medical Technology Program

The College of Education has told me that they are working on our request but their response will be somewhat delayed because of the diversity of their programs.

#### 3. Academic Honesty

Our subcommitte is studying Clemson University's policies on honesty and has obtained responses from the four Universities that they have contacted. They will present a comparison of the policies at the next Faculty Senate meeting.

## 4. University Admissions Policy

The committee met with Mr. Mattox of the Admissions Office on February 6. Mr. Mattox told us that Clemson University has no written admissions policy. This is intentional in order to give the Admissions Office maximum flexibility. Admission is based on the predicted performance for the freshman year at Clemson. Although the Admissions Office may set an application cutoff date which may fall as early as the applicant's junior year in high school, most prospective students are not hurt (according to the Admissions Office) because they take the college boards in their junior year anyway. Seventeen hundred freshmen dormitory spaces are available for the fall semester. Eight hundred and fifty off-campus spaces are available. The early cutoff date is imposed because the office has decided that the same admissions standard should be used for on and off campus residents.

As far as our committee could learn, there has never been significant faculty input into the University's admission policies. We will have resolutions to present in this area during future meetings.

During the ensuing discussion, the Senate indicated that it preferred that Senator Edie's Committee proceed with its study on Definition of Major sans the responses from the four departments. Then Senators Baron and Burt expressed concern over the lack of a written admissions policy and the fact that admission to Clemson is based on the junior year of high school. Senator Burt asked if the Admissions Office, in writing a letter to a nonadmitted student, clearly states that the person is not being rejected? Senator Edie suggested that an advisory committee should oversee the admission procedure. Other comments were that the policy seems to be improvised as exigencies require; that the Senate needs to tackle the implementation of admission policies; that it seems that filling the dorms is more important than taking qualified students; that the "policy" seems to make little sense and they can admit anybody that they want; that the faculty does not object to discretionary policy, just to a policy where the concern seems to lie with housing rather than scholarship considerations; and that even the deans have no input into the admissions policy.

Senator Hester suggested that the Faculty Senate go on record recommending that the Faculty Senate and Council of Academic Deans deal collectively with the admissions problem.

The following was introduced as information and not as a resolution:

Academic standards depend to an extent on the number of class sessions in a school term, and the administration should schedule and execute 75-day semesters.

Explanation. Spring Semester 1979 is a 72-day term having 43 class meetings for most three-semester hour courses. Syllabi are commonly structured on 45 class meetings resulting in a <u>scheduled</u> foreshortening. No apparent reason exists in that the term could well have begun on Monday, January 8 rather than on Thursday, January 11 with orientation and registration on January 3, 4, and 5.

In the 1978 and 1979 winter season, classes were cancelled due to the weather. Clemson University is not a commuter college. Faculty and students who cannot attend should endeavor to make up work as in any other missed attendance. The administration should not suspend classes for snowstorms.

- b. Policy Committee No report
- c. Research Committee No report

A discussion did develop and two items were addressed:

- 1. Copyright policy. Adm. McDevitt will give this his attention now that the presidental search process is growing to a close.
- 2. Thesis research in College of Agricultural Sciences. The following clarification on the Thesis Research Policy in the College of Agricultural Sciences which resulted from resolution FS-78-10-3 was circulated to Department Heads in that College on January 22, 1979:

Research training is a critical element of M.S. and Ph.D. programs. In general, Experiment Station projects represent the most concentrated research efforts in the College; hence, thesis research will normally be associated with a Station project. Association with a Station project does not say, nor does it imply, that thesis research must be identical to the Station project or that the association must be with the project of the major professor. In addition, research carried out under the support of any formal grant or contract -- public or private -which has been approved by the department and College represents a potentially suitable thesis research area. It is possible that a legitimate Station project might not provide a suitable basis for thesis research. This decision must be made within the department.

In no way is this policy an administrative attempt to mandate or manage the details of graduate education or to interfere with the unique and essential functions of graduate advisory and examining committees. It is, however, a written policy to ensure a continued practice of supporting a high quality graduate program of which the administration, faculty, and students of this College can be proud.

d. Welfare Committee - Senator Burt, Chairman, presented the "Faculty" Senate Committee Report on TIAA Optional Retirement Plan" [SEE ATTACHMENT A].

Senator Burt asked if he could invite Mr. John Gentry, retired head of the Personnel Department, to address the Senate for 10-15 minutes at the March meeting. Mr. Gentry has researched some special features of the S.C. Retirement System and would like to share his information with the Faculty Senate. The Senate approved this request. (The Senate did recognize the work of former Senator Melsheimer on a voluntary basis.)

e. Ad Hoc Committees - Senator Burt, Chairman, circulated the final report of the Ad Hoc Committee on Faculty Compensation [See ATTACH-MENT B].

## f. University Councils and Committees

Senator Hipps, representative on Undergraduate Council, discussed the problem related to reexamination of graduating seniors. The following points were made during the discussion: Maybe faculty members need to allow reexaminations, and if students fail, they just fail; the question of how many other universities allow reexamination was addressed; it was suggested that the Resolution on Reexamination for Graduating Seniors (FS-78-11-1) be reintroduced. (See page 9 of November 21, 1978 Minutes).

# 4. President's Report

a. By this time, one-half of you have had the opportunity to enter into a dialogue with one of the presidential candidates while the other half will have the same opportunity later this week. I am glad that every Faculty Senator will have this opportunity because each of you as a representative of your college deserves the opportunity to represent your constituents in this important task. I added Hugh Macaulay to each group because as a member of the Screening Committee his knowledge of the candidates would be useful and because as the elected representative of all the full professors, he should have this chance to represent them.

A number of people and groups suggested alternatives to the procedure adopted, but I rejected them all because of the importance that I attach to the Faculty Senate. It is, after all, the only elected body representing the Faculty and all efforts to enhance its importance in university affairs would come to naught if on this important occasion I would ignore it, and have other people do something that Faculty Senators can do. No assembly can ever gain respectability unless as responsibilities arise, it is given the chance to discharge those responsibilities. From my observation of the first two meetings, you are doing splendidly, and I can not believe any other groups of faculty members would do better.

- b. The Alumni Association and Jim Strom of the Development Office have officially thanked the Senate for the Letters of Appreciation we sent last month [Secretary's Note: the originals of these two letters will be attached to the Approved Minutes that will be given to Dean Hurst for filing in the Library Archives].
- c. Dean Hurst has responded to FS-79-1-1 (on consulting) by sending the type of request that we asked him to send to all the Deans. On FS-79-1-3 (on information about professional examinations), Dean Hurst agrees that this information would be useful to faculty members. He will accumulate the information himself instead of asking the Undergraduate Council to do so.
- d. Elections of officers for 1979-80 will take place on March 27. The Advisory Committee will meet on Thursday, March 8 at 1:25 p.m. in Hardin Hall 121 in order to nominate candidates. I will remind the committee members later, but would like them to arrange their schedules with this time in mind.
- e. Elections for new senators will occur in late March and early April. Please think of those best suited to do the kind of job needed. Use your influence in encouraging excellence to be recognized and placed in the Senate.
- f. I know many of you are eager to see the copyright policy issue resolved; so am I. Once the presidential selection task is behind him, I am sure Vice-President McDevitt will be able to give it the attention it deserves.

A discussion developed over the University Governance Committee. President Steirer revealed that two reports will be forthcoming from this committee: a majority report from all but one member of the committee; and a minority report from President Steirer. Senator Snipes moved that a straw vote be taken on how the Senate feels about the preamble of the proposed constitution -- specifically the reference to the faculty possessing legislative authority. The motion to support in principle the faculty possessing legislative poweror authority passed by voice vote.

# 5. Old Business

a. Welfare Committee Reply to Dean Hurst on Summer Employment - Senator Burt introduced the following resolution and moved its acceptance:

#### FS-79-2-5

Concerning the Welfare Committee's rebuttals to Dean Hurst's reply to the Senate's Policy Statement on Summer Employment and the Senate's Report on Status of Academic Year Faculty Employed in Summer be it resolved, the Senate adopts the Welfare Committee Rebuttals.

The resolution was seconded by Senator Grubb. [See ATTACHMENT C for Rebuttal to Comments on Faculty Senate Report on Status of

Academic Year Faculty Employed in Summer and ATTACHMENT D for Rebuttal to Comments on Faculty Senate Policy Statement on Summer Employment of Academic Faculty.]

The resolution passed unanimously by voice vote.

- b. Retirement Policy Report -- Senator Burt moved acceptance of the Retirement Policy Report and Senator Fleming seconded [See ATTACHMENT A.] The motion to accept the report passed by unanimous voice vote.
- Report on Faculty Compensation -- Senator Burt moved acceptance of the Faculty Compensation Report [See ATTACHMENT B] and Vice President Dickey seconded. A rather spirited discussion developed during which the following points were made: Senator Baron raised objections about the statement on page 4 item 3 concerning terminal degrees for full professors and that there was no consideration given as to why a greater difference exists at the full professor level than at the associate or assistant professor levels. Senator Burt rebutted Senator Baron's objections by stating that the average compensation at each level should be brought up to the level at the peer institutions. Senator Prince injected that now requirements are higher than just a terminal degree and that we may not be comparing the same types of individuals. Senator Burt stated that the ad hoc committee looked at the AAUP data and asked themselves the question -- Are there any extenuating circumstances here at Clemson? It was decided that we should let the administration point them out if any exist. Senator Snipes expressed concern that a person makes full professor just because of longevity. Senator Fennell commented that the greater discrepancy at the professor level tended to play down the role of the assistant and associate levels. Senator Burt assured the group that there are differences at all levels. Vice President Dickey reminded the group that we are talking about averages -- we are not saying that we are better or worse. Senator Baron expressed the opinion that the average level of each rank could be raised and then within that framework, individual salaries could be considered on a merit basis. Senator Burt stated that it is a numerical matter and we are not saying any group is better than the other; we are suggesting that the average compensation at each rank be examined and adjusted to bring that average up to the level of the peer institutions. Senator Snipes commented that the report says nothing about what a full professor's salary should be: all we are trying to say is how we are being undercompensated. Senator Fleming remarked that the issue at hand is that we are undercompensated, and that the AAUP does in fact feel that this is a matter that the Senate should pursue on behalf of the Clemson Faculty. He assured us that the AAUP supports the Senator's efforts and would like to see the Faculty Senate assume a leadership role in the endeavor. Senator Grubb expressed the opinion that the Faculty Senate is the best body to make recommendations and asked the question, "Why does Clemson appear at the bottom?"

The motion to accept the ad hoc report was approved by voice vote.

d. Report on Administration Positions -

The February 20, 1979, memorandum to Dean Victor Hurst concerning Administrative Positions in the Academic Area for which Search Committees are appropriate was distributed to the Faculty Senate [See ATTACHMENT E]. Senator West moved acceptance, Senator Grubb seconded, and the motion was approved unanimously by voice vote.

e. FS-78-4-5 - The Resolution on Student Liability will be reintroduced as FS-79-2-7 under New Business.

## 6. New Business

a. FS-79-2-1 - Resolution on Class Withdrawal Policy

WHEREAS, the present system of withdrawing from classes does not encourage students to share in responsibility of pursuing academic information early each semester; and

WHEREAS, allowing withdrawal from a course anytime until the last five weeks of classes encourages an air of irresponsibility on the part of the students; and

WHEREAS, some persons register for more classes than they intend to finish each semester so they can choose to remain in those classes for which the best grades seem probable, and thereby occupy class space other students may desire; and

WHEREAS, six weeks in any course should be ample time to allow students to determine if they wish to remain in a course; now, therefore

BE IT RESOLVED that the present class withdrawal policy be changed to encompass the following:

- a. That the first six weeks of a semester constitute a free drop period. Courses dropped during this period are not recorded on the student's permanent record.
- b. That a student enrolled in a class after the first six weeks of classes shall have final grades recorded unless the student withdraws from the University or can demonstrate to the Dean of Undergraduate or Graduate Studies confirmable extenuating circumstances why the student should be allowed to withdraw from that course. Students withdrawing from the University in the last five weeks of classes shall have final grades recorded. Instructors may dismiss a student from class for cause at any time. Students so dismissed during the last five weeks of classes shall receive a grade of "F."

The above resolution was introduced by Senator Edie, who moved its adoption, seconded by Senator Howard, and approved unanimously by voice vote.

b. FS-79-2-2 - Resolution on Proposed Amendment to State Employment Grievance Procedure.

Concerning the proposed amendment to the State Employment Grievance Procedure to exempt teaching personnel from coverage under the State Employee Grievance Procedure in matters relating to tenure and/or retention be it resolved, the Senate requests an explanation from the Administration on the decision to recommend this action to the Council of Presidents.

The above resolution was introduced by Senator Burt, who moved its adoption, seconded by Senator Lambert, and approved unanimously by voice vote.

c. FS-79-2-3 - Resolution to Accept the Welfare Committee's Report and Recommendations for Optional Retirement Plans in lieu of SCRS.

On the basis of the Welfare Committee's study of the benefits of optional retirement systems and,

In view of precedents in other states for the existence of optional retirement plans in addition to state retirement plans, be it resolved,

the Senate recommends that the Welfare Committee's Report and recommendations for optional retirement plans in lieu of the South Carolina Retirement plan be adopted by the Administration.

The above resolution was introduced by Senator Burt who moved its adoption, seconded by Senator Grubb, and approved unanimously by voice vote.

d. FS-79-2-4 - Resolution Concerning Changes in the South Carolina Retirement.

On the basis of the Welfare Committee's report of April 18, 1978, concerning changes in the South Carolina Retirement, to wit.

- (1). Provision for inflation protection should be made in the deferred pension payable to the vested employee who terminates prior to being eligible for retirement.
- (2). The payout rate should be increased to 2% on salary amounts over \$4800.
- (3). The state should investigate possibilities of a limited portability in which a person leaving Clemson for another (non South Carolina) state university or vice versa could be immediately enrolled in the new system at no cost and no loss of previous benefits.
- (4). Investigations into the feasibility of converting the State System to a non-contributory plan should be undertaken. The tax advantages to the State employees would be quite significant, and no net cost to the state need be involved,

be it resolved,

the Senate recommends that these changes be fought for by the Administration.

The above resolution was introduced by Senator Burt who moved its adoption, seconded by Senator Walker, and approved unanimously by voice vote.

e. FS-79-2-6 - Resolution on Faculty Compensation.

Whereas, the Ad Hoc Committee on Faculty Compensation has established that Clemson University faculty have been and are significantly undercompensated relative to faculty in peer institutions, be it resolved, the Senate recommends that the Administration implement the plan for amelioration of this undercompensation as contained in the Ad Hoc Committee's Final Report.

The above resolution was introduced by Senator Burt who moved for its adoption, seconded by Grubb, and approved by voice vote.

f. FS-79-2-7 - Resolution on Student Liability Insurance Coverage (First introduced as FS-78-4-5)

RESOLUTION ON STUDENT LIABILITY INSURANCE COVERAGE

WHEREAS the general liability policy which covers employees of the University does not cover students participating in various activities such as student clubs, fraternities, sororities and intramural sports programs; and

WHEREAS it is not fully clear as to the liability coverage of students involved in assigned laboratory, or field experiences, shop exercises; and

WHEREAS it is in the best interest of the University to provide liability coverage for all student activities sanctioned by the University, be it therefore

RESOLVED that the Faculty Senate requests the Administration to clearly identify the current liability insurance coverage for students and to take immediate steps to obtain student coverage for all University sanctioned activities.

The above resolution was introduced by Senator Hood who moved its adoption and seconded by Senator Burt. During the discussion, Senator Hood pointed out that there are potential dangers when students work on or with floats, food service, laboratories, classroom and when they go out in the state. Senator Hipp asked who would pay for the coverage, and Senator Hood responded by stating that the resolution does not address the problem of how coverage will be obtained.

The resolution was approved unanimously by voice vote.

g. FS-79-2-8 - Resolution on The Provision of Towels and Soap for Laboratories.

WHEREAS the Clemson University Physical Plant currently has a policy of not providing basic items such as paper towels and soap for laboratory areas for teaching and research, and

WHEREAS paper towels and soap are necessities for the cleanliness and well being of students and faculty,

Be it therefore resolved that the University Administration take steps to change this policy.

The above resolution was introduced by Senator Hood who moved its adoption, and seconded by Senator Dickey. During the discussion it was revealed that it is a policy that these items are provided for restrooms only.

The resolution was approved unanimously by voice vote.

7. The meeting adjourned at 5:35 p.m.

Respectfully submitted,

T. R. Adkins, Jr. Secretary

Senators absent:

Agricultural Sciences

D. B. Smith

S. G. Turnipseed

Industrial Management and Textile Sciences

W. C. Whitten

G. H. Worm

Liberal Arts

E. M. Coulter

Sciences

H. F. Senter



**FACULTY SENATE** 

# FACULTY SENATE WELFARE COMMITTEE REPORT ON TIAA OPTIONAL RETIREMENT PLAN

#### I. SUMMARY

The difference in the characteristics of the South Carolina Retirement System (SCRS) and TIAA plans is such that no unequivocal comparison of the individual benefits can be made. However, it appears that both will provide very similar pensions for individuals serving to retirement for the interest rate and inflation scenarios of this study. The SCRS plan provides an assured pension level, while TIAA pensions may be slightly better or worse.

The advantage of TIAA to the individual is the fact that he owns the pension accumulation and the right to purchase a retirement annuity with it. Since TIAA is used as the retirement fund vehicle by the vast majority of major institutions of higher learning in this country, the individual can move from one to another without losing part of his pension fund accumulation. He is, thus, not "locked in" to a particular job or institution by his pension fund, and is better able to pursue professional opportunities furthering his professional development. Indeed, this is at least as advantageous to the University as to the faculty member. Development of a vigorous and vital academic program in any field requires the cross-fertilization of ideas which accompanies the addition of new, ambitious faculty to interact with more experienced faculty possessing broader perspective. While the greater mobility offered by the TIAA option will result in some people leaving that we would like to see remain, it will also bring good people to replace them. In general, the programs at all institutions involved, and the professional development of the individuals involved, will benefit in the long run.

The greatest advantage to the University of a TIAA optional retirement plan lies in the area of faculty recruiting, especially of senior faculty. As the most common retirement system in higher education, TIAA is widely known and respected among faculty throughout the country. Many have their retirement accounts with TIAA, and the ability to continue their participation in TIAA would be very attractive to them. The assurance that their pension accumulation would not be forfeited should they depart would also be a considerable attraction to many younger faculty candidates. On the other hand, other individuals will be attracted by the assured benefits of the SCRS plan. The availability of both plans on an optional basis would distinctly strengthen the University position in attracting top-flight faculty to continue its movement toward national prominence.

Finally, there appears to be no significant additional cost to the University in offering the TIAA plan as an option. Thus, the clear conclusion is that appropriate action should be instituted to implement the TIAA plan as an option to the present SCRS retirement plan.

- II. Comparison of characteristics of State (SCRS) and Optional (TIAA)
  Retirement Plans
  - A. Basic Concepts
    - State The South Carolina Retirement System (SCRS) utilizes a formula based on years of service and final average salary (three highest years) to compute a <u>defined benefit</u>. The benefit, or pension, is only indirectly related to the individual's contributions.
    - TIAA The TIAA plan provides a pension actuarily based on a defined contribution rate. The pension depends on cumulative contributions, dividend rate (which is variable), and time on deposit. Presently, it also depends on sex, though the actuarial tables may be merged in the future. Thus, TIAA pensions can only be estimated for some economic scenario. The TIAA member is also given the opportunity to invest his pension funds in CREF, an equity investment fund.
  - B. Vesting and Portability
    - Definitions Vesting refers to the right to receive a deferred pension from employer contributions to a pension fund even if employment with the sponsoring company or agency ceases.

      Portability refers to the right to continue active participation with the same pension fund with more than one employer. It also implies full credit for pension fund accruals even in periods when no contributions are made. Generally, such plans are owned by the individual.
    - State Vesting is provided in fifteen years. No provision is made for inflation or interest adjustment between separation and retirement. Consequently, this vesting is of very dubious value if termination is more than ten years from retirement eligibility.
    - TIAA Immediate vesting and full portability are provided. The ultimate pension reflects all fund earnings even if no contributions are made for a long period prior to retirement.
    - \*\*\* This appears to be the pre-eminent advantage of TIAA.

- C. Inflation and Cost-of-Living
  - State Compensation for inflation is quite good prior to retirement in that the benefit is generally based on the individual's highest salary, which will have at least roughly kept pace with inflation. After retirement, there is a limited adjustment of pension benefits in response to changes in the consumer price index.
  - TIAA Compensation for inflation prior to retirement depends on rising interest rates in inflationary times (and thus higher TIAA dividends), and the opportunity to participate in equity investment through the CREF option or TIAA with highly uncertain results, of course. After retirement, the same factors are operative.
  - \*\*\* Probably an advantage to SCRS in highly inflationary periods.
- D. Disability and Death Benefits
  - State There is a disability retirement provision in the State system after five years service. The calculation is complex, but the pension would range from roughly 30% of final salary at initial eligibility to about 45% if near retirement with extensive service at Clemson. A death benefit of one year's salary is also provided (along with return of all contributions with interest.)
  - TIAA There are no disability or death benefit provisions in TIAA other than entitlement to the full contributions and interest attributable to both the individual and the state, and the prerogative of taking this as an annuity. For the individual with a number of years in the program, the entitlement to the State contributions offsets the one year salary death benefit of SCRS.

    TIAA offers a separate disability insurance program with excellent benefits at modest cost (less than one per cent of salary). This plan would also be attractive to SCRS members not yet eligible for SCRS disability, or whose SCRS disability income would be inadequate.
  - \*\*\* An advantage to SCRS in the early years, about equal later, perhaps an advantage to TIAA even later. The TIAA disability insurance would be a valuable addition to Clemson's benefit plans in any event.

#### E. Tax Treatment

- State All employee contributions are taxed at the time of contribution. Tax on the employer contribution, and on the interest accrued, is deferred until retirement.
- TIAA Generally, such optional plans allow tax deferral on employee contributions. At a contribution rate of 6% and a 33% marginal tax rate, the employee choosing tax deferral would be able to purchase a Supplemental Retirement Annuity with 3% of his salary with no reduction in take home pay. His ultimate retirement pension would then be increased by about 20% (before taxes). Since most of the pension is attributable to employer contributions and interest (and is thus taxable), the after tax income would also increase significantly no matter what his tax bracket.
- \*\*\* Clearly an advantage to TIAA.

### III. Comparison of Estimated Retirement Benefits

A. Bases - Salary profiles used are 5% and 7% average annual raises. Case studies of recent employees indicate about 7% has been the case over the past 30 years. Generally, higher salary increase rates make SCRS look better, while lower values are favorable to TIAA. In the comparison, the TIAA Plan is assumed to have no CREF component since no reasonable prediction can be made for CREF.

Note

TIAA interest rates are assumed to be fixed at 6% to retirement and 9% after retirement. Actual TIAA rates are variable; currently, the rate is 7.75%. The figures in the following illustrations are abstracted from a report prepared by TIAA for Clemson University, dated August 15, 1978. Copies are available in the Clemson University Personnel Office.

#### B. Sample Cases

Initial Salary - \$16,000

1. Twenty-eight year old serving 30 years, then retiring. What is his pension?

Final Salary	Salary Increase	TIAA	SCRS
Average	Rate	Male Female	
\$ 62,770	5%	49.5 45.6	48.5
\$106,943	7%	38.7 35.6	49.0

Note result is very similar at 5% salary rate, but SCRS is about 25% higher at 7% rate. As discussed in II E., election of tax deferred treatment with TIAA would enhance TIAA pensions significantly, placing TIAA slightly ahead at 5% and modestly behind at 7% salary increase rates.

Pension - % of Final Avg. Salary

2. Same twenty-eight year old serves 15 years and terminates to take administrative position at another University. What is his deferred pension at age 65?

Initial Salary - \$16,000		Pension -	% of	Final Avg.	Salary
Final Salary	Salary Increase	TIAA			SCRS
Average	Rate	Male	Fema]	<u>e</u>	
\$ 88,324	5%	31.2	28.0	)	8.1
\$171,085	7%	18.5	16.7	7	5.4

Note that the vested pension from SCRS for the 15 years service is only 5 - 8% of the individual's final pre-retirement salary! Indeed, if the employee withdrew his contributions, forfeited the State share, and invested in a bank savings account for the intervening 22 years, he would be better off. With TIAA, on the other hand, he has a deferred pension of 17 to 31% of his final average salary - a significant contribution to his retirement income.

3. Same twenty-eight year old serves to retirement at age 65. What is his pension?

Initial Salary - \$16,000		Pension - %	of Final Avg.	Salary
Final Salary	Salary Increase	TIAA		SCRS
Average	Rate	Male	Female	
\$ 88,324	5%	70.5	63.3	60.2
\$171,085	7%	51.6	46.3	60.7

Conclusions are much the same as Case 1 above. Note again that use of tax deferred option with TIAA could increase those pensions, so that TIAA would be appreciably superior at 5% salary increase rate, and roughly on a par with SCRS at the 7% increase rate.

4. Forty-four year old enters with 16 years service elsewhere. How does TIAA option affect him?

Without listing the detailed calculations, suffice it to say that Illustrations 1 and 3 give a reasonable assessment of the relative pensions he would earn during the balance of his career at Clemson. That is, at 5% annual salary increase the TIAA pension would be somewhat higher, at 7% salary increase the SCRS pension a bit greater. The pension would be about one-third of the final average salary in each case.

- 5. Case studies from Clemson recent retirees; SCRS pension versus TIAA based on actual contribution and dividend record.
  - a. Initial Salary \$2,250 in 1946
    Years of Service 31
    Final Salary Avg. \$24,540
    Salary Increase Rate 8.0%
    SCRS Pension \$11,571
    TIAA Pension \$8,867
  - b. Initial Salary \$4,150 in 1949
    Years of Service 28
    Final Salary Ave. \$16,072
    Salary Increase Rate 5.0%
    SCRS Pension \$6,888
    TIAA Pension \$6,722

c. Initial Salary - \$5,400 in 1949
Years of Service - 28.5
Final Salary Avg. - \$30,738
Salary Increase Rate - 6.9%
SCRS Pension - \$13,907
TIAA Pension - \$9,969

Note that for the two individuals with high salary increase rates SCRS was distinctly superior, while the third case gave almost equal pensions. It should be recognized, however, that during the early years of these careers, the total contribution rate (state plus individual) was appreciably lower than it is at present. This penalizes the TIAA pension (which reflects the money which has been deposited), but not the SCRS plan (which is based on the current benefit rate irrespective of cumulative contributions.) Note also that the advantages of tax deferred treatment were not considered.

\*\*\* Based on the information presented above, it is clear that level of pension benefits alone does not provide an unequivocable choice between SCRS and TIAA. SCRS pensions seem to be somewhat higher (if inflation rates remain high) for the employee who remains at Clemson until retirement. However, this comparison is based on a lower interest rate than that currently paid by TIAA, and does not allow for tax sheltered treatment available in optional plans. Indeed, one can make either plan appear superior by altering one's assumptions about interest rates and inflation rates.

IV. Advantage to Clemson and to the Faculty of Having TIAA Option

The really distinct advantage of TIAA is its immediate vesting and complete portability. As TIAA is by far the most widespread retirement plan at American colleges and universities, a faculty member can readily move about in his academic career without adverse effect on the retirement security of himself and his family.

The improved mobility offered by the TIAA plan is important to both the University and the faculty. The vitality of an academic program is dependent on the introduction of new, fresh ideas through new faculty. For the faculty member, opportunities for advancement, especially into administrative positions, are relatively limited within any single institution. Furthermore, the professional development of the faculty member also depends on interaction with other professionals in his field. While many avenues exist for this (such as sabbaticals), job changes are one of the more important.

The disincentive to change jobs which is given by the lack of portability in the SCRS system is sometimes regarded as an advantage to the institution in that it may help to retain good faculty. However, it will likewise retain faculty who are not so good, or who are unhappy at Clemson and thus not performing at their best capability but who feel "locked in" by the retirement system. Indeed, it can be argued that the exceptionally good faculty member who finds opportunity elsewhere can often negotiate a sufficient salary increase to enable him to disregard the SCRS pension forfeited, while the relatively poorer faculty member cannot and thus remains. Thus, the lack of portability inherent in the SCRS system may act so as to decrease the overall quality of the faculty.

In recruiting of new faculty, especially of experienced individuals for administrative positions or special professorships (endowed chairs, for example), the availability of TIAA would be a strong positive feature for the University. Faculty elsewhere are familiar with TIAA, and are likely to have their retirement account with TIAA. The ability to continue with this plan would be attractive to most such individuals. While younger faculty candidates may be less concerned with retirement, the assurance that they would have the opportunity to retain their accumulated pension fund if they should leave Clemson before retirement would again be an attractive feature.

On the other hand, of course, the assured benefits offered by the SCRS would be an attraction to other individuals coming to Clemson with no thought of leaving before retirement. As pointed out above, in highly inflationary times the SCRS pension levels will keep pace with inflation, while TIAA involves some degree of uncertainty in this matter. The ability to offer both options thus would put the University in a distinctly advantageous recruiting position relative to institutions with but one option.

#### V. COST TO THE UNIVERSITY

The comparisons presented above assume the same contributions currently made to SCRS by both the individual and the University would also be made to a TIAA optional plan. While dealing with two optional plans rather than a single mandatory retirement plan would certainly increase the administrative overhead, this should be a minimal expense. Thus, the additional cost to the University of offering the TIAA optional plan is expected to be negligible.

## ATTACHMENT B

Ad Hoc Committee on Faculty Compensation

Final Report
January 19, 1979

Philip B. Burt, Chairperson
Theodore Adkins, Jr.
Charles A. Grubb
Stephen S. Melsheimer
Roger B. Rollin
E. P. Stillwell, Jr.
Samuel G. Turnipseed

#### Summary

In its role as South Carolina's land grant institution, Clemson University consistently attracts the best students in the state. In South Carolina, as elsewhere throughout the country, the best students place quality education above all other considerations. In order to maintain and improve the quality of the University's programs it is necessary to retain the expertise of senior faculty and to attract young faculty of high potential.

At present, the quality of Clemson's programs is threatened due to the marked deficiency in faculty compensation relative to comparable institutions in neighboring states. This deficiency, if allowed to continue, must increasingly impair the Institution's ability to acquire and keep highly qualified faculty members and to maintain the standards of its programs. As a consequence, and because competition among universities for the best students is increasing, Clemson's public commitments will inevitably suffer.

As a first step in correcting the deficiency in faculty compensation the University should move to raise the average compensation at each rank to at least the average of the peer institutions as defined in this report. This initial step should be completed in the next two academic years.

The Ad Hoc Committee on Faculty Compensation has fully considered the questions raised in the Faculty Senate Welfare Committee's March 18, 1978 report on faculty compensation at Clemson. The results of our consideration support the preliminary report of the Welfare Committee, whose main thrust was that Clemson University faculty are significantly under-compensated at all academic ranks except Instructor in comparison with faculty at peer institutions --- an undercompensation which has persisted over a period of several years.

## Accordingly, we recommend:

- that the average compensation of Clemson faculty at each rank be brought up to the average level at peer institutions, defined as:

  The University of South Carolina, Columbia; North Carolina State

  University, Raleigh; The University of North Carolina, Chapel Hill;

  The University of Georgia, Athens; Georgia Institute of Technology,

  Atlanta; The University of Florida, Gainesville; Florida State University,

  Tallaḥassee; Auburn University, Auburn; The University of Alabama,

  Tuscaloosa; The University of Tennessee, Knoxville; The University of

  Virginia, Charlottesville; Virginia Polytechnic Institute and State

  University, Blacksburg; The University of Maryland, College Park:
- (2) that the program to establish parity with the peer institutions be effected in the academic years 1979-80 and 1980-81:
- (3) that a progress report on this program be made annually to the Faculty Senate Welfare Committee by the Administration:
- (4) that after completion of this program an annual report on compensation at Clemson and its peers be made by the Administration to the Faculty Senate Welfare Committee.

The basis for our study was the data on faculty compensation (salary plus fringe benefits) compiled by the American Association of University Professors and reported annually in <u>The A.A.U.P. Bulletin</u>. Data for the period 1970-71 through 1977-78 were examined. By analyzing such an extended period transient effects on compensation differentials were shown to be unimportant.

A total of thirteen universities comprise the peer group established by the Committee. All are: (1) Category I institutions (a classification made by the A.A.U.P. on the basis of graduate programs in existence); (2) state supported; (3) in Southeastern states.

#### III

Comparison of compensation relative to the defined peer group at the various ranks are presented in Table I. It can be seen that the most significant undercompensation at Clemson occurs at the full professor rank. Table II further emphasizes this point by comparing the average increment in compensation accorded full professors relative to associate professors at Clemson and in the peer group. Finally, for reference, Table III presents a comparison of compensation at each rank for Clemson relative to the national average of Category I institutions.

It is of the utmost importance to recognize that full professors at Clemson, as at any reputable university, are expected to be individuals "who have demonstrated outstanding performance in their respective fields" and, in addition, who possess "the terminal degree" and have "at least nine years of relevant experience" (Manual for Faculty Members, Clemson University, 1976; p. 47). Many years of professional training and demonstrated expertise in scholarship, teaching and research are routine requirements for elevation to the rank of full professor. These achievements imply a strong commitment on the part of faculty to higher education, to the university and to the search for knowledge. Simultaneously, a full professor is expected to exercise leadership within the university community and to exert himself courageously

on behalf of the university. To a considerable extent, allowing for differences in professional experience and accomplishment, these remarks describe associate professors. Table II offers evidence that the importance of senior faculty is much more fully recognized at its peer institutions that at Clemson. By comparison, Clemson University's senior faculty—the very faculty on whom much of the Institution's quality, reputation and prestige depend, those whose professional commitment has been most extensive and extended, those who by attainment, performance and seniority merit appropriate compensation—have been and are inadequately recognized.

The effect of inordinately low relative compensation, such as is received by Clemson faculty, is insidious and pervasive. The results can manifest themselves in several ways. New junior faculty are keenly aware that the salary range of senior faculty ranks is ultimately of more importance to them than their starting salaries. They may use a low paying institution as a "training camp", remaining uncommitted to the institution and departing at the first opportunity. At the senior levels the likelihood that highly qualified and accomplished individuals will go where their professional capabilities are better recognized and utilized is enhanced. Many of those who remain, in order to supplement their income, may devote less than full attention to their professional duties. The end result can be an overabundance of uncommitted, minimally qualified faculty members. If such a collection predominates it does not constitute a University.

Like the above economic model, the "Ideal of the University" is relevant to the issue of faculty compensation at all levels. It is one to which all who have knowledge of the history and tradition of higher education must respond. The business of The University is Education in the broadest sense of the creation, conservation and dissemination of knowledge---but The University is not a business. Faculty members are not standardly trained, equally qualified, readily replaceable workers. They are professionals--in their commitments to their disciplines and their institutions, and in their education, authority, responsibility and activities.

April 15, 1979

They are chosen by their professional peers for their abilities and capabilities, demonstrated and potential, to contribute to the sum which is The University. Clemson University—the Clemson that functions in part through tradition—through the perceptions of alumni, students, friends, and citizens of South Carolina and the nation—is a recognizable, respected and valued entity. Whether it can remain so is the question we address.

In sum, what the Committee has found is that the Faculty of Clemson
University, dedicated to serving the needs of a developing state, is and
has been under-compensated. Whether such a University can continue to exist
and meet the needs of its constituency with such under compensation is doubtful.
Clemson faculty see the incomes on which they and their families depend falling
significantly below those for peer institutions at the same time academic
salaries are decreasing relative to those of the other segments of our society.
The cost to morale and, consequently, to program effectiveness, is becoming
increasingly substantial. The danger is clear and present: the gains made
by South Carolina and Clemson University over the past ten to fifteen years
risk being lost or appreciably eroded unless a program to remedy the undercompensation of the Clemson Faculty is quickly effected.

Respectfully Submitted,

Philip B. Burt, Chairperson Theodore Adkins, Jr. Charles A. Grubb Stephen S. Melsheimer Roger B. Rollin E. P. Stillwell, Jr. Samuel G. Turnipseed

TABLE I
Relative Compensation of Clemson Faculty
(Clemson - Average of Peers)/Clemson (per cent)

	197071	71-72	72-73	73-74	74-75	75-76	76-77	77-78
Professor	-13.8	-15.6	-14.1	-10.4	- 9.7	- 8.4	-10.1	-13.4
Assoc. Prof.	- 4.8	- 6.7	- 5.7	- 5.3	- 3.8	- 1.6	- 3.5	- 6.8
Ass't. Prof.	- 5.8	- 6.5	- 7.8	- 7.2	- 6.1	- 5.3	- 5.0	- 7.9
Instructor	1.1	2.0	3.7	2.6	5.6	5.3	3.0	2.1

Table II

Relative Compensation of Full Professors and Associate Professors
(Professor - Associate Professor)/Professor (per cent)

Peer	23.2	23.1	23.4	23.2	24.5	24.4	24.1	24.2
Clemson	16.7	16.8	17.3	19.4	19.5	18.6	18.7	18.9

Table III
Relative Compensation of Clemson Faculty
(Clemson - National Average)/Clemson (per cent)

Professor	-17.2	-18.4	-16.2	-11.4	-10.2	-12.2	-11.8	-14.2
Assoc. Prof.	- 5.5	- 7.4	- 5.7	- 4.7	- 3.3	- 3.6	- 4.5	- 6.8
Ass't. Prof.	- 5.8	- 6.4	- 7.8	- 5.8	- 5.4	- 8.5	- 6.9	- 9.1
Instructor	- 7.4	- 7.0	- 2.8	- 1.7	.8	- 1.5	- 2.2	- 4.3

#### ATTACHMENT C

Rebuttal to Comments on Faculty Senate
Report on
Status of Academic Year Faculty Employed in Summer

- 1. It is certainly true "that the University may agree with faculty that they could carry out in a manner that is mutually agreeable such functions as teaching, research, or extension, or other duties --" in the summer period. The issue is precisely the nature of such agreements, and whether the University will provide professional conditions of employment in the summer. Summer faculty are continuing employees (their salary is based on their academic year salary for example, and they are required to participate in the South Carolina Retirement System while temporary employees (under four months) are excluded from the SCRS) and this status should be reflected in all aspects of employment conditions.
- 2. Employment agreements would serve to protect the rights of the faculty to fringe benefits (such as sick leave) due by virtue of state employment. The Faculty Senate proposal specifically states that the agreements would be consummated at a mutually agreeable time. In some instances where the University desires to ensure the services of a faculty member (such as to conduct contract research) it would presumably offer to execute the agreement early in the academic year. Where uncertainties regarding the need for a faculty member's services exist, the agreement would be executed later. Meanwhile, of course, the faculty member might be exploring other opportunities. In any event, escape clauses permitting the University or the faculty member to abrogate the agreement for valid reasons and with reasonable notice would logically be incorporated in any summer employment agreement.
- 3. During the academic year the maximum teaching load is generally deemed to be four courses per semester. A faculty member is therefore paid 12 1/2% of his yearly salary for each course taught. During the summer a faculty member is paid 7 1/2% of his yearly salary for teaching a single course. Thus, the same course is taught during the summer at a 40% reduction in salary.

It has been suggested that the summer teaching faculty do not have the additional responsibilities that the academic year faculty have, such as advising students and committee assignments, and that this justifies a lower salary. We do not believe this is the case. Many faculty continue to advise students and to keep up with departmental and college responsibilities whether or not they are employed by the University during the summer. However, let us concede that the extra activities are less during the summer than during the academic year and let us then assume that the extra academic year activities are equivalent to one extra course each semester. This then brings the academic year work load to an equivalent 5 courses per semester. A faculty member is thus paid 10% of his academic year salary to teach a single course in the academic year and 7 1/2% of his academic year salary to teach the same course during the summer. The result is a reduction of 25% in salary for the same effort. It is therefore clear that summer teaching faculty are being paid 25% to 40% less to teach in the summer sessions.

As to the number of "free days" available to the teaching faculty during the summer, inspection of the 1978 Summer Calendar indicates that there are 5 net free days between May 16 and August 15 (not 12), a number that is quite consistent with the 4 1/2 or 7 1/2 days of Annual Leave earned by calendar year employees during the summer. It is also consistent with the number of "free days" available to the academic faculty during the academic year.

- 4. The right to use sick leave when legitimately ill is earned by the employee; written summer employment agreements would protect this right fully as applied to summer employment.
- 5. Clearly, the current policy is that summer faculty do not earn "annual leave." In fact the Faculty Senate proposal did not use the term "annual leave" in reference to summer faculty.

Academic year employees receive a reasonable and equitable amount of leave time during the academic year in comparison to that earned by calendar year employees during the academic year. The same principle should apply in the summer. Summer teaching faculty do have an equitable number of "days off" in the summer, and summer research faculty should likewise receive paid vacation time comparable to the annual leave earned by calendar year employees during the summer period.

#### ATTACHMENT D

Rebuttal to Comments on Faculty Senate Policy Statement on Summer Employment of Academic Faculty

- 1. While committee and council work and other peripheral academic activities may be somewhat reduced during the summer, the reduced number of faculty available ensures that the summer faculty do have a substantial burden in this area. No Faculty Activities Analysis has been conducted for the summer. Indeed course and curriculum development often proceeds a greater pace during the summer than during the academic year. Further, the level of teaching effort required for full pay is substantially higher than during the academic year (essentially a full semester's teaching load during a three month period). While the mix of teaching, research, and extension duties may change for a particular faculty member, the duties and level of effort are not reduced.
- 2. True in most respects.
- 3. Just as a 9-month faculty member is entitled to sick leave in the academic year even if the illness commences during the summer, the summer faculty employee should be entitled to use his accumulated sick leave for any definitely scheduled period of summer employment.
- 4. Summer school teachers do receive an equitable number of vacation days (5, not 12, in 1978) but are presently penalized in pay for this "privilege." Summer faculty employed in research do not receive any vacation days except by taking days off without pay. In both cases equity demands a number of paid vacation days consistent with the leave earned by calendar year employees during the summer. "Nine month appointees are not eligible to receive annual leave" simply states current policy, and does not justify the failure to provide the paid vacation time which is part of any professional employment conditions.

#### ATTACHMENT E

MEMORANDUM TO: Dean Victor Hurst

FROM: Faculty Senate

DATE: 2-20-79

RE: Administrative Positions in the Academic Area for

Which Search Committees Are Appropriate

In reviewing your letter of October 2, 1978 we concur that those positions listed are appropriate to search committee procedures described on pages 49 and 50 of the Faculty Manual with the following exception:

The Assistant-to-the-Dean in the College of Architecture should be listed since it is understood that he/she has faculty and budgetary line responsibility (see page 12 of Faculty Manual.)

By dissemination of this listing all of us should avoid any future questions about the appropriateness of a search committee for a particular position.

In our discussions it has been pointed out that some question may exist as to which of the policy statements on pages 49 and 50 apply to positions titled other than as specifically delineated in paragraphs 1 thru 5 of the procedures. Accordingly we would appreciate your notifying the deans of the appropriate procedure when you send them their listing of germane positions. For example, the College of Agriculture and the Library have several titles not specifically covered in paragraphs 1 thru 5, whereas all of the College of Engineering's positions are covered. Therefore a bit of clarification might be appropriate. As a suggestion, we have attached a listing to this memo with the appropriate procedure (from our perspective) indicated by those positions not otherwise obvious.

It is felt that a memo from you to the Deans of the Colleges delineating appropriate search committee positions would resolve any ambiguities that might exist and there would be no need to attempt to make the present Faculty Manual statement any more specific.

Thank you for this clarification.

## ATTACHMENT E (cont.)

# College of Agricultural Sciences

Dean of the College of Agricultural Sciences Associate Dean and Director of Instruction		
Associate Dean and Director of Extension Associate Director of Extension		
District Extension Leader, Piedmont	Proc.	#3
District Extension Leader, Savannan River variey District Extension Leader, Pee Dee	Proc.	#3
State Leader, Extension Home Economics		
Associate District Leader, Home Economics, Piedmont		
Associate District Leader, Home Economics, Savannah		
Associate District Leader, Home Economics, Pee Dee State Leader, 4H Club Work and Youth Development		
Associate Dean and Director of Research		
Associate Director of Research		
Superintendent, Edisto Station		
Superintendent, Pee Dee Station		
Superintendent, Sandhill Station Superintendent, Truck Station		
Head, Dept. of Ag. Econ. & Rural Sociology		
Head, Dept. of Agr. Engineering		
Head, Dept. of Agronomy & Soils		
Head, Dept. of Animal Science		
Head, Dept. of Dairy Science		
Head, Dept. of Entomology & Economic Zoology Head, Dept. of Food Science		
Head, Dept. of Horticulture		
Head, Dept. of Plant Pathology & Physiology		
Head, Dept. of Poultry Science		

# College of Architecture

Dean of the College of Architecture Head, Department of Architectural Studies Head, Department of History & Visual Studies Head, Department of Planning Studies

# College of Education

Dean of the College of Education Head, Department of Agricultural Education Head, Department of Elementary & Secondary Education Head, Department of Industrial Education Director, Vocational Education Media Center

# ATTACHMENT E (cont.)

# College of Engineering

Dean of the College of Engineering
Associate Dean of the College of Engineering
Head, Department of Ceramic Engineering
Head, Department of Chemical Engineering
Head, Department of Civil Engineering
Head, Department of Electrical and Computer Engineering
Head, Department of Environmental Systems Engineering
Head, Department of Engineering Technology
Head, Department of Mechanical Engineering
Head, Department of Interdisciplinary Studies

# College of Forest & Recreation Resources

Dean of the College of Forest & Recreation Resources Head, Department of Forestry Director of Baruch Institute of Forest Science Associate Dean & Head, Dept. of Recreation & Park Administration

# College of Industrial Management and Textile Science

Dean of the College of Industrial Management and Textile Science Associate Dean of the College of Industrial Management & Textile Science Head, Department of Accounting and Finance Head, Department of Industrial Management Head, Department of Textiles Head, Department of Economics Director, Professional Development

# College of Liberal Arts

Dean of the College of Liberal Arts
Head, Department of English
Head, Department of History
Head, Department of Languages
Head, Department of Music
Head, Department of Political Science
Head, Department of Psychology
Head, Department of Sociology

# College of Nursing

Dean of the College of Nursing Director, Baccalaureate Degree Program Director, Associate Degree Program Director, Continuing Education in Nursing Director, Graduate Program in Nursing

## ATTACHMENT E (cont.)

# College of Sciences

Dean of the College of Sciences

Head, Department of Biochemistry

Head, Department of Botany

Head, Department of Chemistry and Geology

Head, Department of Mathematical Sciences

Associate Head, Department of Mathematical Sciences

Head, Department of Microbiology

Head, Department of Physics & Astronomy

Head, Department of Zoology

Head, Department of Computer Science

# Office of Undergraduate Studies

Dean of Undergraduate Studies Director of the Library Associate Director of the Library

# Office of Graduate Studies and University Research

Dean of Graduate Studies and University Research Associate Dean of Graduate Studies Associate Dean of University Research

# Office of University Extension

Dean of University Extension





January 27, 1979

Dr. William F. Steirer President Faculty Senate Clemson University

Dear Bill:

I am in receipt of your letter of January 23 concerning the Alumni Merit Scholars program. I relayed your message to the Council at its meeting today.

The Association is looking forward to continued cooperation in building more programs like this in the future. At our annual meeting today the Council doubled the grant to provide for another 20 Alumni Merit Scholars for 1979.

Let me also say that it was an honor and a pleasure to work with you and the others on the Presidential Selection Committee as we sought the best qualified persons to be candidates for President of Clemson University.

Sincerely,

Davis T. Moorhead

DTM:rs



OFFICE FOR DEVELOPMENT

January 24, 1979

Dr. William F. Steirer, President Faculty Senate Hardin Hall Clemson University

Dear Bill:

Your letter of January 23, 1979 with its kind words, was warmly received. We are extremely pleased that we were able to assist in the establishment of this very fine scholarship program.

Perhaps with a Faculty Senate endorsement, annual contributions will be increased to the point that the number of scholarships awarded annually can be increased. We look forward to the time when a Faculty-Staff Merit Scholarship recipient will be in each class level.

I have taken the liberty of sending a copy of your letter to the persons shown below to receive copies of this letter. They were also instrumental in either the establishment of administration of this scholarship.

Please convey my appreciation to the Faculty Senate for their support of this scholarship and for their continuing efforts to increase the level of giving from the faculty.

I would ask that current gifts to support the Faculty-Staff Merit Scholarship be made payble to Clemson University rather than the Clemson University Foundation. If the faculty decide to endow the scholarships, then the gifts which would set up the principal would be made payable to the Clemson University Foundation. We use this procedure to assure that only endowment gifts are placed in the Foundation.

Sincerely yours,

James L. Strom, Ph.D.

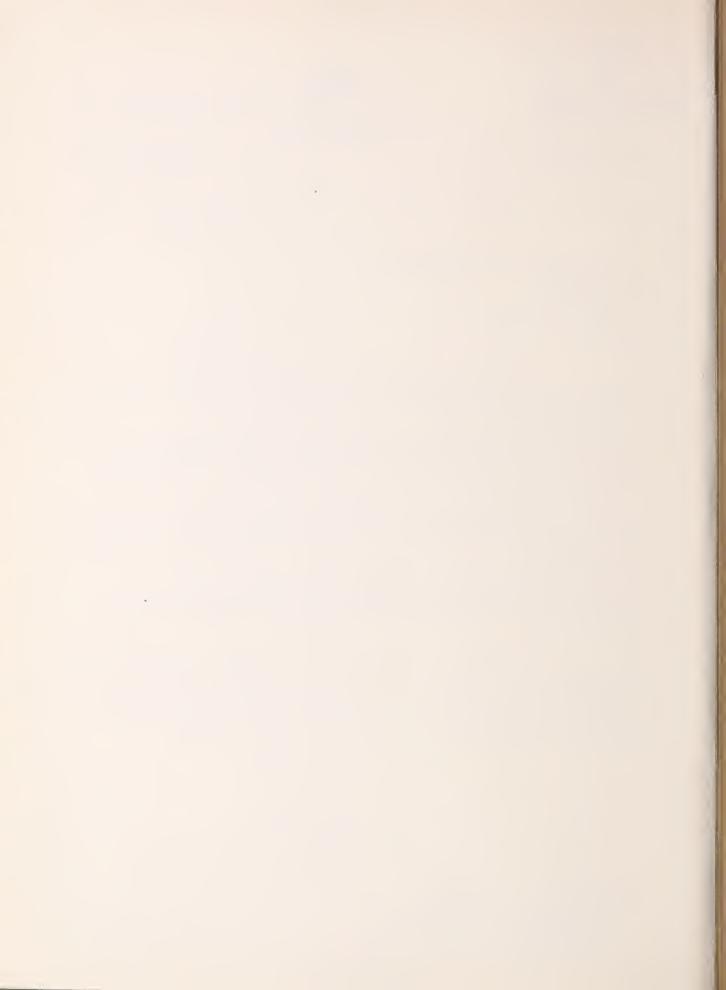
Director
Planning and Corporate Relations

JLS:cs

xc: Mr. Stanley G. Nicholas

Mr. Marvin G. Carmichael

Mr. Trescott N. Hinton Dr. Corinne H. Sawyer



# MEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY



Vol. 18 No. 17

May 1, 1979

CLEMSON UNIVERSITY LIBRARY
SOUTH MAROLINA ROOM
3 1970

#### BOARD OF TRUSTEES PROPOSES INTERNAL STUDY

The Board of Trustees April 24 authorized chairman Paul W. McAlister to initiate plans for a study of the internal operation and organization of the University; voted to award two honorary doctoral degrees, their first since 1971; and heard four fund-raising reports that brought big smiles around the board room.

Buck Mickel of Greenville will chair a special committee to explore the internal study idea and present a final recommendation to the Board. Other members are James C. Self of Greenwood and Thomas B. McTeer Jr. of Columbia. The committee will coordinate its work with president-elect Bill Atchley and is expected to request a proposal from a consulting firm for the Board's consideration.

In recommending that the Board undertake the internal study, President Robert C. Edwards said, "I have no crystal ball, but I believe as firmly as I know how to express it, that the programs serving this State -- academic, research, public service and regulatory -- will involve problems more difficult to solve than any we have had to deal with while I've been in this office."

He pointed to a similar study of the University made in 1954 by the firm of Cresap, McCormick and Paget as one of the most important milestones in the University's history. He suggested that the transition between his administration and that of president-elect Atchley presents an opportune time to consider another study.

"I think it would be of real value as we look to the future," he said.

He emphasized that the study he recommends is "not to be confused in any way with

other studies under way in the State to manage resources human and otherwise" such as the master plan study being conducted by the State Commission on Higher Education.

Edwards said he felt the most important element in the University's operation is communications and that people "must have spelled out clearly what their responsibilities are and be given the authority required to discharge those responsibilities to the best of their abilities."

The honorary degree recipients are President Edwards, who will retire in June after 21 years in office and was making his farewell appearance before the Board as its chief executive officer, and State Sen. L. Marion Gressette, D-Calhoun.

Edwards will receive the Doctor of Humanities degree and Gressette, who is recuperating in Texas from surgery to correct an abdominal aneurysm, will receive the Doctor of Laws degree. Presentation dates will be set later.

The private giving reports included the good news that the campaign to establish the Robert Cook Edwards Endowment for Excellence in Science and Technology would surpass its minimum \$1 million goal. (See related story on page 2).

While campaign general chairman Robert Yeargin of Greenville gave no exact figures, he did toss out this teaser: "We will unquestionably exceed the goal, we hope by a great amount" and added that at a May 21 meeting "we will have some exceptionally good news to report."

Yeargin, who is also vice president of the Clemson University Foundation, told the trustees the foundation now has assets of more than \$4 million.

IPTAY president Reeves Gressette of Orangeburg, who heads the athletic scholarship fund-raising program, said this year's goal of \$1.5 million had also been surpassed with 10 weeks to go in the annual IPTAY drive. He said there are now some 300 student athletes at Clemson receiving full or partial aid from IPTAY in 12 men's and seven women's sports. He said if trends continue, "in about four years the IPTAY reserve fund will have enough to endow the scholarship program."

Billy Rogers of Dillon, president of the Alumni Association, told the Board members that Alumni Loyalty Fund gifts of more than \$600,000 last year, a 9.8 percent increase in participation, have now put the association "on the verge of an expansion in the next five years that a few years ago we never even dreamed about." He said Clemson now ranks about third in the nation among land-grant schools in terms of percent participation by alumni in fund-raising. (See related story on page 3.)

Outgoing Faculty Senate president William F. Steirer Jr. and outgoing Student Government president Michael M. Ozburn in separate reports thanked the Board for its concern with the problems and interests of their constituencies, especially in a milestone year for the University as it selected a new president.

The Board welcomed the new Faculty Senate president, Prof. Horace W. Fleming Jr., and new student government president Robert L. Fuzy.

# SPRINGS MILLS PLEDGES \$75,000 TO EDWARDS ENDOWMENT CAMPAIGN

Springs Mills, Inc., has pledged \$75,000 to Clemson's first major capital campaign, The Robert Cook Edwards Endowment for Excellence in Science and Technology.

H. W. Close, board chairman of the Fort Mill-based textile and frozen food company, presented Springs' pledge to Paul W. McAlister of Laurens, chairman of Clemson's Board of Trustees. The gift is one of the largest yet received for the minimum \$1 million goal.

The endowment was established by the trustees to honor President Edwards. Income from the endowment will finance fellowships, scholarships, professorships, visiting professors, research, public service programs and continuing education.

Close said Springs made the contribution on behalf of the many Clemson alumni among its employees.

"We recognize the significant contributions made by Clemson and Dr. Edwards over the years, particularly to the progress of the textile industry," Close said.

"Springs Mills wants to see Clemson continue to grow in its service to South Carolina, and we are happy to help support this program designed to meet our region's future needs. We salute Clemson for this ambitious undertaking."

In accepting Springs' pledge on behalf of the Clemson trustees, McAlister said, "This magnificent gift symbolizes not only the relationship between Clemson and the Springs organization, but also the kind of support that enlightened industry must provide if higher education is to properly fulfill its role in regional development.

"The Edwards endowment will help Clemson continue its excellence of service to present and future generations of South Carolinians."

# HONORS AND AWARDS PRESENTED TO 1,200 STUDENTS

More than 1,200 Clemson students were recognized April 11 at annual Honors and Awards Day ceremonies in each of the University's nine colleges.

The event is Clemson's traditional program to honor outstanding scholarship and achievement in extracurricular activities.

The day-long ceremonies began with a luncheon honoring University-wide award winners. They concluded with a 5 p.m. Founder's Day prayer service at historic St. Paul's Episcopal Church in Pendleton and the dedication of a stretch of U.S. 76 between Clemson and Anderson as the Thomas Green Clemson Parkway.

Students receiving the top University non-academic award, the Algernon Sydney Sullivan Medallion, were seniors Saundra Hodge of Sumter and Mike Ozburn of Athens, Ga. The award is given annually for service to humanity and the Clemson community.

The non-student recipient of the Sullivan Medallion was Earle E. Morris Jr., comptroller general of South Carolina. A Clemson alumnus, Morris was elected to the state House of Representatives at age 21 and served there and in the state Senate until 1970 when he was elected lieutenant governor. He assumed his present post in 1976.

In presenting the award, Clemson dean of students Walter Cox said Morris was being recognized for "outstanding public service, most especially your work in mental health on both the state and national levels."

The Trustees Medal, which was first awarded in 1903 and goes traditionally to the best speaker in the student body, was won by Alan L. Raflo of Leesburg, Va.

The Phi Kappa Phi Awards, given annually to the highest ranking upperclassmen who have earned at least 75 percent of their credits at Clemson, went to Michael Eric Brown of Spartanburg, Mark Alan Buechler of Louisville, Ky., Linda Merck Crenshaw of Central and Jane W. Cutler of Taylors.

Cutler also received the Phi Eta Sigma Award, given to the graduating senior with the highest grade point average, and one of the American Association of University Women awards presented to the highest ranking women in the graduating class.

Other winners of the AAUW awards were Virginia Boroughs Dwyer of Pickens and Greenwood, Anita Lyn King of Dothan, Ala., Barbara J. Ramirez of Seneca and Gayle Elizabeth White of Anderson.

# PRIVATE SUPPORT GIFTS TOTAL NEARLY \$2 MILLION

Private support for Clemson's educational programs reached nearly \$2 million in 1978—the most ever—and included a record \$601,400 in gifts to the Alumni Loyalty Fund.

In the annual "Report of Private Giving," President Edwards notes the 1978 total of \$1,956,331 is a 12 percent increase over 1977.

Private financial support comes to the University through the Alumni Loyalty Fund and the University Fund administered by the Office for Development. The total reflects gifts from many sources, including alumni, parents, friends, business and industry, foundations, and professional and trade organizations.

Edwards also points out that more people-8,400-gave to the Loyalty Fund than ever before, making 1978 the best year in the 23-year history of the Clemson Alumni Association. Alumni gifts accounted for 31 percent of private gifts.

In addition to the \$1.9 million received last year, another \$420,582 was recorded through the deferred giving program, gifts which will benefit Clemson in the future. This increases to some \$4.5 million the total "irrevocable" deferred gifts on record.

"In a time of inflation and reduced tax dollars," says Edwards, "private support is critical to the maintenance of quality at this institution. And there is just no way to adequately thank each individual who helped to make such a great year possible.

Edwards says it is significant that participation of Clemson alumni in the annual fund continues to far outstrip the national average (26 percent vs. 15 percent) for state-supported, land-grant

schools.

Use of 1978 gifts was allocated as follows: student aid and services, \$425,983; faculty enrichment and services, \$111,200; educational programs, \$674,786; facilities and equipment, \$366,845; and permanent endowment, \$377,517.

#### PUBLIC RADIO STATION CAPTURES TOP HONORS

Clemson's staff of radio station WEPR (Greenville-Spartanburg) has captured two awards in the 1978 broadcast competition of the Radio and Television News Directors Association of the Carolinas.

Taking top honors in the documentary category was "In the Shadow of Standing Indian," a program examining activity on a segment of the Appalachian Trail. The broadcast aired last August and was produced by Clemson University student Michael Ausherman, a part-time production assistant with WEPR and a student in the Department of Recreation and Park Administration.

Coverage of Clemson football coach Charley Pell's resignation in December took top honors in sports reporting. The award-winning segments, including locker-room interviews with players, were produced by Keith Hamlin, a production assistant and engineering graduate student, and Bo Bierley, news director at WEPR.

WEPR station manager Lily Hall said she hoped the awards would "create a greater public awareness of the quality and scope of programming being produced by public radio in South Carolina."

WEPR was one of only two South Carolina stations to receive awards. Commercial station WFBC (Greenville) was cited for best spot news coverage.

With studios at the University, WEPR is the upstate affiliate for the National Public Radio Network and the South Carolina Educational Radio Network.

# AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

J. C. Hite (Prof) is the author of a review of Ervin, Fitch, Godwin, Shepard and Stoevener, <u>Land Use Control</u>, in the February 1979 issue of <u>Land Economics</u>.

Prof. Hite presented a paper he coauthored with Mike Ellerbrock (Instr, RPA) on "Factors Affecting Regional Employment in Tourism in the United States" at the annual meetings of the Southern Regional Science Association in Nashville, TN, April 5-6.

D. B. Smith (Assoc Prof) received an award for "Outstanding Contribution in the Field of Farm Managemnet and Rural Appraisal." The award is presented annually by the South Carolina Society of Farm Managers and Rural Appraisers.

M. L. Wise (Asst Prof) presented a paper, "Financing the Small City," at the 2nd Annual Conference on Small Cities and Regional Government sponsored by the University of Wisconsin, Stevens Point, WI, March 14-16.

#### **BIOCHEMISTRY**

The following papers were presented by the faculty of the Department of Biochemistry at the Federation of American Societies for Experimental Biology Meeting in Dallas, TX, April 1-5:

M. B. Cable (Grad Stu) and G. L. Powell (Assoc Prof), "Interaction of Cytochrome C. Oxidase with Spin Labeled Fatty Acid, Phosphatidyl Choline, and Cardiolipin."

W. R. Strohl (Grad Stu, LSU), G. C. Cannon (Grad Stu), D. W. Forbes (Grad Stu), J. M. Shively (Prof & Hd), L. A. Hook (Grad Stu, LSU) and J. M. Larkin (Prof, LSU), "Assimilation of CO2 in <u>Beggiatoa</u> via a Glyoxylate-linked Reductive Carboxylic Acid Cycle."

P. C. Gainey (Grad Stu), R. L. Glinski (Grad Stu) and R. H. Hilderman (Asst Prof), "Partial Physical and Biochemical Characterization of an Arginyl- and Lysyl- tRNA Synthetase Complex from Rat Liver."

- J. K. Zimmerman (Assoc Prof) and M. Fern (Grad Stu), "Purification of Pyruvate Kinase K<sub>4</sub> from Pig Kidney."
- D. C. Speckhard (Asst Prof), "RNA Polymerases Types I and II, Partially Purified from Chick and Turkey Liver."

The following papers were presented by the faculty of the Department of Biochemistry at the South Carolina Academy of Science Meeting in Columbia April 5-6:

- E. Bock (Prof, Hamburg Univ), G. C. Cannon (Grad Stu) and Prof. Shively, "Comparison of Carboxysomes from Nitrobacter Strains."
- D. W. Forbes (Grad Stu), G. C. Cannon (Grad Stu) and Prof. Shively, "Improved Isolation and Partial Characterization of the Carboxysomes of Thiobacillus Neapolitanus."

Carolyn S. Brown (Asst Prof), Debbie Hall (former Grad Stu) and George Park (former Asst Prof), "Brain Catecholamine Levels in Six Inbred Strains of Mice."

Bub Dillon (Stu), Prof. Brown and M. Lynn Lamoreux (Asst Prof, USC at Spartanburg), "Comparisons of Behaviors and Brain Catecholamine Levels in Mouse Strains C57bl/6J, JUN, and C57Bl/6J X JUN Fl Offspring."

Andrew Farmer (Stu, USC at Spartanburg), Prof. Lamoreux and Prof. Brown, "A Strain of House Mouse in Which the Expression of the Dominant Yellow (AY) Allele is Modified II. Eumelanin Production, Inheritance."

Prof. Brown with Ellis L. Kline (Asst Prof, Micro), Vytas Bankaitas (Grad Stu) and Dave Mantefiori (Grad Stu) recently published a paper, "Imidazole Acetic Acid as a Substitute for cAMP," in Biochem.

Biophys. Res. Commun. 87, 547-556 (1979).

The following paper was presented at the 21st Southeastern Developmental Biology Conference, Fontana Village, Fontana Dam, NC, April 5-7: Joy Martin (Grad Stu), Prof. Lamoreux and Prof. Brown, "A Strain

of House Mouse in Which the Expression of the Dominant  $\underline{\text{Yellow}}$  (A<sup>y</sup>) Allele is Modified I. Effect of Sex Hormones."

#### CHEMISTRY

Joe F. Allen (Prof) is co-author with Richard B. Glazer and Theodore J. Skaar (Ulster County Community College, New York) of two books, Indicator Organisms and Nutrients, which are designed as learner's guides for trainees in water quality monitoring programs. The books contain 67 learning modules in mathematics, chemistry, environmental science and laboratory procedures. The modules use the learning objectives format. The books are an outgrowth of A Two-Year Water Quality Monitoring Curriculum (1975), also co-authored by Prof. Allen, and demonstrate how the learning units of that system can be resequenced for use in such ways as continuing education, on-the-job training, or classroom instruction. The project was funded by the U. S. Environmental Protection Agency.

Keith McDowell (Assoc Prof) has published a note, "Differential Equation Formulation of Corrections to an Incomplete Basis Set," in The Journal of Chemical Physics, vol. 70, page 3143.

#### CIVIL ENGINEERING

Parviz F. Rad (Assoc Prof) participated in the Construction Educators Meeting held at Massachusetts Institute of Technology, Cambridge, MA, April 2 and ASCE Construction Research Council Executive Meeting, Boston, MA, April 3. The theme of both of these meetings was current and future construction research activities and mechanisms of developing closer relationships between the academic and practicing segments of the industry. Prof. Rad also attended an ASCE sponsored shortcourse, "Construction Project Administration," April 5 in Boston.

Subhash C. Anand (Prof) attended the ASCE National Convention at Boston, MA, April 2-6, where he presented a paper, "Material Constitutive Relations and

Solution Schemes in Elastic-Plastic Finite Element Analysis," in a session on "Plastic Analysis of Civil Engineering Structural Systems: State-of-the-Art."

Prof. Anand also attended two ASCE National Committee meetings and was elected chairman of the Committee on Inelastic Behavior of the Engineering Mechanics Division of ASCE for the years 1979-80 and 1980-81. He will take over the responsibilities of this office starting October of this year.

Russell H. Brown (Assoc Prof) made three presentations at the "University Professors' Masonry Workshop" at Notre Dame University, South Bend, IN, April 9-10. The program, sponsored by the masonry industry, drew 91 participants consisting primarily of professors of architecture and engineering.

#### COMPUTER SCIENCE

J. C. Peck (Assoc Prof) attended the Southeastern Regional ACM Conference April 9-11 in Orlando, FL, and gave a talk on "Expanding Use of DATA Dictionaries in Information Systems." He also chaired a technical session.

#### ELECTRICAL AND COMPUTER ENGINEERING

W. J. Barnett (Assoc Prof) presented the following paper for publication at the Southeastern Section Meeting of the American Society for Engineering Education held April 1-3: "What Every Electrical Engineering Graduate Should Know about Computers and Computing." The meeting was held at North Carolina State University, Raleigh, NC.

Edward W. Page (Asst Prof) presented the following paper for publication at the same meeting: "The Challenge of Microprocessors in Engineering Technology."

## ELEMENTARY AND SECONDARY EDUCATION

Elizabeth Galloway (Prof) has been selected to serve on the Governor's Task Force

on Citizen Participation in Education.

Morris A. King (Prof) served as chairman of a Visiting Committee at Bonds-Wilson High School, North Charleston, March 19-22. The committee represented the South Carolina Committee of the Commission on Secondary Schools of the Southern Association of Colleges and Schools.

#### COLLEGE OF ENGINEERING

B. E. Gilliland (Asst to the Dean) presented a paper, "An External Graduate Program," at the First World Conference on Continuing Engineering Education held in Mexico City April 25-27. The paper was co-authored by Prof. D. E. Griffith (Dir, Engineering Extension, Oklahoma State Univ) who was an Alumni Visiting Professor of Engineering at Clemson during 1977-78. Prof. Gilliland also chaired a session at the Conference. His participation was supported in part by a National Science Foundation travel grant.

#### ENGINEERING TECHNOLOGY

D. V. Hutton (Assoc Prof) was elected 1980-81 chairman of the Engineering Technology Division, Southeastern Section of the American Society for Engineering Education during the annual meeting at Raleigh, NC, April 2-3.

#### **ENGLISH**

Sterling Eisiminger (Asst Prof) read
"From Seminars to Text: Selecting
Literature for the Engineering Student"
at the annual meeting of the American
Society for Engineering Education, Raleigh,
NC, April 2.

Bruce Firestone (Asst Prof) and Clifton Egan (Asst Prof) screened "A Thrill You Hadn't Ever Saw" at the Purdue Conference on Film, March 22-24, and at the annual meeting of the Southeastern American Studies Association, Tampa, FL, April 5-7.

John Idol (Assoc Prof) read "Robert Burton" Illustrative Use of Emblem" at the

Southeastern Renaissance Conference, University of Alabama, March 30-31.

William Koon (Assoc Prof) read "Flannery O'Connor, the South, and Christianity" at the annual meeting of the Conference on Christianity and Literature, Savannah, GA, March 30.

David Tillinghast (Asst Prof) directed a creative writing workshop for the Anderson College Continuing Education Program, Anderson, March 26.

#### FOOD SCIENCE

Robert G. Bursey (Assoc Prof) presented a seminar, "The United States Diet--Yesterday and Today," at Warren Wilson College, Asheville, NC, March 22.

James C. Acton (Assoc Prof) presented a lecture, "Food Additives: Functionality and Safety Testing," in the Consumer Chemistry Department at Morris Brown College, Atlanta, GA, March 15.

Robert F. Borgman (Prof) presented an invited talk to the VPI/IFT Conference of Food Editors April 3 on "Marine Oils and Fats as Related to Health."

#### FORESTRY

J. L. Askew (Grad Stu) and C. L. Lane (Prof) were invited participants in the poster session at a recent workshop on "Symbiotic Nitrogen Fixation in the Management of Temperate Forests." The workshop was supported by the National Science Foundation and was held at Corvallis, OR. The presentation was entitled "Nitrogenfixing Capabilities for Myrica cerifera Elaeagnus pungens, and Various Alnus Species Grown on Piedmont Sites in South Carolina."

The following individuals participated in the 1979 Annual Meeting of the South Carolina Academy of Science held at Columbia April 6:

S. M. Jones (Res For) served as moderator for the botany morning session.

- D. H. Van Lear (Prof) and S. M. Jones co-authored a paper, "Phytosociological Relationships of an Old Growth Loblolly Pine (Pinus taeda) Yellow Poplar (Liriodendron tulipfera) Forest."
- S. M. Jones and B. A. Dunn (Assoc Prof) co-authored a paper, "Distribution of Rudbeckia heliopsidis in South Carolina."
- R. A. Harper (Grad Stu) and Prof. Dunn were co-authors of a paper, "A Computer Based System for Use in Urban Tree Management."
- Prof. Dunn presented a paper, "Relationship Between Personal Distance Characteristics and Personality."
- J. R. Saucier (Forestry Sciences Laboratory, Athens, GA), L. T. Henderson (former Grad Stu) and R. E. Schoenike (Prof) co-authored a paper, "Wood Properties of Plantation-Grown Sonderegger Pine," published as a Southeastern Forest Experiment Station Research Note.

Prof. Van Lear and S. M. Jones recently presented an invited seminar at the University of Georgia Ecology Laboratory at the Savannah River Plant. The seminar topic was "Ordination of Pine Communities at the Savannah River Plant."

#### **GEOLOGY**

J. Gregory Bryan (Grad) and Villard S. Griffin Jr. (Prof) presented a research paper at the 52nd annual meeting of the South Carolina Academy of Science in Columbia. The title of the paper is "Small Chlorite Bodies Within the Inner Piedmont belt of Northwestern South Carolina."

#### INTERDISCIPLINARY STUDIES

J. B. Park (Assoc Prof) has received a continuation grant for the third year (April 1, 1979 to March 31, 1980) from the National Institute of Dental Research. Research is on "Dental Implant Fixation by Electrically Mediated Process," and

the amount of the grant is \$15,066. He has also recently published a book, Biomaterials: An Introduction, Plenum Publishing Corp., NY (1979).

#### LANGUAGES

Leon Seamon (Asst Prof) gave a talk, "Antonio Gala: A Continuation of Artistry in the Spanish Theater," at the Comparative Drama Conference at the University of Florida April 7.

#### MATHEMATICAL SCIENCES

W. Robert Boland (Prof) recently visited Washington State University, Pullman, WA, and gave an invited talk on "Extended Conjugate Gradient Methodology for Unconstrained Optimization."

William R. Hare (Prof) and Renu Laskar (Prof) participated in the Tenth S. E. Conference on Combinatorics Graph Theory and Computing, held in Boca Raton, FL, April 2-6. Prof. Hare presented a paper, "Some Covering Numbers of Graphs," (jointly with Prof. Laskar.) Prof. Laskar chaired a session and presented two papers, one jointly with William Frye (former Grad Stu) entitled "Path Numbers of Some Digraphs" and the other on "Partial d-Spaces."

John Kenelly (Prof) serves as chairman of the Southeastern Section of the Mathematical Association of America. Prof. Kenelly helped direct the spring meeting of the section at Chattanooga, TN, April 6-7. He chaired the annual business meeting and one of the three different hour address sessions.

Robert F. Ling (Prof) attended the Tenth Annual Meeting of the Classification Society (North American Branch) held at the University of Florida, Gainesville, FL, April 8-10. He was the banquet speaker at the meeting and spoke on "The History and Direction of the Classification Society."

Prof. Ling was the featured speaker April 17 at the Semi-Annual Clemson/

University of Georgia Cooperative Statistics Colloquium at the Camp Hope Pavillion of Clemson's Outdoor Laboratory. His topic was "Exploring Tails of Distribution." The colloquium series is intended to stimulate, through professional and social activity, interaction between the faculties and students of the two sponsoring departments.

#### MUSIC

Edith B. Card (Asst Prof) presented a program of dulcimer and folk music for the Alpha Delta Kappa S.C. State Convention March 31 in Greenville, and for the SAGE Club of Clemson April 3.

#### NURSING

Kathleen E. O'Rourke (Instr) has been accepted for admission into the Graduate School of Nursing at Catholic University of North America in Washington, DC. She will begin studies leading to a Doctorate of Nursing Science in the fall semester.

Judith J. Chodil (Assoc Prof and Dir Cont Ed) was selected by New York University Nursing Alumni Association to receive the 1979 Doctoral Graduate Leadership Award. Presentation will be made at the Second Annual Martha E. Rogers Day, May 12, in New York City.

#### PHYSICS AND ASTRONOMY

Beverly B. Bookmyer (Prof) and William C. Maddox (Grad Stu) have had a note, "Improved Ephemeris, V502 Ophiuchi," published as <u>Internat'l Astron</u>. <u>Union Information Bulletin on Var Stars No</u>. 1569, March 1979.

Philip B. Burt (Prof) published a chapter in the book <u>Nonlinear Equations in Physics and Mathematics</u>, edited by A. O. Barut. The book is the proceedings of the NATO Advanced Study Institute held in Istanbul, Turkey, August 1977. The title of Prof. Burt's chapter is "Nonperturbative Self Interactions, Solitary Waves and Others."

A. L. Laskar (Prof) presented a colloquium talk on "Electrical Conductivity in Ionic Semiconductors" at The Citadel April 9.

#### POLITICAL SCIENCE

Michael A. Morris (Asst Prof) presented a paper, "Brazil and India as Emerging Third World Powers," at the Eighth National Meeting of the Latin American Studies Association, Pittsburgh, PA, April 5-7.

#### PROFESSIONAL DEVELOPMENT

J. David Acker (Asst Prof, Fin Acct and Managerial Acct) will chair a two-day seminar, "Financial Accounting for Non-Financial Executives," to be held May 16-17 at the Ramada Inn in Greenville.

Claude S. Simpson Jr. (Instr, IM and Asst Dir) will chair a course, "Resident First Aid Instructor," to be held May 16-18 at the Clemson House.

Evans A. LaRoche (Prof, IM) and E. Earl Burch (Assoc Prof, IM) will be the speakers for two courses: "Elementary Statistics for Business Decisions," to be held May 21-23, and "Statistical Quality Control," to be held May 23-25 at Clemson.

Ernest B. Berry (Assoc Prof, Text), J. C. Hubbard (Prof, Text) and E. A. Vaughn (Prof & Hd, Text) are seminar leaders for a three-day course, "Fundamentals of Textiles," to be held May 22-24 on campus.

Frederick T. Simon (Prof, Text) will chair a two-day seminar, "Basic Color Science," to be held May 22-23, and "Advanced Color Science," to be held May 24-25 on campus.

Thomas B. Maertens (Instr,IM) is chairperson for a course, "Salesmanship," to be held on campus May 24-25.

Leonard Berger (Assoc Prof, Psych) will be the chairperson for a course, "Equal Employment Opportunity," to be held May 29-30 on campus.

Hassan M. Behery (Assoc Prof, Text) will chair a two-day conference, "Upholstery from Start to Finish," to be held on campus May 30-31.

#### RECREATION AND PARK ADMINISTRATION

Paul Richard Saunders (Vstg Instr) and William Vincent Stachoviak (Grad Stu) presented a paper, "Photointerpretation of Forest Survey Plots as a Source of Recreation Data," at the South Carolina Academy of Sciences Annual Meeting on the campus of the University of South Carolina April 5-6.

Prof. Saunders also presented "Vegetational Cover Differences of Random Forest Plots with and without Recreation Use" at the meeting.

#### SOCIOLOGY

Kelly W. Crader (Assoc Prof) co-authored an article, "Family Size and Parental Satisfaction: Race and Sex Differentials," in the <u>International Journal of Intercultural Relations</u>, 2 (Winter, 1978), 394-408.

Ronald J. Knapp (Assoc Prof) and Larry G. Peppers (Asst Prof) presented a paper, "Toward a Theory of Community Unresponsiveness to Perinatal Death," at the Southwestern Sociological Association meetings in Fort Worth, TX, March 29-31.

Prof. Peppers and Ronald G. Stover (Asst Prof) published a joint article, "The Elderly Abuser: A Challenge for the Future," in the <u>Journal of Drug Issues</u>, 7 (Winter, 1979), 73-83.

Christopher M. Sieverdes (Asst Prof) was the co-author of a paper, "The White Victim: Problems of Institutional Adjustment," presented at the annual meeting of the Academy of Criminal Justice Sciences in Cincinnati, OH, March 14-16.

Six members of the Sociology faculty were on the program of the annual meeting of

the Southern Sociological Society held in Atlanta April 5-7. Susan Brown (Asst Prof) presented a paper, "Social Ecology of Appalachian County." Prof. Crader chaired a section on "Sociology of Leisure." Dallas Owens (Asst Prof) chaired a workshop on "Transportation Research: Current Status, Available Funding, and Potential." Prof. Sieverdes chaired a session on "Juvenile Delinquency." Prof. Stover was the discussant in the "Women and Work" section. Jon D. Wells (Instr) presented a paper, "The Mutually Held Stereotypes of Police and Citizens."

#### ZOOLOGY

Sidney A. Gauthreaux Jr. (Prof) was recently awarded a grant of \$27,216 by the United States Air Force. The grant is entitled "Radar Techniques for Air Force Applications in Avoidance of Bird-Aircraft Collisions and Improvement of Flight Safety."

Prof. Gauthreaux chaired a paper session at the meeting of the Wilson Ornithological Society in Omaha, NB, April 5-8. As an elected councilman of the Society, he served as chairman of the nominating committee at the meeting.

MINUTES OF THE COUNCIL OF ACADEMIC DEANS MEETING, MARCH 19, 1979

In the absence of Dean Hurst, Dean Green called the meeting to order at 9 a.m. with the following present: Dean Anderson, Dean McClure, Dr. Newton (for Dean Landrith), Dean Wilcox, Dean Box, Dean Efland (for Dean Trevillian), Dean Cox, Dean Labecki, Dean Vogel, Dean Green, Dean Brown (for Dean Schwartz), Dean Willis and Dr. Steirer. Attending briefly were Mr. Jack N. Wilson, assistant vice president for facilitating services, and Mr. James M. Boleman Jr., director of purchasing.

Messrs. Wilson and Boleman had a lengthy discussion with the deans relative to the advantages and/or disadvantages of Clemson University's entering into a Custom Service Agreement with IBM as of July 1, 1979. Comparison cost figures were given for the Custom Service Agreement as opposed to our present costs--which represent some typewriters on a regular service agreement and others on no service agreement. IBM had conducted a cost study on various areas of the University (Engineering and Liberal Arts were specifically mentioned) showing the high costs of servicing machines not under agreements. Deans Wilcox and Cox stated that they intended to check the accuracy of these cost figures as they appeared excessively high. It was pointed out by Mr. Boleman that going under a Custom Service Agreement would eliminate the present processing of individual invoices to departments which IBM estimates to cost around \$15 per invoice. deans inquired about the possibility of one billing from IBM to the University, with our Purchasing Department then billing proportionately to the colleges and/or departments. Mr. Wilson said this could be considered. Generally, the deans were skeptical of entering into this type agreement until they have more facts, and no action was taken.

The recommendations that CA AH 305 be added to the course offerings in the College of Architecture and that Zool 431/681 be deleted from the course offerings in Sciences were approved.

Dean Farrell Brown stated that the deans and department heads are presently reviewing portions of the graduate catalog, and that the front portion will be available for their review around April 1, but definitely prior to the next meeting of the Council of Deans.

The meeting was adjourned at 10 a.m.

Respectfully submitted, Annette H. Kesler

#### MINUTES OF THE FACULTY SENATE

March 27, 1979

The Senate Chamber

#### 1. Call to Order

The meeting was called to order by President Steirer at 3:35 p.m. President Steirer introduced Mr. Jim Stovall, the new Editor of the Tiger.

# 2. Approval of Minutes

Senator Burt requested that the complete reports of the Ad Hoc Committee on Faculty Compensation and the Subcommittee on Retirement be included in the February 20 minutes. This was approved by unanimous vote. The minutes of the February 20 meeting were approved with minor corrections.

# 3. Special Request

President Steirer introduced Mr. John B. Gentry, retired Clemson University Personnel Director, who addressed the Senate on a serious flaw in the S. C. Retirement System, e.g.: Section 9-1-1660. Nominee on member's death may receive monthly allowance instead of accumulated contributions. This section allows beneficiary to receive a lifetime monthly annuity only if death occurs after he/she has either retired with disability for 30 days, is over 65, had more than 30 years of creditable service, or a combination of 60 years of age or older with 20 years of service.

Mr. Gentry is requesting that we support the campaign to amend Section 9-1-1660 so as to correct this <u>omission</u> among the many benefits provided members of the SCRS. His position is that the situation can be corrected without an additional dollar of appropriated funds. He is appealing for a remedy of a critical hardship which occasionally affects, without warning, a small portion of "the State employee family."

This hardship occurs when an employee <u>dies</u> in active service after completing 15 to 29 years of service, but before the attainment of age 60 or the completion of 30 years of service. Although State law provides, after completion of 15 years of creditable service for <u>vesting</u> of employee contributions <u>plus</u> the employer's matching contributions to provide a Deferred Annuity at age 60, no similar protection is provided the employee who continues State service and dies before age 60. (It is distressing to note that once vested the employee is protected even though he/she may have left S.C. employment, but no similar protection is provided the family of the faithful employee who remains in South Carolina and continues State service.)

Mr. Gentry's appeal is that we support a simple amendment which would protect the families of employees who die "after completing 15 years of service regardless of age with a lifetime annuity under Option 2 to the surviving beneficiary.

# 4. Committee Reports

- a. Admissions and Scholarship Senator Edie, Chairman, stated that his committee had no report, but would be presenting resolutions under new business.
- b. Policy Committee No report.
- c. Research Committee Senator Fennell, Chairman, reported that the following areas of concern have been discussed by the committee and deserve further consideration: University assistance in the attainment of research grants; graduate student support; current tenure policy and its relation to the hiring of distinguished professors; the role and function of the University Research Council.
- d. <u>Welfare Committee</u> Senator Burt had no report but did express appreciation to the <u>Tiger</u> for its reporting on and support of the <u>ad hoc</u> committee on Faculty Compensation.
- e. Ad Hoc Committee No reports.
- f. University Councils and Committees It was requested that the representative on the Graduate Council report on the study of the use of 600-level courses for a graduate student's plan of study. Senator Edie informed the group that he was not on the committee that was conducting the study, but Senator Howard had attended a Graduate Council Meeting and was able to explain as follows: The resolution forbade the use of a 600 course on GS2 form if the companion 400-level course was required for graduation at the Bachelor's level. (The Council of Deans formed a subcommittee consisting of Anderson, Box, Trevillian, and Vogel to study this problem, but they have as yet not reported back.) The resolution did pass the Graduate Council in February. Further comments indicated that there are additional requirements for 600-level courses, but how do you force the instructor to enforce them? There is a movement underway to eliminate 300-600 level courses.

The <u>ad hoc</u> committee monitoring the Faculty Evaluation System meets April 9 to end its business.

# 5. President's Report

- a. Dean Hurst will make no further reply to the Faculty Senate statements on Summer Employment.
- b. Action on other Senate resolutions is as follows:
  - FS-79-2-1 -- The Class Withdrawal Policy has been submitted to the Undergraduate Council;
  - FS-79-2-2 -- Resolution on Proposed Amendments to State Employment
    Grievance Procedure. Clemson's administration did not support
    the action that was taken by the Council of Presidents. Dean
    Hurst's personal recommendation was to oppose it strongly;

- FS-79-2-3 -- Resolution to Accept the Welfare Committee's Report and Recommendations for Optional Retirement Plans in lieu of SCRS. If the Senate desires, the administration will provide a formal statement of support for the optional retirement plans. Purvis Collins opposes it strongly arguing that, because many other groups among the 52,000 state employees have optional plans that they could participate in, to validate one would establish a precedent that would fragment the system;
- FS-79-2-4 -- Resolution Concerning Changes in the S. C. Retirement.

  The best way to achieve these changes would be to include them in a list of priorities to place before the new President.

  Incidentally, Purvis Collins believes that the provision to vest individuals after five years of service will probably be enacted this year;
- FS-79-2-6 -- Resolution on Faculty Compensation. Vice President Melvin Barnette is doing his own peer group study so that he can ask for a one-shot sum of money to bring Clemson faculty salaries up to parity with that peer group. The administration is committed to remedying the situation;
- FS-79-2-8 -- Resolution on the Provision of Towels and Soap for Laboratories.

  The Physical Plant says this cannot be changed.
- c. Dean Hurst asks what the Senate would like him to do on the matter of distributing the first semester grade reports for faculty. He will do whatever the Senate desires. So, under Old Business, I will ask you to decide what you want to do.
- d. The one item of importance from the Athletic Council is a change that will help faculty members in the distribution of bowl tickets. Distribution of bowl tickets to faculty will be based on years of service to the University. Therefore, a faculty member with 15 years of service will have a higher priority than one with just one year of service.

FS-79-2-6 was discussed and it was pointed out that approximately 1.4 million dollars was being requested to bring us up to parity with the peer group. Mr. Darrell Hickman, Asst. Vice President of Budgets and Systems, has agreed to come and address the Senate on the matter of the programatic five-year plan. Senator Worm moved that Mr. Hickman be invited to address the Senate at the April meeting, Senator Young seconded, and the motion was unanimously passed by voice vote.

Senator Burt moved that the Faculty Senate request a formal statement of support of FS-79-2-3. The motion was seconded by Senator Lambert and was approved unanimously by voice vote.

Senator Hood asked about FS-79-2-7 -- The Resolution on Student Liability Insurance Coverage. President Steirer reported that there was no response on this resolution.

In response to Senator Hood's question on FS-79-2-8 -- President Steirer stated that this is the way it will be and that there will be no promise of change.

Ray Thompson, Personnel Director, is on the committee to study optional retirement plans referred to in FS-79-2-3.

# 6. Old Business -

a. President Steirer asked the Senate for instructions on item "c" in the President's Report. Does the Senate object to the distribution of grade reports? Senator Coulter objected and expressed the same sentiments as before that these reports give a false impression of grades given. No Senator who voted to distribute the grades moved for reconsideration of the motion; therefore, the Senate in effect reaffirmed the previous motion that the grades be distributed.

# 7. New Business

a. Election of officers for 1979-80.

The following officers were elected:

President: H. W. Fleming Vice-President: C. S. Thompson Secretary: E. M. Coulter

b. FS-79-3-1 -- Ad Hoc Committee on Senate Priorities. By letter dated March 13, 1979, Senator Baron recommended that the Faculty Senate advise the President to organize an Ad Hoc Committee for the purpose of preparing a Faculty Senate Position Paper.

"In July, Dr. William Atchley will begin his tenure as President of Clemson University. He will undoubtedly be asked by numerous individuals and organizations to make decisions pertaining to the administration of the University. He will be establishing his priorities.

"In order to ensure that the concerns and interests of the Clemson University Faculty are brought to President Atchley's attention and given appropriate priority, I would like to recommend that the Faculty Senate prepare a position paper listing those items which are of greatest concern to the Faculty. The position paper would be presented to Dr. Atchley immediately upon his taking office.

"We recommend therefore that the President of the Senate immediately appoint an <u>ad hoc</u> committee to draft a document for the Senate's approval. It is suggested that the <u>ad hoc</u> committee be instructed to prepare a brief statement listing not more than six items of concern. The list should include items pertaining to the welfare of the faculty, the administration of the university and academic affairs. The paper should avoid taking a position on items which might be considered controversial by the Senate. Such items should simply be listed for Dr. Atchley's attention. The committee should be advised that it must present a draft to the Senate by the May meeting.

"Therefore, be it resolved, that the President of the Senate immediately form an <u>ad hoc</u> Faculty Senate committee to prepare a Faculty Senate position paper, for presentation to Dr. W. Atchley upon his taking office as President of Clemson University."

Senator Edie moved acceptance and Senator Addison seconded.

Senator Dan Smith moved to table until the April meeting because Senator Baron is absent and should be present to discuss the proposal. The motion to table was seconded by Senator Hood. There was some opposition to tabling, Senator Smith withdrew the motion, and Senator Hood agreed. Senator Bill Smith moved to amend so that the <u>ad hoc</u> committee would be an <u>ad hoc</u> Faculty Senate Committee which would be composed of a representative from each College. Vice President Dickey seconded and Senator Coulter moved the question. The vote to amend the motion was unanimous. Discussion on the main motion including the amendment brought out the following points: Senator Grubb asked why there was a limit of six items; Senator Coulter stated that it suggested not more than six; Senator Lambert pointed out that it is a suggestion and would not be law; Senator Whitten suggested that the number of items be left to the discretion of the Committee

The motion to approve FS-79-3-1 as amended passed unanimously by voice vote.

c. Senator Baron in a communication dated March 12, 1979, submitted a recommendation for a Salutary Letter of Commendation to the President of the University.

"Last year President Edwards advised the Palmetto Golf Tournament officials that the Clemson University Golf Team could not compete in an event sponsored by a racially segregated organization. The action was taken without fanfare. The tournament committee was simply advised that by law Clemson University could not participate in any activity that was racially segregated. A recent newspaper article however, suggests that the President's response was meant to convey the message that the University had more than a legal responsibility in this matter. President Edwards took the position that this University had a moral responsibility not to participate in any segregated activity. It was a response worthy of an institution holding a position of leadership and trust within the State.

"We should therefore like to call upon the Faculty Senate to commend the President of the University for his actions in this matter. Further, we call upon the Senate to request, that the President of the Senate, prepare a salutary letter expressing our appreciation. We further request that the letter be made a part of the Senate's minutes, so that it might be given the widest possible public distribution through the Campus News."

Senator Burt moved that the recommendation be approved. The motion was seconded by Senator Lambert. The motion was unanimously approved by voice vote.

d. FS-79-3-2 -- Establishment of Physical Plant Advisory Committee.

WHEREAS, the Physical Plant has the responsibility for janitorial service, maintenance, and repairs; and

WHEREAS, the function of faculty members at the departmental level is directly affected by policies and procedures of the Physical Plant, therefore

BE IT RESOLVED that an Advisory Committee made up of one Department Head from each College (to be appointed annually by each College Dean) be established to advise the Physical Plant on matters relating to janitorial service, maintenance, repairs, and grounds upkeep.

Senator Hood moved acceptance and Vice President Dickey seconded. A discussion insued whereby various complaints were aired: Utilization of kennel fences; utilization of jack hammers and lawnmowers during class periods with no advanced warning to departments.

The motion to accept the resolution passed by voice vote but was not unanimous.

e. FS-79-3-3 -- Retention of present seat assignments.

WHEREAS, Faculty and staff who annually purchase season football tickets have been allowed the option of retaining their seat assignments from year to year; therefore

BE IT RESOLVED that the Faculty Senate requests the Athletic Department to continue to allow faculty and staff the option of retaining their present seat assignments.

Senator Hood moved acceptance and Senator Dan Smith seconded. During the discussion the question was asked "What does it mean?" Senator Hood responded that he does not want to be moved out of his seat. President Steirer stated that he does not know of any plans to move Faculty/Staff and that it is his understanding that they will have the right to move to the new section if they wish, but they will not be obliged to move. However, the resolution should clarify the situation.

The motion passed unanimously by voice vote.

f. FS-79-3-4 -- Resolution on Reexaminations.

WHEREAS the original reasons for institution of the policies allowing reexaminations for deficient grade point ratio and for an F received the last semester of the senior year no longer exist.

BE IT, THEREFORE, RESOLVED that the practice of reexamination for an F received the last semester of the senior year and reexamination for deficient grade point ratio (as described in paragraphs 4 through 7 of page 48 of Clemson University Announcements 1978/1979) be abolished.

The motion to approve the resolution was made by Senator Edie and seconded by Senator Grubb. The motion was approved unanimously by voice vote.

g. FS-79-3-5 -- Resolution on Academic Misconduct.

WHEREAS Clemson University's <u>Student Handbook</u> lacks a philosophical statement on academic honesty and does not specify with exactness all cases of academic dishonesty which might occur, and

WHEREAS Clemson's present method of dealing with cases of academic misconduct puts the burden of investigating, prosecuting and punishing solely on the faculty member who suspects or detects cheating, meaning that numerous incidents of academic misconduct go unreported --

## BE IT, THEREFORE, RESOLVED THAT:

- (1) the publishers of the <u>Student Handbook</u> consider including a philosophical statement on the matter of academic honesty as it relates or pertains to the ideals of the University;
- (2) the <u>Student Handbook</u> give a more detailed and comprehensive account of actions that may be considered academically dishonest;
- (3) the proper agencies within the University establish a judiciary committee whose function shall be to investigate, prosecute, and pass sentence or recommendations on cases of academic dishonesty.

The motion to approve the resolution was made by Senator Edie and seconded by Senator Bill Smith. After a spirited discussion during which several controversial items were brought out, the motion to table was made by Senator Burt and seconded by Senator Snipes. The vote in favor of tabling was unanimous.

h. FS-79-3-6 -- Resolution on University Admission.

WHEREAS Clemson University presently lacks a written, formal policy of admissions, and

WHEREAS there is currently some confusion and annoyance concerning the University's admission policy, caused particularly by the early cut-off date for application and the importance the University evidently places on a non-academic criteria, dormitory space, and

WHEREAS admission to the University is and will continue to be competitive and in order to maintain the University's high standards,

#### BE IT, THEREFORE, RESOLVED THAT:

(1) a formal policy of admission be established, based on academic considerations rather than dormitory space. This policy should be in writing and made known to all applicants, the faculty, and the general public, and it should be included in the Bulletin. This policy should be reviewed and revised as needed by appropriate faculty and administrative groups.

- (2) the Registrar and Office of Admissions henceforth come under the Dean of the University, indicating thereby the academic nature of their responsibility.
- (3) the faculty should play a part in the admissions procedure. For this purpose a permanent University committee on admissions should be established to advise the Registrar in matters of policy, or this function could be assumed by the Undergraduate Council.
- (4) the Registrar should present to the faculty long-range goals to improve admissions standards.

Senator Edie moved that the resolution be approved. Senator Snipes seconded. During the discussion it was pointed out that at the present time there is no review by either Faculty or Administration, rather admission is predicated on dorm space; the Registrar and Admission offices should be under the Dean of the University; the Faculty should play a part in formulating admissions policy; the Registrar should present long-range goals in admission policy. Senator Burt expressed the opinion that this responsibility of admission should be under the Admissions and Scholarship Committee of the Senate; whereas, Senator Edie disagrees and stated that it should be under the auspices of the Undergraduate Council. Senator Howard expressed the opinion that this was part of a piece meal approach toward effecting the new constitution; he is concerned with long range admission and questions the adviseability of attracting only the elite; there is no known method of determining who will be successful in a university; the best we have is SAT and class position. The consensus was that the Senate needs to participate by having some group work with the Registrar's office and really have some input. Senator Snipes moved the question, and the motion passed by voice vote, but not unanimously.

i. FS-79-3-7 -- Faculty Compensation to Minimize Losses Due to Inflation.

WHEREAS, the rate of inflation continues to erode real faculty income appreciably,

BE IT RESOLVED. the Senate urges the administration to put first priority this year on insuring that the Faculty does not sustain real salary losses due to inflation.

Senator Burt moved that the motion be approved, and Senator Lambert seconded. The motion was approved unanimously by voice vote.

# 8. Other New Business

Senator Hood requested that President Steirer ask what the current policy is on official travel outside the United States to attend professional meetings (particularly Canada and Mexico). President Steirer will attempt to obtain an answer to this question.

9. The meeting adjourned at 5:33 p.m.

Respectfully submitted,

T. R. Adkins, Jr.

Secretary

## Senators Absent:

Agricultural Sciences S. G. Turnipseed

Education

W. E. West (Substitute present)

Engineering

J. L. Prince

W. Baron

J. C. Hester

# Calendar of Campus Events

- 1 -- Clemson Area Continuing Education continues. Call 654-2139 for more information.
- 1-18 -- Art Exhibition: "MFA Thesis Exhibits." Thesis work by three MFA students:
  Marcia Bugg, ceramics; Terry Dimond, fiber sculpture; Jim Meaders, paintings.
  Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m. 4:30 p.,
  weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
- 9-12 -- Tennis: Region 2 AIAW Tournament (Women), here, all day each day.
  - 10 -- General Faculty Meeting, Tillman Auditorium, 10 a.m.
  - 11 -- End Co-op Work Period No. 19.
  - 11 -- Commencement, Littlejohn Coliseum, 11 a.m.
  - 11 -- Air Force and Army Commissioning Exercises. Sponsored by Departments of Aerospace Studies and Military Science, Daniel Auditorium, 9 a.m.
  - 12 -- All residence halls close at 8 a.m.
  - 14 -- Begin Co-op Work Period No. 20.
- 14-17 -- Short School: "Water and Wastewater Treatment Plant Operators." Sponsored by Environmental Systems Engineering Department, Outdoor Laboratory. Call James Hindman, 656-3276, for more information.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY



Vol. 18 No. 18

MAY 16 1979

SOUTH CAROLINA ROOM

May 15, 1979

#### RESIDENT EDWARDS RECEIVES BLISS MEDAL

resident Edwards has been awarded one of ne highest civilian honors conferred by ne Society of American Military Engieers.

ir Force Brig. Gen. Clifton D. Wright Jr., resented Edwards with the Tasker H. Liss Medal, an annual award given to a ingle national figure for outstanding ontributions to military engineering ducation. Wright is a member of the ociety's board of directors and is ommander of the Air Force Civil Engineering Center at Tyndall Air Force Base,

ne Bliss Medal was established in 1958 behonor World War I Army Chief of Staff asker H. Bliss. Bliss was instrumental the development of the Army's War ollege at Carlisle Barracks, Penn.

n making the presentation, Wright ommended Edwards' service on the Air orce ROTC advisory panel to the ecretary of the Air Force.

Dr. Edwards has provided valuable advice nd counsel and has helped guide key lements of the overall program," said right. "By these actions he has rendered nvaluable service to this nation."

dwards was nominated for the award by lemson's Air Force ROTC Department.

## OMPUTER CONFERENCE AND EXHIBIT SCHEDULED

Conference and Exhibit on Small Computrs will be held at Clemson May 23-24.

avid Ahl, publisher of <u>Creative Computing</u> agazine, will speak at 9:30 a.m. May 23, ollowed by a session for the computer obbyist. The afternoon will be devoted

to small computer applications in business and education.

On May 24, sessions will deal with small computers in medicine, industry and manufacturing, and engineering and science.

More than 30 computer manufacturers and vendors will exhibit the latest in small computer hardware and software throughout the two-day conference.

For more information contact Bill Barnett, conference chairman, in the Electrical and Computer Engineering Department, 656-3375; or the office of Continuing Engineering Education, 656-3308.

# CROUCH HONORED FOR GRAPHIC ARTS CONTRIBUTIONS

J. Page Crouch, professor of industrial education, has been honored by an international association for his achievements and contributions in the field of graphic arts education.

Crouch received the George B. Jensen Graphics Contributor Award and a \$2,000 check during the annual convention of the In-Plant Printing Management Association at New Orleans.

The Award is given annually by IPMA to recognize significant contributions to graphic arts education. It is in the name of George B. Jensen, a long-standing leader in this field, now the Education Markets Manager of the A. B. Dick Company.

Crouch said the funds will be used in the further development of Clemson's graphic arts program.

Crouch is responsible for the development of a self-taught, self-paced group of

educational materials in graphic arts which are now marketed worldwide. The training program uses synchronized slides and tape cassettes in addition to illustrated booklets.

He refers to the program as a "monkey see, monkey do approach to immediate hands-on performance." After seeing a part of the printing process, the student does it himself.

The learning materials were developed at Clemson in a cooperative project with the Printing Industry of the Carolinas and the S.C. State Department of Education.

Crouch joined the Clemson faculty in 1968 after earning his doctor of education degree at the University of Missouri. He has bachelor's and master's degrees from San Diego State University in his hometown.

# CIVIL ENGINEERING PROFESSOR TAKES TOP AWARD

His research ranges from earthquake engineering to leakage of radioactive waste and his colleagues are quick to recognize his accomplishments.

Civil engineering professor Subhash C. Anand received the McQueen Quattlebaum Faculty Achievement Award in Honors and Awards Day ceremonies.

The award was set up by businessman Alex M. Quattlebaum of Florence and Georgetown in honor of his father, the late McQueen Quattlebaum, a 1909 Clemson graduate. It is the highest award given to engineering faculty at Clemson.

Anand was selected for the honor by a committee of engineering professors on the basis of his teaching, research and public service activities.

With the aid of a civil engineering graduate student, Anand is studying the flow of radioactive material in ground-water from leaks in underground storage containers.

The National Science Foundation is also supporting research by Anand on stresses and loads on subway tunnels and other urban substructures caused by seismic activity.

But research doesn't fill all his time. Anand also teaches both graduate and undergraduate courses in civil engineering and several extension courses in Clemson's Continuing Engineering Education Program.

The Quattlebaum award carries with it a \$1,000 stipend to Anand and \$1,000 to the Civil Engineering Department to be used as Anand chooses. Although no formal plans have been made, he says he will probably use the money to support independent research by himself and his students.

Anand is originally from India and did his undergraduate work at Banaras University there. He received both his M.S. and Ph.D. degrees at Northwestern University in Illinois.

He has taught at Clemson since 1972.

#### CAMP RUNNING BRAVE CITED FOR EXCELLENCE

Camp Running Brave, a week-long summer camp at Clemson for hemophiliac boys, has received the American Camping Association's national award for program excellence.

The Eleanor P. Eells Award for Program Excellence was presented to the South Carolina Chapter of the National Hemophilia Foundation, sponsors of the summer camp with the assistance of the Department of Recreation and Park Administration.

Other sponsors of the camp are the Wade Hampton Sertoma Club of Greenville and the S.C. Sertoma Foundation.

The camp annually houses 22 hemophiliac boys from the Carolinas and Georgia. The disease, which rarely afflicts girls, inhibits the normal process of blood-clotting. Thus hemophiliacs are commonly known as "free-bleeders."

With close medical supervision, Camp Running Brave allows these youngsters to participate in activities, such as swimming, boating and hiking, from which they are normally excluded. In addition, they receive medical counseling on treatment of the disease.

# FORMER CLEMSON PROFESSOR RECEIVES POSTHUMOUS AWARD

Microbiologists from across the state bestowed their highest award posthumously on former Clemson professor John Howard Bond at a meeting at Greenville Memorial Hospital last month.

The Outstanding Microbiologist Award, presented by the South Carolina Chapter of the American Society for Microbiology, was accepted by Bond's family. He was only the third recipient of the award in its nine-year history.

Bond came to Clemson from the University of Texas in 1952. He assisted in founding the state chapter of ASM in 1966 and co-sponsored the founding of a student chapter of the organization in 1970.

A leading researcher in the field of disease-carrying bacteria, Bond also coauthored a microbiology text. He died of a heart attack at Clemson Dec. 3, 1977.

# ANNUAL COMPETITION OPENS FOR OVERSEAS STUDY

The Institute of International Education announced the official opening of the 1980-81 competition for grants for graduate study or research abroad in academic fields and for professional training in the creative and performing arts is scheduled for May 1, 1979. Approximately 500 awards to 50 countries are expected to be available for the 1980-81 academic year.

The purpose of these grants is to increase mutual understanding between the people of the United States and other countries through the exchange of persons, knowledge and skills. They are provided under

the terms of the Mutual Educational and Cultural Exchange Act of 1961 (Fulbright-Hays Act) and by foreign governments, universities, corporations and private donors.

Applicants must be U.S. citizens at the time of application, who will generally hold a bachelor's degree or its equivalent before the beginning date of the grant and, in most cases, will be proficient in the language of the host country. Except for specific awards, candidates may not hold the Ph.D. at the time of application. Candidates for 1980-81 are ineligible for a grant to a country if they have been doing graduate work or conducting research in that country for six months or more during the academic year 1980-81.

Creative and performing artists are not required to have a bachelor's degree, but they must have four year of professional study or equivalent experience. Social work applicants must have at least two years of professional experience after the Master of Social Work degree; candidates in medicine must have an M.D. at the time of application.

Selection is based on the academic and/or professional record of the applicant, the validity and feasibility of the proposed study plan, the applicant's language preparation and personal qualifications. Preference is given to candidates who have not had prior opportunity for extended study or residence abroad.

Information and application material may be obtained from Dean Arnold E. Schwartz, Clemson's Fulbright Program adviser, in E-106 Martin Hall during regular office hours. The deadline for submission of applications to Dean Schwartz is October 1, 1979.

#### ACCOUNTING AND FINANCE

C. Don Wiggins (Asst Prof) presented a paper, "The Net Present Value of the Addition to Clemson Memorial Stadium," to the South Carolina Academy of Science

in Columbia April 6. Prof. Wiggins also acted as a paper discussant at the Southwestern Finance Association meeting in Houston, TX, in March.

Alison C. Drews (Asst Prof) presented a talk, "Recordkeeping for the Small Business," March 23 at a Small Business Seminar sponsored jointly by Anderson. College and the Anderson Area Chapter of the National Association of Accountants. Prof. Drews is currently the NAA Chapter president.

Thaddeus R. Bismack (Assoc Prof) conducted a session on Professional Development and Education at the National Association of Accountants Chapter Management Seminar in Myrtle Beach April 20. This annual seminar sponsored by NAA International is conducted primarily for the incoming officers and directors of the 20 NAA chapters in North and South Carolina.

#### CHEMICAL ENGINEERING

- D. D. Edie (Assoc Prof) presented a paper, "Studies of A Direct Contact Latent Heat System for Energy Storage," by D. D. Edie, S. S. Melsheimer and J. C. Mullins at the 86th National Meeting of AIChE in Houston, TX, April 3.
- S. S. Melsheimer (Assoc Prof) chaired a session on "Solar Power Generation Including Biomass" and co-chaired a session on "Solar Thermal Application" at the 86th National AIChE Meeting in Houston, TX, April 3. Prof. Melsheimer also co-authored a paper, "A Study of Binary and Ternary Ion Exchange Equilibria with a Perfluorosulfonic Acid Cation Exchange Membrane," presented by Marcia J. Manning (former Grad Stu) at the same meeting.
- R. W. Rice (Asst Prof), faculty advisor for the Clemson Student Chapter of AIChE, and F. C. Alley (Prof) accompanied 20 students to the Southeastern Regional Convention of Student AIChE Chapters held in Long Beach, MS, April 7-9. For the second year in a row and the third in the last four, the Clemson Chapter was named the "Most Outstanding Chapter" of

the 18 schools comprising the region.

Prof. Alley served as co-chairman of a one-day seminar held in Atlanta, GA, April 17 on "Volatile Organic Compounds - Regulations and Control." Sponsored jointly by the College of Engineering and College of Industrial Management, the seminar was attended by more than 70 persons from industry and government.

#### CHEMISTRY

Joe F. Allen (Prof) is a co-author of three bulletins for the U. S. Environmental Protection Agency: "Learner's Guide for a Critical Path in Water Quality Monitoring: Nutrients" and "Learner's Guide for a Critical Path in Water Quality Monitoring: Indicator Organisms," both co-authored by Richard B. Glazer (Prof) and T. J. Skaar (Asst Project Dir) of Ulster County Community College, Stone Ridge, N. Y.; "The Use of Performance-Oriented Instructional Worksheet in Meeting Instructional Needs Within the Environmental Protection Agency," with R. A. Gearheart (Prof) Humbolt State University, John H. Austin, The Maxima Corp., and K. M. Hay, U. S. Environmental Protection Agency.

- H. G. Spencer (Prof) and J. A. Barrie (Imperial College, London) published a paper, "Transient Diffusion Through a Binary Laminate Separating Finite and Semiinfinite Volumes," J. Appl. Poly. Sci., 23, 2537 (1979).
- J. W. Nuffman (Prof) presented a seminar, "Recent Developments in Terpene Synthesis," at the University of Arkansas, Fayette-ville, AR, April 23.

#### CIVIL ENGINEERING

Subhash C. Anand (Prof) is the author of a paper, "Current Trends in Structural Design Education," that has been published in Civil Engineering Education, Proceedings, ASCE Conference on Civil Engineering Education, held at the University of Wisconsin-Madison, April 19-21, pp. 504-510.

This paper is based on a survey of approximately 225 colleges and universities offering civil engineering undergraduate degrees.

John S. Fisher (Assoc Prof) and Ben L. Sill (Assoc Prof) have been awarded \$26,466 from the U. S. Army Corps of Engineers, Mobile District, to conduct a six-month study of the water quality of Carter's Lake, GA. The study will include biweekly samples at a number of stations on the 400-foot deep lake.

Parviz F. Rad (Assoc Prof) attended a four-day workshop on work sampling and time studies administered by the University of South Carolina in Columbia April 17-20.

Prof. Rad has been recognized as a certified cost engineer encompassing specialties in cost estimating, cost control, business planning, and management science, by the American Association of Cost Engineers. Prof. Rad is one of only five engineers in South Carolina to have received this recognition since the inception of the certification program.

# COUNSELING CENTER

The Counseling Center staff (Lucile Reddick, Fred Steele, John Anderson and William Wells) held the first annual Career Search Workshop March 31, 1979, for high school seniors who will be attending Clemson in the fall. The workshop was designed to aid students in exploration of majors, of careers and of themselves in an effort to diminish the likelihood of dissatisfaction with their major choice and the need for change later. During the afternoon session, a representative from each college was available to answer questions about the various programs and majors.

#### **ECONOMICS**

Ralph D. Elliott (Assoc Prof and Dir of Prof Develop) gave a presentation on "Computers and Word Processing in Center Administration" at the Fourth Annual Conference of Management and Labor Relations Education Administration held April 10-13 in Richmond, VA.

Hugh Macaulay (Alumni Prof) spoke at the annual meeting of the Association of Texas Colleges and Universities in Dallas, TX, March 30, and gave the keynote address at a Free Enterprise Symposium at College Station, TX, April 6. He spoke on "Economics and Products" at the Philadelphia College of Textiles and Science April 19.

Bruce Yandle (Prof) is co-editor, with James C. Miller III, of Benefit-Cost Analysis of Social Regulation, Washington: American Enterprise Institute. Prof. Yandle has also published "Identifying Brand Performance by Shift-Share Analysis," Journal of the Academy of Marketing Science, Winter/Spring 1978, Vol. 6, pp. 126-137 and "Mortgage Usury Laws: Placebo or Paralysis," Business Topics, Winter 1979, pp. 35-39.

#### ELEMENTARY AND SECONDARY EDUCATION

Sam L. Buckner (Assoc Prof) and Debby Jones (Grad Stu) had an article, "Aren't Ya Listening?" printed in the spring, 1979 edition of the <u>Indiana State Univer-</u> sity Jr. High-Middle <u>School Bulletin</u>.

Margaree S. Crosby (Asst Prof) has been appointed to the Board of Directors of the School of Education Graduate Alumni Association at the University of Massachusetts at Amherst. Prof. Crosby recently attended the first meeting of the board which was held in conjunction with the Annual Spring Forum sponsored by the UMASS School of Education March 27-30.

#### ENTOMOLOGY AND ECONOMIC ZOOLOGY

T. E. Skelton (Prof) received the Outstanding Teaching Award presented by the Clemson Chapter of Gamma Sigma Delta at the annual Initiation and Awards Banquet in March.

T. R. Adkins Jr. (Prof) attended and

participated in the carbaryl assessment team meeting on data gaps held in Portland, OR, April 23-26.

Merle Shepard (Assoc Prof) attended and participated in the insect migration conference held in Raleigh, NC, April 8-12.

S. B. Hays (Prof & Hd) attended and participated in the IPM regional meeting held in Atlanta, GA, April 11-12.

Gerald R. Carner (Prof) attended and participated in the Scanning Electron Microscopy 1979 meeting in Washington, DC, and consulted with insect pathologists at the USDA Insect Pathology Lab at Beltsville, MD, April 16-20.

#### ENVIRONMENTAL SYSTEMS ENGINEERING

Thomas J. Overcamp (Assoc Prof) presented a talk on "Problems of Continuous Compliance with Air Pollution Regulations" to the 10th Annual Spring meeting of the Carolinas Air Pollution Control Association in Raleigh, NC, April 19.

Paul B. Zielinski (Assoc Prof) participated as a chairman of a session on Water Resources Research in South Carolina at the Twelfth Annual Governors Conference on Water Resources held in Columbia May 1-2.

#### **GEOLOGY**

Villard S. Griffin Jr. (Prof) attended the 56th Annual Meeting of the Georgia Academy of Science April 20-21 in Augusta and presented a paper, "Comparison of Earth Science Programs in Southeastern Universities," before the geology section. An abstract of this paper has recently been published in the Georgia Journal of Science, V. 37, N. 2, p.89.

#### **HISTORY**

John W. Johnson (Asst Prof) has published an article, "The 'New Journalism' and the 'New American Studies': Reflections on Some Technical and Methodological Affinities," in The Indian Journal of American Studies, 9 (January 1979), 22-30. The Journal is published by the American Studies Research Centre at Hyderabad, India.

Joseph L. Arbena (Assoc Prof) served as a commentator on a panel, "Trends in Caribbean International Relations," during the 26th annual meeting of the Southeastern Council on Latin American Studies held in Tampa, FL, April 19-21.

Prof. Arbena has also published a review of Allan J. Kuethe, Military Reform and Society in New Granada, 1773-1808 (University Presses of Florida, 1978) in South Eastern Latin Americanist (March 1979).

#### INDUSTRIAL MANAGEMENT

Earl W. Arp (Assoc Prof) presented a block of instruction, "Health Hazards in the Rubber Industry," at the OSHA Training Center in Des Plaines, IL, March 27.

Thomas W. Zimmer (Prof) conducted a workshop at the California Institute of Technology on Human Resources Planning and Development in Pasadena, CA, April 2-4.

#### LANGUAGES

Margit M. Sinka (Asst Prof, German) read "Composition in German: Why Can They Write?" at the S. C. Association of German Teachers meeting in Columbia April 7.

#### NURSTNG

Lynne A. Hall (Instr) has reviewed Persis Mary Hamilton's third edition of <u>Basic Pediatric Nursing</u> in Vol. 27, No. 4

(April 1979) <u>Nursing Outlook</u>, page 287.

Sharon Thompson (Asst Prof) gave two inservice education classes at Greenville General Hospital April 25 on "The School Age Child in the Hospital."

#### POLITICAL SCIENCE

Horace Fleming (Assoc Prof) presented a paper, "The General Assembly's Search for a Balanced System of Revenue for Local Governments in South Carolina," at the April 7 meeting of the South Carolina Political Science Association in Rock Hill.

Prof. Fleming was a discussant on the panel "The Supreme Court and Civil Rights: Judicial Activism and Restraint Revisited" at the annual meeting of the Midwest Political Science Association April 19-21 in Chicago.

Harold E. Albert (Prof) presented a paper, "Grants and Political Science," at the April 7 meeting of the South Carolina Political Science Association in Rock Hill.

Michael A. Morris (Asst Prof) chaired a panel on "Trends in Caribbean International Relations" at the SECOLAS Annual Conference (Southeastern Conference on Latin American Studies) April 19-21 in Tampa, FL.

#### PROFESSIONAL DEVELOPMENT

Kathryn S. Collins (Adm Asst) conducted a one-day workshop for Furman University April 12 at the Sheraton-Palmetto Inn, Greenville, on "Increasing Enrollments through Effective Brochures."

Evans A. LaRoche (Prof, IM) is chairperson for a course, "Textile Testing and Quality Control," to be held at Clemson June 5-7.

Thomas B. Maertens (Instr, IM) will chair a course, "Basic Management Processes for the Newly Appointed Manager," to be held June 6-8 on campus.

Warren W. Menke (Assoc Prof, IM) will be the chairperson for a course, "Making Word Processing Work," to be held at the Ramada Inn in Rock Hill June 12-13.

Claude S. Simpson Jr. (Instr, IM and Asst Dir) is course chairperson for

"Managing the Smaller, Rapidly Growing Retail Firm" which will be held at the Quality Inn in Columbia June 12-14. He is also chairperson for "Managing the Smaller, Rapidly Growing Manufacturing Firm" which will be held at the same location June 13-15.

Edward Vaughn (IId and Assoc Prof, Text) is chairperson for a conference, "Non-woven Fabrics Forum," to be held here June 11-15.

#### **PSYCHOLOGY**

L. Berger (Assoc Prof) was chairman of a symposium on "Encouraging Industrial/ Organizational Graduate Programs in the Southeast" which was presented at the recent SEPA meeting in New Orleans, LA.

S. Cole (Assoc Prof) and E. Brainerd (Assoc Prof) presented a symposium on "Behavior Modification and Obesity" for the Home Economics-Nutrition Inservice Teaching Program at Clemson April 18.

#### **TEXTILES**

B. L. Rutledge (Assoc Prof) is program chairman for the 1979 Southern Textile Research Conference to be held May 21-22 at the Holiday Inn, Hilton Head Island. The theme of the conference is "Progress Through Fundamentals," and the speakers and attendees will review current research developments in the textile industry.

Edward S. Olson (Prof) was a speaker at the Professional Development course, "Textile Chemistry Put to Work," held on campus March 27-28. Prof. Olson's presentation was entitled "Carriers for Polyester Dyeing." He also chaired a symposium for Professional Development entitled "Special Topics in Textile Printing," which was held April 3-5. Prof. Olson has been named consulting editor for Clark Publishing Company, Americas Reporter (Public Service).

Edward A. Vaughn (Hd and Assoc Prof) presented a paper, "Recent Innovations of Nonwovens," before the Gulf Coast Section

of American Association of Textile Chemists and Colorists in New Orleans, LA, March 7. On March 8, Prof. Vaughn chaired a session on "Developments in Binders, Coatings and Absorbents" at the INDA Technical Symposium, Nonwoven Technology, Association of the Nonwoven Fabrics Industry in New Orleans, LA.

#### WEPR RADIO

Bo Bierly (news and public affairs director for educational radio station WEPR) has been elected to the South Carolina board of directors of the Associated Press Broadcasters Association. Bierly has worked with the WEPR studio for four years following a decade in commercial broadcasting.

#### **ZOOLOGY**

James F. Schindler (Assoc Prof) has recently been awarded a grant from the National Science Foundation for \$59,908 to study the biogeochemistry of aquatic environments.

Gayle Noblet (Asst Prof) and Thomas C.
Gore (Grad Stu) co-authored a paper,
"Physiological Factors Affecting the
Periodicity of Leucocytozoon smithi
Gametocytes in the Peripheral Blood of
Domestic Turkeys," presented by Mr. Gore
at the 33rd Annual Meeting of the Animal
Disease Research Workers and the 21st
Annual Meeting of the Southern Conference
on Avian Disease at the University of
Tennessee, Knoxville, TN, March 20-21.

# MINUTES OF THE UNIVERSITY LIBRARY COMMITTEE MEETING, MARCH 12, 1979

Present: Ann W. Baxter (chairperson), Harold N. Cooledge Jr., Alison C. Drews, R. R. McGregor, Bill Smith, Garry Haehnle, John V. Hamby, Jack C. McCormac, Becky F. Campbell, Syed S. H. Rizvi, J. W. Gordon Gourlay (secretary.)

Guest: Mr. Frances M. Diaz, reference librarian, Science, Technology and Agriculture Service.

- 1. Minutes of the meeting of Feb. 12 were approved.
- 2. Mr. F. Diaz discussed the search procedure used with the Lockheed Information System and answered questions.
- 3. Ad Hoc Committee to Recommend a Library Policy for On-Line Bibliographic Searching presented the following recommendation which was unanimously approved.

# The Present Policy and Use of the Service

The library was authorized to purchase the equipment and to offer the service to the University clientele. A procedure was set up with the accounting office for billing the various departments for the cost of the service. This cost includes the cost of connect time, off-line prints and communication cost. It does not include any compensation for library personnel, training programs, special conferences, up-date sessions, costs for billing, central accounting, purchase of manuals, etc.

The library has received or anticipates receiving requests from faculty and students not having account numbers and who wish to pay for the service personally, 2) Federal agencies located in the Clemson area, 3) other institutions or state agencies, 4) research personnel from business and industry.

# Policy Recommended by University Library Committee

- 1. That on a trial basis July 1, 1979 December 31, 1979, the service be offered to Clemson faculty, staff and graduate students at the same rate charged faculty who have departmental account numbers. That the Clemson faculty, staff and graduate students by given first priority in the use of the service. That anyone without a departmental account number sign a statement to the effect that he is personally responsible for paying for the search.
- 2. That outside users such as federal

agencies located in the Clemson area and other institutions or state agencies be charged one and one-half times the cost charged the Clemson University faculty, staff and graduate students.

- 3. That personnel from business and industry (profit-making organizations) be charged two times the cost charged Clemson faculty, staff and graduate students.
- 4. That billing for the service (other than that now being done by the Accounting Office) be done by the library under procedures approved by the Office of Business and Finance.
- 5. That graduate students delinquent in paying for searches come under the same rules as students delinquent with other library accounts.
- 6. That detailed records of usage be maintained, and, at the end of the trial period the policy be reviewed.

Ann W. Baxter (chairperson), Alison C. Drews, Bill R. Smith, J. W. Gordon Gourlay (secretary).

- 4. Statistics indicating numbers of persons leaving the library between 11 p.m. and 1 a.m. Sunday through Thursday November 5, 1978 March 11, 1979, were distributed.
- 5. A memorandum to Dr. Ann Baxter from Drs.S. A. Gauthreaux Jr. and John P. Wourms regarding the disposal of surplus library materials was discussed. Chairperson Baxter said that she would communicate further with Drs. Gauthreaux and Wourms in order to get more information.
- 6. Unless a member has some matter to bring before the Committee Chairperson Baxter will not call a meeting for April.
  - J. W. Gordon Gourlay, Secretary University Library Committee

MINUTES OF THE EXTENSION COUNCIL MEETING, APRIL 5, 1979

Present: Sam Willis, H. E. Albert, J. J. Chodil, R. P. Ashworth, H. W. Webb, D. H. Pate, F. C. Alley, G. E. Sabin, C. S. Simpson, H. W. Fleming, J. W. Riser, Rose Davis, Linda Durham, M. J. Carter.

#### Dean Willis presiding:

- 1. Dean Willis reported on activities of the Commission on Higher Education's task forces on Off-Campus Programs and Continuing Education. Statistics were given on Clemson's off-campus and continuing education activities. Non-credit registrations amounted to 19142 for the year 1978 while off-campus credit registrations were 2364 in 134 courses. When the Cooperative Extension activities are counted, the number of contacts exceeds 2 million.
- 2. Dean Willis reported on the newly revised affirmative action plan adopted by the University. This revised plan has also been accepted by the South Carolina Human Affairs Commission. An NEW team will be on campus the week of April 9-13 to review University policies relative to Title VI.
- 3. Clemson University has completed plans for implementing The Rehabilitation Act of 1973 requiring access to programs. The physical requirements on campus have substantially been met. However, it was noted that off-campus locations must also provide necessary access to University programs.

Adjourned at 3:55 p.m.

D. Henry Pate - Recorder

MINUTES OF THE UNIVERSITY PLANNING COUNCIL MEETING, APRIL 23, 1979

The University Planning Council met at 3:30 p.m. Monday, April 23, in the Campus

Planners Office in G-23 Lee Hall.

Mr. Stanley Nicholas attended the meeting and discussed the formation of the Planning Council and its activities over the years. Mr. Nicholas said he thinks the Planning Council can play an expanded role during the coming years. He feels that the Council should bring suggestions from the individual colleges represented as well as carrying proposed plans to the individual colleges for their input prior to implementation.

Mr. Mark Wright of the Campus Planners Office discussed the role of the Planners Office in terms of planning concepts and policy. He showed the Council the master plan as it is now conceptualized. After electing Dr. J. L. Von Rosenburg as chairman and Dr. P. W. Wannamaker as co-chairman, the Council discussed ways of better defining its responsibilities. The Council will meet with the new president early next fall to get his ideas as to the way we may best benefit the University.

The meeting adjourned at 4:45 p.m.

Present: II. W. Fleming Jr., Political Science; M. A. Kelly, Nursing; C. L. Lane, Forestry; S. G. Nicholas, Vice President for Development; J. L. Von Rosenburg, Chemistry; P. W. Wannamaker, Languages; M. A. Wright, Campus Planning; J. L. Young, Architecture.

# Calendar of Campus Events

- 17 -- Workshop: "Touch in Therapeutic Nursing Practice" conducted by Doris Milton Rogoff, M.A., R.N., assistant professor in the School of Nursing at the University of Maryland. Sponsored by College of Nursing's Department of Continuing Education. Enrollment limited to registered nurses, preregistration required. Call 656-3079 for more information.
- 20 -- Residence halls open at 10 a.m. for first session summer school.
- 21 -- Registration, first session summer school.
- 21 -- Edgar's opens for the summer. Happy Hour prices all night, 6 p.m. midnight.
- 21-6/3 -- Videotape: "Rock Garden." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
  - 22 -- Classes begin, first session summer school.
  - 22 -- Film: "Cromwell." Sponsored by University Union, Edgar's Nightclub, 9 p.m. University I.D. and proof of age required, 25¢ admission charge.
  - 23 -- Film: "Rage." Sponsored by University Union, Edgar's Nightclub, 9 p.m. University I.D. and proof of age required, 25¢ admission charge.
  - 23-24 -- Conference: "Conference and Exhibit on Small Computers." Sponsored by Continuing Engineering Education. For more information, see related article in this issue of the Newsletter or call Bill Barnett, 656-3375.
    - 24 -- Thursday Afternoon Delight: Ice Cream Sundaes. Sponsored by University Union, front entrance to the Union, noon 1 p.m. University I.D. required, 50¢ charge.

- 24 -- Live Entertainment in Edgar's. Sponsored by University Union, Edgar's Nightclub, 9 p.m. University I.D. and proof of age required, 50¢ admission charge.
- 28 -- Surprise Night at Edgar's. Call 656-2461 for more information.
- 21-25, -- Ninth Annual College Week for Senior Citizens. Offers elderly South Caro-28-6/1 linians a variety of educational and recreational opportunities ranging from gardening and estate planning to crafts and yoga. Sponsored by Recreation and Park Administration Department and the South Carolina Commission on Aging. Call 656-2477 for more information.
  - 29 -- Film: "Which Way to the Front?" Sponsored by University Union, Edgar's Nightclub, 9 p.m. University I.D. and proof of age required, 25¢ admission charge.
  - 30 -- Film: "Jane Eyre." Sponsored by University Union, Edgar's Nightclub, 9 p.m. University I.D. and proof of age required, 25¢ admission charge.
  - 30 -- Workshop: "Human Relations and Communication Workshop for Office Personnel."
    An opportunity for staff members to enhance and/or modify their behaviors in the direction of better communication, mutual respect, and an increased awareness of consumer problems. Sponsored by Counseling Center, 200
    Tillman Hall, 8 a.m. noon. Open to all faculty and staff, no charge.
  - 31 -- Thursday Afternoon Delight: Ice Cream Sundaes. Sponsored by University Union, front entrance to the Union, noon 1 p.m. University I.D. required, 50¢ charge.
  - 31 -- Live Entertainment in Edgar's. Sponsored by University Union, Edgar's Nightclub, 9 p.m. University I.D. and proof of age required, 50¢ admission charge.
  - 31 -- Workshop: "Principles of IV Fluid Administration" conducted by Veronica Rempusheski, M.S., R.N., instructor in Clemson's College of Nursing. Sponsored by College of Nursing's Department of Continuing Education. Enrollment limited to LPN's, preregistration required. Call 656-3079 for more information.

# PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

CLEMSON

UNIVERSITY

Vol. 18 No. 19

CLASS OF '79 LARGEST IN CLEMSON HISTORY

President Edwards conferred 1,330 diplomas May 11 to the largest graduating class in Clemson history.

It was the 61st and final commencement for Edwards, who retires in June.

During his 21-year tenure as Clemson's chief executive, Edwards has personally conferred every degree to Clemson graduates who attended commencement exercises.

In his address to the class of '79, Edwards called for a re-examination of "the ethical components in higher education." He said the solutions to the "grave and pressing problems" confronting free societies today "is as dependent upon developing a moral and ethical consensus as it is upon acquiring new knowledge.

"The production of knowledge is mainly a function of the human mind. But the wise and creative use of knowledge relates more directly to the human heart," he said.

Edwards also awarded the University's two highest academic honors to graduating seniors. Recipient of the Norris Medal, presented to the best all-around student on the basis of scholastic and extracurricular achievement, was James H. Mehserle Jr. of Ft. Walton Beach, Fla.

Mehserle recorded a 3.92 grade point average while serving three years as a varsity cheerleader and two years as vice president of the Student Alumni Council, in addition to winning a number of academic honors in his major field of architecture.

Recipient of the Faculty Scholarship Award for the highest final grade point average was Jane W. Cutler of Greenville. A biochemistry major, Cutler completed her studies at Clemson with a perfect June 1, 1979

4.0 average.

Twenty-four seniors also received second lieutenant commissions in ROTC ceremonies during commencement. Fifteen Army and nine Air Force commissions were awarded.

In a separate ceremony Thursday at the University's last faculty meeting of the year, Edwards was awarded the President Emeritus title by Clemson Board of Trustee chairman Paul W. McAlister of Laurens.

#### STUDENTS PICK 'MASTER TEACHER'

From Socrates to the 20th century, the teaching profession has been an honored and cherished pursuit.

Teachers often influence more who we are and what we become than even our parents. But with falling test scores, job shortages and the threat of walkouts, taxpayers have begun to question the value of what today's teachers have to offer.

"Sweeping reconsiderations of where we're going in education" is what Horace Fleming calls for. Fleming is a man worth listening to. He has just been chosen the 1979 Alumni Master Teacher by the Clemson student body.

"We don't need to train students, we need to make them think," says the 35-year-old political science professor. He says today's fragmented and complex society demands that educators help students "gain an appreciation of who they are, what kind of society they live in, how they fit into that society and how important their role is."

He cites the current controversy over the future of nuclear energy as a crucial example of the need for broader education. "We can no longer depend on experts with very narrow and specialized backgrounds

to define our needs for us because we have no guarantee that they really understand the true concerns of the general public."

Fleming sees a trend away from overspecialization in higher education as the
need for communication among different
segments of society becomes more acute.
"We need engineers who can talk to artists,
and we need artists who can understand,
for example, the technology of nuclear
energy," he says. "We must become more
conversant in our society, and college is
the place where one learns to be conversant."

Recalling his freshman year at the University of Georgia, Fleming says his only direction then was for "an education with breadth. I wanted to learn as much about as many different things as I could. One reason was that I didn't know what I wanted to do with my life, and second, the teachers I admired and looked to as role models were people who were broadly educated."

One of the most important functions of teachers today, says Fleming, is being a model or "sounding board" for students. "Students don't want you just to be their pal. They're looking for someone with the willingness to listen to them and with a genuine interest in motivating them. They want and need to be challenged."

He sees the teacher's role becoming more difficult as the pressures of an uncertain future build on students. "Students find more and more demands made on them to succeed more rapidly than ever before, and it's got to result in greater frustrations for them."

But if the demands on student and teacher are increasing, he adds, so are the possibilities for rewards.

"There's nothing more satisfying and fascinating for me than to have a positive impact on a lot of people. That's why I could never bring myself to leave teaching."

# COLLEGE OF SCIENCES MAKES TWO NEW APPOINTMENTS

Two new appointments have been announced by Henry E. Vogel, dean of the College of Sciences.

Charles Ronald "Ron" Dillon, native of Charlotte, N.C., has been named head of the Botany Department.

Dillon was with U. S. Rubber Company for 10 years before graduating from the University of North Carolina at Chapel Hill in 1965 with an A.B. degree in zoology. He received the Ph.D. in botany from UNC-Chapel Hill in 1971.

Dillon has been at Clemson since 1970 and served as acting head of the department this year. He was president of the Clemson Faculty Senate during the 1974 academic year and is a member of the board of directors of the Water Resources Research Institute.

An expert in aquatic biology, Dillon served two years as a governor's appointee to the S.C. Coastal Council Advisory Committee and was on the Council's legislation drafting committee in 1977.

The other new appointment in the College of Sciences is Richard D. Ringeisen, who has been named associate head of the Department of Mathematical Sciences.

Ringeisen comes to Clemson from the Aerospace Medical Research Laboratory at Wright-Patterson Air Force Base in Ohio, where he was scientist-in-residence in the human engineering division for the past year.

He was on leave from his position as associate professor of mathematics at the Fort Wayne campus of Purdue University, where he has been since 1974.

Ringeisen, who did his undergraduate work at Manchester College in Indiana and received his M.S. and Ph.D. degrees from

Michigan State University, has also taught at Michigan State and Colgate University.

The department has more than 300 majors at the undergraduate and graduate levels and teaches math courses required in nearly every curriculum of the University.

#### EDWARDS HONORED BY ARMY AND AIR FORCE

More than 45 years have passed since President Edwards last paraded on Bowman Field as a member of the Clemson College corps of cadets.

Now he has been honored by the U.S. Army and Air Force for his service to the state and nation "as an educator, Army officer and leader."

Edwards has been presented the Distinguished Civilian Service Award by the Department of Army, and the Air University Plaque by the Air Force.

The Army award, presented on behalf of Army Secretary Clifford Alexander by Maj. Gen. Forrest Abbott, of the Office of the Deputy Chief of Staff for Personnel, recognizes distinguished service "which contributes to the accomplishment of the Army's mission."

Lt. Gen. Raymond B. Furlong, commander of the Air University, awarded the Air Force plaque in acknowledgement of Edwards' "significant contributions to Air Force professional education."

Edwards has served as a civilian adviser to both the Secretary of the Air Force and the Secretary of the Army concerning the goals of ROTC programs on the nation's college campuses.

Taking over the presidency at a time when Clemson was still making the transition from military college to civilian institution, Edwards continued to encourage participation in the school's ROTC program as a way for a student to earn a "second degree," that of an officer's commission.

Despite the strife that afflicted many campuses during the 1960s, Edwards'

"personal leadership prevented the military science program from being disrupted at Clemson," says Lt. Col. Roy Herron, who heads the University's Military Science Department. Today, says Herron, the University's ROTC programs are in their "healthiest posture" in years, largely because of the "devotion, concern and personal support" of Edwards.

In 1972 Edwards was awarded the Outstanding Civilian Service Medal for his advisory service to the Army. He received the Air Force ROTC Outstanding Service Award in 1973 for his service as a member and chairman of the Air Force ROTC Advisory Panel.

#### EXTENSION SERVICE ECONOMIST HONORED

A Clemson Extension Service production and marketing specialist was presented a tobacco economics award for outstanding contributions, in New York ceremonies.

Max I. Loyd received the citation from the Tobacco Merchant's Association. It's one of two given annually to economists "for a single contribution of exceptional merit or for sustained contributions advancing knowledge and understanding of tobacco economics."

Loyd's work areas with Cooperative Extension include tobacco marketing and policy. He is a member of several tobacco committees, and activities have involved studies on the impact of tobacco on the S. C. economy, marketing and policy alternatives, and others.

#### CABINET APPROVES VARIOUS POLICY DECISIONS

In recent meetings of the President's Cabinet, the following policy decisions were approved:

Parents' Day, November 3, 1979—The Cabinet approved the opening of campus facilities for visitation in conjunction with the home football game which has been designated Parents' Day. All colleges will be open for a few hours before the game, staffed with department heads and faculty, for

parents, prospective students and other visitors to inquire about programs, facilities, etc.

Fencing Enclosing the Construction Site of New Student Housing—A recommendation of the vice president for business and finance that fencing be installed to enclose the construction site of the new student housing complex on the east side of South Palmetto Boulevard near Hanover House was approved. Construction should be completed by fall semester 1980.

Allocation of 1978 Alumni Loyalty Fund

Income—Prior approval by the Cabinet
of the allocation of unrestricted income
of the 1978 Alumni Loyalty Fund effective
July 1, 1979, was confirmed.

College Board Fee Waiver--The Cabinet approved University participation in the 1979-80 College Board Fee Waiver Program. Cooperating colleges agree to waive their application fees for students who receive College Board test fee waivers.

<u>Traffic and Parking</u>—The following recommendations of the Traffic and Parking Committee were approved:

- a. That the State Highway Department be contacted concerning feasibility of erecting a "no right turn on red" sign at the traffic light at the intersection of College Avenue and Highway 93.
- b. That a sidewalk and/or steps be located strategically on the hill from Oak Terrace to the crosswalk on College Avenue.
- c. That metal posts be placed at the entrance to the sidewalk between Bryan Mall and the south side of Parkway Drive to prevent passage of vehicles through the area.

President of the Student Body as a Member of the Athletic Council—A Student Senate Resolution that the president of the student body be a full voting member on the Athletic Council in addition to the president of the Student Senate was approved.

Woodland Cemetery—It was agreed that persons who leave the service of the University for reasons other than retirement shall be removed from the waiting list for burial sites in Woodland Cemetery. Previous assignments of burial sites to persons who left the service of the University for reasons other than retirement are not affected by this policy.

Te

D

Policy for Use of the Alumni Center
Lounge—The policy approved by the
Cabinet on Jan. 15, 1976, was changed to
increase fees and provide for use of the
fees by the director of Alumni Relations
to maintain the lounge. Reservations
already contracted are not affected by
these fee changes. The policy is as
follows:

Any person representing an organizational entity of Clemson University may contract the lounge for official or quasi-official functions by certifying the organization's University status and making a refundable deposit of \$50 per date. The deposit may be forfeited under conditions stipulated in the lease agreement.

A Clemson alumnus or alumna and members of his or her immediate family residing in the same household may contract the lounge for a use fee of \$100 per date.

Receipts accruing from forfeited deposits and use fees will be deposited to the Alumni Center account. These funds will be used for maintenance and upkeep of the lounge and kitchen area as necessary beyond the normal services provided by the Physical Plant Division.

Library Hours--Extension of library hours to l a.m. on Sunday through Thursday nights, approved as a pilot program Oct. 26, 1978, was approved for the fall and spring semesters 1979-80. The following schedule of library hours was also approved for the summer sessions of 1979.

Sunday 1 p.m. - 11 p.m.

Monday-Friday 7:45 a.m. - 11 p.m.

Saturday 8 a.m. - 6 p.m.

#### AGRICULTURAL ENGINEERING

W. Harold Allen (Assoc Prof), Joe M. Bunn (Prof) and Richard A. Spray (Assoc Prof) participated in the national workshop on "Use of Solar Energy in Crop Drying" at the Georgia Institute of Technology April 10-11.

James T. Ligon (Prof) and T. V. Wilson (Prof) have received a \$31,000 grant from USDA-SEA-AR to conduct a study of water and energy requirements for subsurface and center-pivot irrigation systems in the South Carolina Coastal Plain.

On April 20-21 ten members of the department attended the spring meeting of the South Carolina Section of the American Society of Agricultural Engineers at Rock Hill. Darrell L. Roberts (Assoc Prof) was elected chairman and Prof. Bunn was elected vice chairman (Public Relations) for 1979-80. The meeting included tours of the Catawba Nuclear Power Plant, Bowater Paper Mill, Fishing Creek Floodwater Retarding Structure #4, Dickie Harper Swine Farm and Joe Barnett Dairy Farm.

Jerry R. Lambert (Prof), Gerald D. Christenbury (Asst Prof) and Virgil L. Quisenberry (Assoc Prof, Agron & Soils) have received a \$68,000 grant from USDA-SEA-AR to investigate irrigation scheduling models for efficient use of water and energy.

#### AGRONOMY AND SOILS

- W. D. Graham (Prof), J. Rice (Assoc Prof) and E. A. Rupert (Prof) participated in Plant Breeding Symposium II in Ames, IA, March 11-16.
- J. H. Palmer (Assoc Prof) presented a paper, "Limited Seedbed Preparation Schemes for Soybeans," co-authored by T. H. Garner (Prof, Agric Engr) at the World Soybean Research Conference II at Raleigh, NC, March 25-29.

#### CHEMISTRY

R. A. Abramovitch (Prof and Hd) and S. Wake published a paper in a journal honoring Prof. Nozoe's 80th birthday. Prof. Nozoe is an eminent Japanese chemist. The paper, "Flash Vacuum Pyrolysis of 3,5-Disubstituted β Phenethylsulfonyl Azides," appeared in Heterocycles, 11, 377 (1978).

#### CIVIL ENGINEERING

Subhash C. Anand (Prof), Michael L. Morrell (Asst Prof) and Richard Bertz (Grad Stu) attended the AISC National Engineering Conference in Chicago May 9-11 at the invitation of the American Institute of Steel Construction. This invitation was extended because Richard Bertz is one of the four students in the country who has been awarded a fellowship by AISC for the amount of \$3,500 to pursue graduate studies in civil engineering related to fabricated steel structures. Mr. Bertz will conduct research on post elastic behavior of column-web connections under the direction of Prof. Anand as his master's thesis project.

Charles B. Chesnutt (Vstg Asst Prof) has been named chairman of the Publications Committee of the Journal of the Waterway, Port, Coastal and Ocean Division of the American Society of Civil Engineers, effective Oct. 1, 1979. Prof. Chesnutt is teaching in the Civil Engineering Department for calendar year 1979 under an Intergovernmental Personnel Act Agreement with the U. S. Army Coastal Engineering Research Center at Fort Belvoir, VA.

J. Edwin Clark (Assoc Prof) participated in the Committee Meeting of the Air Transport Publications Committee of the ASCE. The committee meeting was held in conjunction with the International Air Conference that met in New Orleans April 30-May 2.

Prof. Clark attended a three-day workshop held in Arlington, TX, April 18-20. This workshop on evaluation techniques for highway safety projects was sponsored by the National Highway Traffic Safety Administration.

Herbert W. Busching (Prof and Hd) was a speaker at the 5th Roofing Technology Conference held at the National Bureau of Standards, Gaithersburg, MD, April 19-20. The title of Prof. Busching's presentation was "Effects of Moisture and Temperature on Roofing Membranes in Thermally Efficient Roofing Systems."

#### DAIRY SCIENCE

A "Comparison of the Ultrastructure of Mouse Blastocysts Developed in vivo and in vitro" was presented at the 21st Southeastern Developmental Biology Conference, Fontana Village, Fontana Dam, NC, April 5-7 by G. M. Lindner (Grad Asst) and J. F. Dickey (Prof).

#### ENGINEERING TECHNOLOGY

Carl R. Lindenmeyer (Assoc Prof) was elected president of the Greenville-Spartanburg Chapter of the American Institute of Industrial Engineers.

Prof. Lindenmeyer is a referee for the international journal, <u>Computers and</u> Industrial Engineering.

David V. Hutton (Assoc Prof) and Daniel L. Ryan (Assoc Prof) attended the SME Annual Education Forum on "Impact of Future Technology on Manufacturing Education" in Detroit, MI, May 2.

Prof. Ryan presented a seminar, "Computer-Aided Design of Machine Elements," at Cleveland State University, Cleveland, OH, April 27-28.

#### ENGLISH

Two members of the English faculty had essays included in Carol Nabb's Help

From One to Another: Techniques That

Work in the Teaching of English Composition (Dallas: Taylor Publishing Co., 1979): Sterling Eisiminger (Asst Prof),

"Using Vocabulary in the Composition"

Class," pp. 19-21, and John Idol (Assoc Prof), "Please Say it Again, Sam: A Few Words in Praise of Cliches," pp. 29-32.

Two members of the English faculty were on the program of the Conference on College Composition and Communication, Minneapolis, April 5-7: Dixie Elise Hickman (Asst Prof) read "Oral Revision Techniques: Toward Writer Independence," and Ronald F. Lunsford (Asst Prof) read "Entitling as a Pre-Writing Heuristic." Marvin K. L. Ching (Memphis State) read Prof. Lunsford's "Byron's Spatial Imagery: A Psycholinguistic Approach" at the Southeastern Conference on Linguistics, Old Dominion University, Norfolk, VA, April 7-8.

Prof. Idol has been elected to serve as vice-president of the Piedmont Area Phi Beta Kappa Association.

Jerome Mandel (Prof) read "What Teaching Medieval Literature Elsewhere Teaches Us About Teaching Medieval Literature Here" at the Fourteenth Conference on Medieval Studies at Western Michigan University, Kalamazoo, MI, May 5.

#### ENVIRONMENTAL SYSTEMS ENGINEERING

A. W. Elzerman (Asst Prof) presented a seminar on "Ozone Deposition to the Sea Surface" at the University of Wisconsin-Madison, and a paper, "Organic Carbon, Phosphorus, and Nitrogen in the Surface Microlayer of Southern Lake Michigan," at the Great Lakes Research Conference in Rochester, NY, in early May.

#### FOOD SCIENCE

Robert F. Borgman (Prof) presented an invited talk, "Dietary Fiber," to the Home Economics-Nutrition In-service Training Extension Group April 17 at Clemson.

The following papers were presented at the S.C. Academy of Science Annual Meeting April 6 at the University of South Carolina, Columbia: Robert G. Bursey (Assoc Prof) and Jim L. Johnson (Clinical Res Spec), "The Influence of Ethanol

Consumption Prior to Conception on Perinatal Development in Rats," <u>Bull. S.C. Acad. Sci. 41:57</u>; Cathy B. Shirley (Vstg Instr), Woodie P. Williams Jr. (Prof and Hd) and Prof. Bursey, "Protein Quality Evaluation in Typical Breakfast Menu," Bull. S.C. Acad. Sci. 41:69.

Charles V. Morr (Stender Prof) recently published "Technical Problems and Opportunities in Using Vegetable Proteins in Dairy Products" in the J. American Oil Chemists' Society 56 (3): 383-385 (1979).

#### FORESTRY

D. H. Van Lear (Prof) and S. K. Cox (For Aide) co-authored a paper, "Alternative Methods of Regenerating White Pine in South Carolina," recently published in the Proceedings of the Symposium for the Management of Pines in the Interior South held at Knoxville, TN, Nov. 7-8.

S. M. Jones (Res For) and B. A. Dunn (Assoc Prof) co-authored a paper, "Aspects of the Biology of Shortia galacifolia (Diapensiaceae)," presented at the Annual Meeting of the Association of Southeastern Biologists held at Chattanooga, TN.

#### HISTORY

W. F. Steirer Jr. (Assoc Prof) delivered a paper, "Slave as Super-slave: Who Really Did Work in the Cotton Fields Down South?" at the 49th annual meeting of the South Carolina Historical Association at Clemson April 7.

#### **HORTICULTURE**

Bruce J. Parliman (Asst Prof) has been awarded a Fulbright-Hays Lectureship under the Mutual Educational and Cultural Exchange Program. Lectures and seminars in the areas of Evolution of Crop Plants and Mutation Breeding and Genetics will be presented at The Instituto Nacional de Technología Agropecuaria, Pergamino, Argentina from July to December 1979. The award will also afford the opportunity for small fruit crop germ plasm studies.

The department was awarded a grant by the Department of Energy and the President's Committee on Employment of the Handicapped to participate in the ACT '79 (Appropriate Community Technology) Program in Washington, DC. Horticulture staff members T. L. Senn (Prof and Hd), Stephen Olson (Ag Sc Assoc), Adele Olson (Ag Sc Assoc) and Carey Burriss (Ag Aide) presented a Solar Greenhouse/Hortitherapy Demonstration showing how handicapped individuals can use horticultural methods and skills while improving the quality of their lives and the environment. The theme and outstanding quality of the Clemson demonstration made it one of the highlights for the estimated 75,000 people attending the four days of ACT '79.

The <u>Horticulture</u> book published by McGraw-Hill and authored by Gordon Halfacre (Assoc Prof) and John Barden (Assoc Prof, VPI) received the Helen S. Hull award for Literary Horticulture achievement in America presented by the Garden Clubs of America at the national meeting held in New Orleans May 9.

#### INTERDISCIPLINARY STUDIES

Joon B. Park (Assoc Prof), S. O. Young (former Grad Stu), G. H. Kenner (Assoc Prof), A. F. von Recum(Prof), B. R. Myers (Dentist, Clemson), and R. R. Moore (Dentist, Seneca) have published a paper, "Dental Implant Fixation by Electrically Mediated Process II. Tissue Ingrowth," Biomaterials, Medical Devices and Artificial Organs, 6 (4) 291-303 (1978).

#### MATHEMATICAL SCIENCES

J. V. Brawley (Prof) spoke May 4 at Armstrong State College's Spring Initiation Banquet of Pi Mu Epsilon, a national mathematics honorary society. His lecture was entitled "Can You Count."

James P. Jarvis (Asst Prof) and Patricia A. Hutchinson (Grad Stu) presented a paper, "An Approximation Procedure for Multi-server Loss Systems," at the joint national ORSA/TIMS Meeting in New Orleans, April 30-May 2.

On April 27-28 the department, in cooperation with Southside High School, hosted the Annual State Convention of Mu Alpha Theta, the high school mather 's fraternity. Over 130 of the best matnematics students in the state represented their schools and chapters in teams of eight in a competitive series of mathematics examinations, called "The Math Bowl." The 1st, 2nd and 3rd place team trophies were taken home by Southside High, Brookland-Cayce High and Berea High, respectively. In addition to the exam competition, the students enjoyed a disco and an overnight stay in the Outdoor Recreation Laboratory. The Saturday program included a keynote address, "Paradoxes" by Donald Kreider of Dartmouth College, and invited hour talks by John Kenelly (Prof), "When Are Things the Same Shape," and John Luedeman (Assoc Prof), "Game Theory." The Math Bowl competition was prepared and administered by Herman Senter (Asst Prof) and Fred Morgan (Asst Prof). The above named faculty members formed the host committee for the convention. John Fulton (Prof and Hd) chaired one of the special address sessions and presented the prizes at the awards ceremony.

Prof. Kenelly was the invited speaker at a special session May 7 on Information for Advanced Placement for the parents of students in the Rock Hill School District. The session was attended by 200 parents and the school board members in the district.

Calvin T. Long (Vstg Adjunct Prof) spent April 18-21 in Boston where he attended the National Meeting of the National Council of Teachers of Mathematics and presented an invited address, "Math Labs, Graphing, and the Line of Best Fit." He also attended meetings of the Executive Committee and of the Council of the Conference Board of the Mathematical Sciences. On behalf of CUPM he was asked to organize a panel on "Administrative Structures for the Mathematical Sciences" for the joint winter meeting of the American Mathematical Society and the Mathematical Association of America to be held in San Antonio next January.

#### MECHANICAL ENGINEERING

James G. Goree (Prof) spent the past academic year, 1973-79, on sabbatical leave at the NASA-Langley Research Center in Hampton, VA. He worked with the Materials Division and was concerned primarily with basic research in the area of analytical studies of fracture in composite materials. While at NASA, Prof. Goree presented a number of seminars at the Center as well as a paper, "Stresses in a Three-Dimensional Unidirectional Composite Containing Broken Fibers," at the 15th Annual Meeting of the Society of Engineering Science at the University of Florida, Gainesville, Dec. 4.

CO

he

Hu

at

Ed

#### PHYSICS AND ASTRONOMY

Philip B. Burt (Prof) published a paper, "Multidimensional Solutions of the Sine Gordon Equation," in <u>Physics Letters</u> B82, 423-26 (1979).

#### POULTRY SCIENCE

Denzil V. Maurice (Asst Prof) was presented the Ph.D. award by the University of Georgia chapter of Sigma Xi at ceremonies in Athens May 3. This award is presented annually to the Ph.D. recipient who prepared the most outstanding dissertation in the university's graduate program. Prof. Maurice's dissertation was entitled "Nutritional Factors Affecting Hepatic Lipid Metabolism and Hemorrhages in Domestic Fowl."

#### PROFESSIONAL DEVELOPMENT

J. Michael McDonald (Asst Prof, IM) is chairperson for the following courses: "Successful Engineering Management Techniques," to be held June 18-19 at Clemson; "From Secretary to Administrative Assistant," to be held June 21 at the Ramada Inn in Rock Hill; and "Preventive Maintenance," to be held June 22 at the Ramada Inn, Rock Hill.

Claude S. Simpson Jr. (Instr, IM and Asst

Dir, Prof Dev) will chair the following courses: "Positive Discipline," to be held June 20 at the Ramada Inn, Rock Hill; "Names and Faces," to be held June 21 at the Ramada Inn, Rock Hill; and "Managing Human Performance," to be held June 25-26 at Clemson.

Edward S. Olson (Prof, Text) will chair a conference, "The Chemistry of Dyeing," to be held June 19-21 on campus.

Ray Sawyer (Asst Prof, English) is chairperson for "How to Become a More Effective Speaker, " to be held June 28-29 on campus.

Leonard Berger (Assoc Prof, Psych) is chairperson for "Effective Affirmative Action Programs," to be held June 27-28 on campus.

#### SYSTEMS ENGINEERING

R. Michael Harnett (Assoc Prof) attended the Third International Conference of Action for Disaster at the University of Aberdeen in Aberdeen, Scotland. The program addressed "Disasters Caused by Cold" and was held March 28-29.

Prof. Harnett co-authored papers entitled "Computation of Maximum Likelihood Estimates for the Lognormal Model Using Optimization" and "Smoke Detector System Availability" in the Proceedings of the Eleventh Annual Southeastern Symposium on System Theory held at Clemson March 12-13.

MINUTES OF THE COUNCIL OF ACADEMIC DEANS MEETING, APRIL 16, 1979

The Council of Academic Deans met April 16, 1979, in the fifth floor conference room of the Nursing Building. Dean Hurst called the meeting to order at 9 a.m. with the following present: Dean Anderson, Dean McClure, Dean Landrith, Dean Wilcox, Dean Box, Dean Efland (for Dean Trevillian), that the information that he hopes to Dean Cox, Dean Labecki, Dean Vogel, Dean Green, Dean Schwartz, Dean Willis, and Dr. Horace Fleming, incoming president of the Faculty Senate.

The recommendations made by the Graduate

Council at its March 6 meeting relative to additions, deletions and changes in courses and/or curricula were approved.

It was recommended by Dean H. M. Cox that a "Proposed Statement for Adoption Relative to 600 Level Courses" be approved. This statement was originally considered at the Feb. 27 meeting, but no action was taken at that time and a committee headed by Dean Cox was appointed by Dean Hurst to give it further study. The statement, as proposed by the committee, was approved by the Council of Academic Deans without change.

Dean Hurst called attention to the concert which is scheduled for April 26 in Littlejohn Coliseum at 8 p.m. The University Chorus, the University Concert Band, and pianist Lillian Harder will present a special presidential retirement concert -- "A Salute to President Robert C. Edwards."

Dean Hurst advised that during the months of May, June and July, the council of Academic Deans will probably meet on an irregular schedule. He further stated that the Educational Council will probably meet on an irregular basis.

Dean Hurst asked the deans for their recommendations regarding the IBM Typewriter Custom Service Agreement proposal that was presented at the March meeting by Messrs. Jack Wilson and James Boleman. It was the consensus of the deans that the concept of a University contract with IBM was acceptable, provided the colleges can retain some flexibility in determining which machines they wish to have under contract.

In response to a request from the Faculty Senate, Dean Hurst requested the deans to check on the availability of scores relative to professional exams that are administered to students/graduates of professional programs. He asked the deans to respond to him by May 1. Dean Hurst explained receive later will be compiled in a report probably by mid-September.

A Revised Clemson University Mission Statement was distributed. This statement has been approved by the Task Force on Institutional and Sector Missions appointed by the Commission on Higher Education.

Dean Schwartz informed the deans that the new IBM 3033 Computer is scheduled to be installed during the period of June 1-6. The present IBM 370/165-II will be taken down at 6 p.m. Friday, June 1, and the IBM 3033 should start up on Wednesday morning, June 6. He asked the deans to let him know if this schedule would cause any particular problems for them. He stated further that the new computer will be installed in the same place as the 165 and will take up virtually less space and use less power.

Dean Willis stated that the new "Record of Professional Qualifications" has been printed and will be available from Central Stores within 10 days. He urged that the new forms be requisitioned and put into use as soon as possible.

Dean Hurst welcomed Dr. Fleming into the group as president of the Faculty Senate. Dr. Fleming expressed his willingness to be of service and stated that he would be forthright, candid and open in his communications with the administration.

Respectfully submitted, Annette H. Kesler

# Calendar of Campus Events

- 1.-- Deadline to apply for University loans and Work-Study employment for the 1979-80 academic year.
- 1 -- Short Course: "Effective Personnel Selection." Sponsored by Professional Development. Call 656-2200 for more information.
- 4 -- Monday Night Baseball. Sponsored by University Union, Edgar's, 8 p.m. University ID and proof of age required.
- 4-17 -- Videotape: "Doonesbury." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
  - 4-8 -- Workshop: "Interactive Computing." High school students learn about and work with computers. Sponsored by Continuing Engineering Education. Call 656-3308 for more information.
- 4-8 -- Short Course: "Industrial Pollution Control." Sponsored by Continuing Engineering Education. Call 656-3308 for more information.
- 4-29 -- Art Exhibition: "Oils and Ceramics." Features a wide variety of work from a number of S.C. artists. On loan from the S.C. state art collection. Cosponsored by the S.C. Museum Commission and the College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 Sundays. Open to the public, no admission charge.
  - 5 -- Short Course: "Principles of Parenteral Hyperalimentation." Conducted by Veronica Rempusheski, M.S., R.N., instructor. Sponsored by Continuing Education Department of the College of Nursing. Open to registered nurses, preregistration required. Call 656-3078 for more information.
  - 5 -- Film: "Hounds of Baskerville." Sponsored by University Union, Edgar's, 9 p.m. University ID and proof of age required, 25¢ admission charge.

JUNE 1, 1979

# CALENDAR OF CAMPUS EVENTS (Cont.)

5-8 -- State Convention: "Fifty-Second Annual Convention of the S.C. Association of Future Farmers of America." Highlights include speaking and parliamentary procedure contest finals; presentation of scholarships, state farmer degrees, and various awards; and election of officers. Sponsored by Agricultural Education Department, Daniel Hall Auditorium, begins 8 a.m. June 5 and ends 1 p.m. June 8. Open to the public, no admission charge. Expected attendance 400 plus.

- 5-7 -- Short Course: "Textile Testing and Quality Control." Sponsored by Professional Development. Call 656-2200 for more information.
  - 6 -- Film: "Klute." Sponsored by University Union, Edgar's, 9 p.m. University ID and proof of age required, 25¢ admission charge.
- 6-8 -- Workshop: "Basic Management Processes for the Newly Appointed Manager."

  Sponsored by Professional Development. Call 656-2200 for more information.
  - 7 -- Thursday Afternoon Delight: Watermelon slices. Sponsored by University Union, front entrance to the Union, 12 noon-1 p.m., 10¢ charge.
  - 7 -- Live Entertainment at Edgar's. Sponsored by University Union, Edgar's, 9 p.m. University ID and proof of age required, 50¢ admission charge.
  - 8 -- Workshop: "Techniques of Venipuncture." Conducted by Veronica Rempusheski, M.S., R.N., instructor. Sponsored by the Continuing Education Department of the College of Nursing. Open to registered nurses and licensed practical nurses, pre-registration required. Call 656-3078 for more information.
- 10-16 -- Jaycee Camp Hope. Co-sponsored by the S.C. Association for Retarded Citizens, S.C. Jaycees and the RPA Department. Outdoor Laboratory. Open to mentally retarded South Carolinians over 18 years old. Call 656-2477 for more information.
- 11-12 -- New Student Orientation.
  - 11 -- Monday Night Baseball. Sponsored by University Union, Edgar's, 8 p.m. University ID and proof of age required.
- 11-22 -- Workshop: "Pre-Engineering Workshop for Females." Participants will receive extra training in math and science subjects and build an engineering project. Sponsored by Continuing Engineering Education. Call 656-3308 for more information.
- 11-15 -- Conference: "Non-Woven Fabrics Forum." Sponsored by Professional Development.

  Call 656-2200 for more information.
- 11-18 -- Seminar: "Robert A. Taft Seminar in Government and Politics." Thirty S.C. teachers, librarians and administrators broaden their understanding and improve their teaching of the American system of government and two-party politics. Sponsored by the Department of Political Science. Call 656-3233 for more information.

# CALENDAR OF CAMPUS EVENTS (Cont.)

- 11-12 -- Short Course: "First Line Management." Sponsored by Professional Development.

  Call 656-2200 for more information.
- 11-29 -- Workshop: "Institute for Industrial Arts and Graphic Arts Teachers."

  Participants will upgrade their technical knowledge and skill and gain experience in a hands-on laboratory-oriented program with individualized instruction. Sponsored jointly by the Industrial Education Department and The Printing Industry of the Carolinas Association. Call 656-3447 for more information.
- 11-28 -- Special Institute Course: "Industrial Education 610, Personnel Development for Vocational Teacher Educators." Provides prospective vocational teacher educators with the necessary preparation to teach in-service courses for trade and industrial education teachers. Sponsored jointly by the State Department of Education and Industrial Education Department. Open to persons holding an earned master's or doctor's degree, having 3 years vocational teaching experience, and having preparation in curriculum development and evaluation. Call 656-3447 for more information.
  - 12 -- Film: "Gidget." Sponsored by University Union, Edgar's, 9 p.m. University ID and proof of age required, 25¢ admission charge.
  - 13 -- Film: "Terror." Sponsored by University Union, Edgar's, 9 p.m. University ID and proof of age required, 25¢ admission charge.
  - 13 -- Workshop: "The Helping Relationship." Conducted by Glenn D. Schultz, M.S., R.N., instructor. Sponsored by Continuing Education Department of the College of Nursing. Open to registered nurses, pre-registration required. Call 656-3079 for more information.
- 14-15 -- New Student Orientation.
  - 14 -- Thursday Afternoon Delight: Ice cream sundaes. Sponsored by University Union, front entrance to the Union, 12 noon-1 p.m., 50¢ charge.
- 14-15 -- Short Course: "Safety in Plant Operation for Water and Wastewater Plant Operators." Sponsored by Continuing Engineering Education. Call 656-3308 for more information.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY



Vol. 18 No. 20

June 15, 1979

CLEMSON UNIVERSITY LIBRAR SOUTH CAROLINA RODE

GOV. RILEY HEADS LIST AT TAFT SEMINAR

Gov. Richard Riley heads a roster of 21 guest lecturers for Clemson University's seventh annual Robert A. Taft Seminar in Government being held June 11-22.

Riley spoke June 11 on "Changes Needed in State Government."

Participating in the Taft Seminar are 30 elementary and high school teachers from schools in 16 South Carolina counties. Their expenses are paid by the Robert A. Taft Institute of Government in New York City.

The seminar is designed to give teachers of government-related courses a better understanding of America's two-party system from persons directly involved in the nation's political processes.

Also addressing state government issues during the two-week seminar are state representatives Theo Mitchell of Greenville, Ed Simpson of Pickens, Marshall Cain of Aiken and S.C. Attorney General Daniel McLeod.

U.S. Rep. Butler Derrick will speak on issues confronting Congress, Washington correspondent Lee Bandy of the State newspaper will speak on the Washington press corps, and radio station WGXL's news director, Dave Partridge, will discuss the press and South Carolina politics.

The two-party political system will be examined by former Gov. James B. Edwards and Democratic Party chairman Don Fowler.

Among the other lecturers are University of South Carolina history professor Daniel W. Hollis, <u>Greenville News political cartoonist Kate Palmer</u>, Greenville County solicitor W. W. Wilkins, and editorial analyst William D. Workman

of the Columbia State.

JUN 15 1979

Each of the 21 lectures will be videotaped for use in high school social studies classes throughout South Carolina.

Since 1973, 210 South Carolina teachers have participated in the Taft Seminars at Clemson.

Director of the Clemson program is Charles W. Dunn, head of the Political Science Department. Deputy director is Harold E. Albert, professor of political science.

#### TEACHER COURSES OFFERED AT PIEDMONT TEC

Graduate courses in education and English for teachers are being offered during a special three-week summer session June 11-29 at Piedmont Technical College in Greenwood.

Courses include English literature for teachers, educational tests and measurements, and three other education courses. The instruction can be applied toward teacher certification or advanced degrees.

Classes meet Monday through Friday from 1:45 to 4:45 p.m. Tuition is \$84 per course.

Additional information is available from the Office of Educational Services, telephone 656-2497.

#### ACCOUNTING AND FINANCE

Alison C. Drews (Asst Prof) has been elected to serve as director of communications for the Anderson Area Chapter of the National Association of Accountants for 1979-1980.

Jimmy D. Sheriff (Assoc Prof) was chairman of the Economics Section of the South Carolina Academy of Science in Columbia April 6. He also presented a paper, "A Capital Maintenance Theory of Accounting," to the Academy.

Prof. Sheriff was chairman of the technical session, "Use of the Computer in Accounting Curricula," at the South Carolina Association of Accounting Instructors' Spring Meeting April 7 at Winthrop College in Rock Hill.

Prof. Sheriff was chairman for one session of a Small Business Management Seminar sponsored by the Small Business Administration and the National Association of Accountants at Anderson College March 23-24. He also presented a paper, "Financial Decision Making," at the seminar.

Prof. Sheriff was a discussant at the "President's Roundtable" at a Chapter Management Seminar sponsored by the Carolinas Council of the National Association of Accountants in Myrtle Beach April 20.

Prof. Sheriff was installed May 15 as president of the Anderson Area Chapter of the National Association of Accountants for the 1979-80 chapter year.

#### AGRICULTURAL ENGINEERING

Darrell L. Roberts (Assoc Prof) attended the Mid-American Biomass Energy Workshop at Purdue University, West Lafayette, IN, May 21-23.

Gerald D. Christenbury (Asst Prof) visited Jonesboro, AR, May 29-31 as a guest of the FMC Corp. to review the status of the newly developed electrostatic crop sprayer. One of eight units to be tested in the United States in 1979 will be located at Bishopville.

Jerry Lambert (Prof) and Itzhak Meirson (Vstg Instr) attended the Workshop on Crop Simulation at Purdue University May 15-17. Prof. Lambert chaired a session on "Phenology Based Yield

Forecasting Models." Mr. Meirson presented a paper authored by himself and Prof. Lambert entitled "Simulated Cotton Field on Tilled Hardpan Soils."

#### **CHEMISTRY**

John W. Huffman (Prof), in collaboration with D. A. Dougherty and K. Mislow (Princeton University) and J. Jacobus (Tulane University), has published a paper, "Study of the A-Ring Conformation in 4, 4-Dimethyl-3-keto Steroids," in Journal of Organic Chemistry, 44, 1585 (1979).

R. A. Abramovitch (Prof and Hd) has published a paper, "Addition of Enolates to Activated Acetylenes. C- versus O-Alkylation," in the Polish Journal of Chemistry, 53 177 (1979). This paper was published in an issue dedicated to Prof. Osman Achmatowicz on the occasion of his 80th birthday and was co-authored by I. Shinkai.

On May 24 Prof. Abramovitch gave a lecture at McNeil Laboratories, Ft. Washington, PA, on "Novel Compounds in the Benzisothiazole Ring System." That evening he was the guest of the Philadelphia Organic Chemistry Club and presented an invited lecture to that body at the University of Pennsylvania on the topic of "Heteroaromatic  $\underline{N}$ -Oxides."

Prof. Huffman and R. Pandian (Former Grad Stu) have published a paper, "Synthesis of (+)-Cacalol," in the Journal of Organic Chemistry, 44, 1851 (1979).

# CIVIL ENGINEERING

Russell H. Brown (Assoc Prof) was awarded a grant from the National Science Foundation, Division of Problem-Focused Research Application, to study "Cyclic Response of Masonry Anchor Bolts." The research should result in improved performance of certain types of buildings during earthquakes. The grant, in the amount of \$130,000, is effective April 15, 1979, and is of 30-month duration.

Julie 15, 1979 3

#### **ECONOMICS**

Russell Shannon (Prof) published an article, "Profit," in the April issue of the Clemson University <u>Textile Marketing</u> Letter.

Hugh Macaulay (Alumni Prof) spoke April 25 to the Piedmont Economics Club of Greenville on "Economic Mythology."

Rex L. Cottle (Assoc Prof and Hd) gave an invited paper at the Annual Eastern Economic Association Meetings May 10-12 in Boston, MA. The paper was entitled "Unemployment Insurance: Prescription for or Against Unemployment." He also chaired a session on "Regulation and Human Welfare."

Ralph D. Elliott (Assoc Prof and Dir, Prof Dev) presented a paper, "Determinants of the Level of Union Decertification Activity 1948-1977," at the International Atlantic Economic Conference held May 10-18 in Salzburg and Vienna, Austria. The paper was co-authored by Benjamin M. Hawkins (Instr).

Bruce Yandle (Prof) was a speaker at the annual meeting of the Bearing Special-ist Association held at Marco Beach, FL, April 23. Prof. Yandle's speech was entitled "Government Regulation: A Decade of Change."

#### ELEMENTARY AND SECONDARY EDUCATION

Robert P. Green Jr. (Vstg Asst Prof) published an article, "Toward Solving the Essay Dilemma," in <u>The High School</u> Journal, Vol. 62, No. 7, April 1979.

#### ENTOMOLOGY AND ECONOMIC ZOOLOGY

T. E. Skelton (Prof) has been appointed to the Committee on Education of the Intersociety Consortium for Plant Protection. The consortium is representative of The American Phytopathological Society, The Entomological Society of America, The Society of Nematologists, and The Weed Science Society of America.

A paper, "Evaluation of the Effects of Six Selected Pesticides on the Growth of Nomuraea rileyi and Beauvaria bassiana in Broth Cultures," by W. A. Gardner, R. Sutton (former Grad Res Assts) and R. Noblet (Assoc Prof) was published in the Journal of the Georgia Entomological Society 14:106-113, 1979.

- T. R. Adkins Jr. (Prof) attended and participated in the carbaryl assessment team meeting on data gaps in Portland, OR, April 23-26.
- G. R. Carner (Prof) attended and presented a paper at the annual meeting of the Southeastern Electron Microscopy Society held in Athens, GA, May 24-26.
- T. M. Brown (Asst Prof) attended and participated in the symposium meeting of the Atlanta Chromatography Discussion Group held in Atlanta, GA, May 23.

Merle Shepard (Assoc Prof) attended and participated in the Crop Modeling Conference held at Purdue University, West Lafayette, IN, May 15-18. He also attended and participated in the conference on insect migration held in Atlanta, May 21-22.

- A. G. Eversole (Assoc Prof) attended the annual regional research project S-83 meeting (Freshwater Food Animals) and presented committee reports and research findings in Knoxville, TN, June 6-9.
- S. G. Turnipseed (Prof) attended and discussed the integrated pest management grant (Adkisson Proposal) held in Washington, DC, May 1.
- S. B. Hays (Prof and Hd) has been appointed chairman of the S. E. Branch Entomological Society of America Nominating Committee by the president of the S. E. Branch and chairman of the S. E. Branch ARPE Nominating Committee by the president-elect of ESA-ARPE. He was also appointed a member of the national ESA Nominating Committee for Committees by the president of ESA.

Richard C. Fox (Prof) has been appointed communications officer by the S. C. Pest

Control Association at their 1979 spring meeting.

#### HOME ECONOMICS

Janice R. McRee (Asst Prof) has been appointed chairman of the National Expanded Food and Nutrition Education Program Workshop Planning and Evaluation Committee. She presided at the planning committee meeting in Washington, DC, April 17-20. The National Workshop, which will involve all 50 states and Puerto Rico, will be held in Denver, CO, Nov. 6-8.

#### INDUSTRIAL EDUCATION

Alfred F. Newton (Prof and Dept Hd) participated in the Second Annual Southeastern Trade and Industrial Education Conference at Lake Lanier, GA, May 14-16. He was elected president of this newly organized group of state supervisors and teacher educators from 11 southeastern states. During the conference, Prof. Newton presided at a general session, presented a report on "Certification of T & I Teachers in the Southeastern States," and served on the program planning committee for the organization.

Prof. Newton made a presentation to the Carolina Society for Training and Development at their spring meeting in Greenville May 18. The topic of his talk was "Writing Instructional Materials for Readability."

#### INDUSTRIAL MANAGEMENT

Thomas W. Zimmerer (Prof) conducted a workshop for engineering managers from around the southeastern United States May 15-16. The workshop was sponsored by the Greater Greenville Chamber of Commerce. Prof. Zimmerer also published an article, "Organizations and Creativity," (co-authored with Ms. Deborah Panson) in the Spring 1979 issue of the Review of Industrial Management and Textile Science.

Carl Gooding (Assoc Prof) was a judge for the Southeastern Universities MBA Competition May 10-12 in Athens, GA.

J. Wayne Patterson (Asst Prof) co-authored "Customer Service Queries in a Self-Service Environment." He presented the paper to Southwest Marketing in Houston, TX, March 15-17. Prof. Patterson also co-authored "Measurement of Efficiency in the Utilization of Human Resources in Statewide Youth Service Bureaus: An Interstate Comparison" and presented it to the Midwest AIDS in Chicago, IL, May 3-5. Both articles were published in the Proceedings.

#### INTERDISCIPLINARY STUDIES

Joon B. Park (Assoc Prof) was a session chairman on polymethylmethacrylate at the 5th Annual Meeting of the Society for Biomaterials held at Clemson April 28-May 2. His graduate students presented three papers at the meeting:

B. Kelly (Grad Stu), M. Grether (former Grad Stu, Ceramic Engr), G. H. Kenner (Assoc Prof), F. W. Cooke (Prof), and J. B. Park, "In Vivo Experimental Results of Piezoelectric Implants" and "Measurement of Potentials in Bone with and without a Piezoelectric Implant."
N. N. Salman (Grad Stu), J. B. Park, G. H. Kenner, and A. F. von Recum (Prof), "Effect of Electrical Stimulation on Bone Growth into Porous PMMA and Co-Cr-Mo Alloy."

Prof. Park also presented a paper at the American Fracture Association Meeting held in Myrtle Beach May 22 entitled "Electrical Stimulation of Fracture Healing and Device Fixation."

Prof. Park, C. S. Malstrom (former stu, Engineering Analysis) and Prof. von Recum have published a paper, "Intermedullary Fixation of Implants Pre-Coated with Bone Cement: A Preliminary Study," Biomaterials, Medical Devices and Artificial Organs, 6 (4) 361-373 (1978).

June 15, 1979 5

#### PHYSICS AND ASTRONOMY

Philip B. Burt (Prof) published a paper, "Energy Bands in Nonlinear Schrodinger Equation," in the April 16 issue of Physics Letters  $\underline{A}$ .

A. L. Laskar (Prof) was invited by IBM Research Center, Yorktown Heights, NY, for consultation May 14-15 and presented a colloquium, "Recent Developments in the Study of Charge and Mass Transport in Ionic Solids."

John Ray (Prof) presented a lecture, "Cosmology: The Large Scale Structure of the Universe," to the Western Section of the American Chemical Engineering Society May 18 in Greenville.

#### PROFESSIONAL DEVELOPMENT

Kathryn S. Collins (Adm Asst) presented a one-day workshop, "Increasing Enrollments through Effective Brochures," to the Eastern Area Health Education Center in Greenville, NC, May 21.

Hassan Behery (Assoc Prof, Tex) and Herbert Bushing (Hd, Civil Engr) will co-chair a course, "Textiles in Civil Engineering," to be held on campus July 10-12.

## RECREATION AND PARK ADMINISTRATION

H. Jesse Grove (Assoc Prof) is the author of A Seasonal Interpreter's Handbook for the Blue Ridge Parkway, N.C. - Va. The handbook will be utilized by the National Park Service in their training of seasonal interpretive personnel on the Parkway beginning this summer season.

Prof. Grove was the principal speaker at the dedication of the Robert L. Smith Memorial Park at Bennettsville May 27. The park was made possible through a combined grant effort of the Department of Housing and Urban Development and the Heritage Conservation and Recreation Service. Plans prepared through the extension efforts of the Department of

Recreation and Park Administration in 1977, with Prof. Grove as team leader, secured the grants for Bennettsville. The 20-acre park site was developed at an approximate cost of \$200,000.

Paul R. Saunders (Vstg Instr) represented the National Recreation and Park Association at the National Forest Products Association sponsored tour of the International Paper Company, Southlands Experiment Forest in Bainbridge, GA, May 21-23. The tour demonstrated the use of fire and other forest management practices as tools for enhancing wildlife habitat. Five other special interest groups also had representatives present for the tour.

#### TEXTILES

M. J. Drews (Asst Prof) and W. C. Jarvis (Asst Prof) have been awarded a one year grant for \$38,987 to study "Antimony Oxide-Organohalogen - Polymer Substrate Interactions in the Solid Phase," from the Center for Fire Research, Office of Extramural Fire Research, National Bureau of Standards.

#### ZOOLOGY

Edward E. Ruppert (Asst Prof) has recently received funding for an NSF grant entitled "Comparative Ultrastructure of Myoepithelial Pharynges in Lower Metazoa." This grant totals \$41,980 for two years beginning April 1, 1979.

MINUTES OF THE MEETING OF THE EDUCATIONAL COUNCIL, APRIL 2, 1979

PRESENT: Robert C. Edwards, presiding,
Ben W. Anderson, Luther P. Anderson,
Melvin E. Barnette, Judith J. Chodil,
Benton H. Box, H. Morris Cox, Walter T.
Cox, J. W. Gordon Gourlay, Claud B.
Green, Victor Hurst, Harold F. Landrith,
Melvin C. Long, Harlan E. McClure,
Joseph B. McDevitt, H. C. McLellan,
Stanley G. Nicholas, A. E. Schwartz,
William F. Steirer, Jr, Wallace D.
Trevillian, K. N. Vickery, Henry E.

Vogel, Lyle C. Wilcox, S. M. Willis, E. N. Tyndall, secretary.

#### 1. Minutes

The minutes of the meeting of March 5, 1979, were approved as submitted.

# 2. Academic Matters by Colleges:

Statement and Recommendations: The Dean of the University recommended the following:

A. COLLEGE OF ARCHITECTURE

#### New Undergraduate Course

CA AH 305 Man and the Built Environment 3 cr (3,0)

B. COLLEGE OF SCIENCES

# 1) Undergraduate Course Deletion:

Zool 481 Methods in Developmental Biology 2 cr (0,6)

# 2) Graduate Course Deletion:

Zool 681 Methods in Developmental Biology 2 cr (0,6)

Action: APPROVED

E. N. Tyndall, Secretary

# MINUTES OF THE FACULTY SENATE MEETING, APRIL 17, 1979

#### 1. Call to Order

The meeting was called to order by President Steirer at 3:33 p.m.

# 2. Approval of Minutes

President Steirer noted that Mr. Darrell Hickman would address the Senate on the subject of the University Five-Year Program Plan instead of the peer group parity budgeting study as indicated on page 3, paragraph 7, of the Minutes. Senator Adkins, outgoing secretary, noted that Mr. John Gentry had offered approximately twelve minor corrections to item three on the first page of the Minutes which described his presentation to the Senate on March 27th. The Senate unanimously approved the changes to be made at Senator Adkins discretion. The corrected Minutes were then unanimously approved.

# 3. Old President's Report; as follows by President Steirer:

- 1. In this, my last report to the Senate, I would like to express my heart-felt appreciation to the members of the Senate for their support and encouragement during the past year. It goes without saying that only such support enables the Senate to achieve any degree of success. We have achieved some successes; the credit is yours.
- 2. On FS-79-2-7 on Student Liability Insurance, John C. Newton, Director of Auxiliary Services, submits the following information:
  - a. Students whose parents have a Homeowner's Policy or a Comprehensive Personal Liability Policy are "insured" under those policies up to the limits of those policies;
  - b. Part-time and student employees are covered by the University's tort liability policy and students are covered by the University's automobile liability policy when driving a University car on official business;
  - c. The state law authorizing tort liability coverage for employees of state agencies does not provide for coverage of students;
  - d. If coverage could be authorized, the increase in the University premium would be approximately \$75,000 per year at current rates.
- 3. a. FS-79-3-2, Establishment of Physical Plant Advisory Committee: Vice President Barnette would like a blueprint describing what is being asked for.
  - b. FS-79-3-3, Retention of Present Seat Assignments: The option of retaining their present seat assignments will continue to be extended to faculty and staff.
  - c. FS-79-3-4, Resolution on Reexaminations: This resolution is now before the Undergraduate Council.

- d. FS-79-3-6, Resolution on University Admissions: All the Faculty Senators have received all the information available on admissions, including the 1961 admissions statement. You are asked to look at that material and respond to it in some way.
- e. FS-79-3-7, Faculty Compensation to Minimize Losses Due to Inflation: It may be premature to talk in these terms since the Senate has a committee recently constituted to establish priorities for the administration.
- f. The current policy on official travel outside the United States to attend professional meetings is simple. No state funds can be used for such travel except to Canada. Why the Budget and Control Board draws a distinction between Canada and Mexico, e.g., is not known.
- 4. Issues that I had hoped would be resolved in this past year include the Revised Faculty Constitution, the Copyright Policy, the Class Withdrawal Policy, a 2.0 GPR in major area required by graduation, and a more liberal policy on public statements by faculty members. I wish you luck and success in resolving these matters
- 5. Faculty Senate Resolution Scoreboard:

	Resolution	Adopted/ Accepted	Rejected	Under Discussion
77-9-1	Payroll Deduction for Contribu- tions to Alumni & University Funds	X		
78-2-2	Affirmative Action Committee		X	
78-2-3	Plus and Minus Final Grades		X	
78-2-4	Athletic Ticket Priorities		Х	
78-2-5	IPTAY Support of Academic Excellen	ce	Х	
78-3-1	on Athletic Ticket Priorities		Х	
78-3-2	East Campus Parking		Х	
78-3-5	Copyright Policy			Х
78-4-1	Faculty Compensation	Report Adopted		
78-4-2	Group Life Insurance Option	X		
78-4-3	Summer Employment of Faculty		Х	

	Resolution	Adopted/ Accepted	Rejected	Under Discussion
78-4-4	Meeting with Faculty Representatives from other State Institutions	X (Internally	)	
78-4-6	Commending President Noblet	X (Internally	)	
78-5-1	Invitation to Col. Tyndall and Dean Sam Willis to talk about Section 504	X (Internally	)	
78-5-2	on Fringe Benefits	X (Internally	)	
78-6-1	on Ad Hoc Committee on Inter- collegiate Athletics	X (Internally	)	
78-9-1	Honoring Gordon McCabe	X		
78-9-2	Publishing Honors Criteria			X
78-9-3	Increase Time Available Adminis- tratively for Honors Program	Х		
78-9-4	Honors Commons Room	X		
78-9-5	Endorsement of Safety Measures Taken at Pedestrian Crosswalk to Clemson House			X
78-9-6	Grade Distribution	X		
78-9-7	Retirement Policy			X
78-9-8	Establishment of Committee on Protocol			Х
78-9-9	Social Events on President Edwards' Retirement	X (Internally	)	
78-9-10	Commendation of Tiger Editor and Staff	X (Internally	)	

-	Resolution	Adopted/ Accepted	Rejected	Under Discussion
78-10-3	Thesis Research in College of Agricultural Sciences	X		
78-11-1	Reexamination for Graduating Seniors		x	
79-1-1	on Consulting Policy	X		
79-1-3	on Being Informed of Professional Test Scores	Χ.		
79-2-1	Class Withdrawal Policy			X
79-2-2	Proposed Amendments to State Employment Grievance Procedure	X		
79-2-3	Optional Retirement Plans			X
79-2-4	Changes in S. C. Retirement			X
79-2-5	on Summer Employment		X	
79-2-6	on Faculty Compensation	X		
79-2-7	Student Liability Insurance Coverage	ge	X	
79-2-8	Provision of Towels & Soap for Labs	5	X	
79-3-1	Ad Hoc Committee on Senate Priorities	X (Interna	ally)	
79-3-2	Physical Plant Advisory Committee			Х
79-3-3	Retention of Present Seat Assignmen	nts X		
79-3-4	Reexaminations			X
79-3-6	University Admissions			X
79-3-7	Faculty Compensation to Minimize Losses Due to Inflation			Х

President Steirer added the following remarks:

- A. With regard to Resolution 78-4-1, it was adopted by the Senate only.
- B. There has been some difficulty getting the Copyright Policy out of the Legal Council's Office.
- C. With regard to Resolution 78-9-2, there are no administrative objections; it has simply not yet been acted upon.
- D. With regard to Resolution 78-9-4, the Honors Room has been approved but no room has yet been found.
- E. With regard to Resolution 78-9-5, the Committee is still studying the asthetic aspects of a crosswalk.
- F. With regard to Resolution 79-2-1, the Graduate Council has been unable to agree.
- G. With regard to Resolution 79-3-7, the resolution seems premature in view of the fact that the current budget is in its advanced stages. The effect of this resolution must await next year's budget.

Grade inflation has become a concern of the Administration. The Faculty Senate needs to consider what, if any, action might be taken to deal with the problem.

President Steirer was questioned about the R. C. Edwards Endowment Fund with regard to the origin of the 3% of salary "quota" for faculty members, and also whether there would be an accounting of who gave what to to the fund. President Steirer answered that the 3% figure was suggested by the fund-raising organization, and that, while there would be a "percent of participation" statement, the distribution of that statement is unknown. He indicated that he saw no need for faculty concern here.

President Steirer was also questioned concerning the status of the special Committee on Governance Policy of the University and its impact on the proposed Faculty Constitution. Specifically, it was asked whether the Senate would receive a majority and minority report from the Committee. President Steirer indicated that he was somewhat disappointed with regard to the seemingly negative attitude taken by the Committee thusfar toward faculty participation, and that incoming President Fleming would see to the question of the distribution of any Committee reports.

President Steirer then turned the gavel over to incoming President Fleming.

President Fleming recognized Senator Hester, who presented President Steirer with a salutory proclamation attesting to his exemplary service to the faculty and to the University during an especially difficult year. The proclamation was signed by the members of the Senate, who gave President Steirer a standing ovation. Senator Hester then presented President Steirer an attache case as a gift from the Faculty Senate.

President Fleming introduced the new Vice President, Senator C. S. Thompson, and the new Secretary, Senator E. M. Coulter.

President Fleming then welcomed the new Senators to the organization.

# 4. Special Guest

Mr. Darrell Hickman, Assistant Vice President of Budgets and Systems addressed the Senate on the University Five-Year Program Plan. He was accompanied by Ms. Sandra J. Underwood, Research Analyst for Budgets and Systems. He discussed the origins of the Plan, noting that it was inspired by the Office of State Planning, an agency of the S. C. Budget and Control Board. He distributed excerpts from the Plan from the General Appropriation Bill now before the House of Representatives. He also made available to the Secretary of the Faculty Senate two complete copies of the Plan to be made available to any Senate member who wishes to review it. Mr. Hickman discussed the method by which the plan was compiled. This involved the solicitation of priority lists from the Colleges, which were analyzed by the administration for designation of critical areas of concern. This information was recycled to the Colleges thereby producing a final list of overall University priorities for the Five-Year Plan. These will be budgeted, as funds are available, over the five-year period. Mr. Hickman also discussed the House Budget Bill which calls for a 3.62% base pay increase, plus a \$450 flat figure. He indicated that the proposal is provisional at this juncture, and that an average 2% merit pay increase was also possible. He noted the inflationary impact of mandated raises on student fees, expressing the desire of the administration to avoid an increase in student fees, nevertheless. In addition, Mr. Hickman made the following observations:

- A. The present State budget formula for higher education is objectionable to Clemson, and it will not be followed this year, but a revised version may be followed in future years.
- B. Clemson can expect no new faculty positions not already budgeted.
- C. The reported 3.2 million dollar increase for Clemson's budget is illusory. After salary increases and other mandated increases, the real growth is approximately \$300,000 which is half of the inflationary impact on operating funds (i.e. we have suffered a net loss of \$300,000 in terms of performing at current level).
- D. There was no attempt to predict new needs in the Five-Year Plan. It was based primarily on current assessments of priorities.

Mr. Hickman's remarks were interrupted several times with questions concerning whether department heads had consulted their faculties for input into the planning process (the answer was indeterminate); the accuracy of the projection of a 2% increase in staff and a 4% increase in expenditures (the answer was that this is a South Carolina budgeting norm); flexibility in the Plan (the answer was that there will be room for change, expecially in view of the coming of a new President, but the University appears bound by the 1980-1981 planning projections which must be reflected in the budget submission of September, 1979); who the peer group universities were (the answer was Southeastern land-grant institutions); who will get the final report on the peer group salary study (the answer was that there will be certain restrictions on certain information due to committments of confidentiality

June 15, 1979 13

as between institutions supplying information, and general concern for the confidentiality of salaries. Vice President Barnette will probably determine the distribution of relevant information); why should the salaries of endowed chairs be omitted from the study (the answer was that they tend to skew the data with regard to comparing departments as between institutions because of idiocentric patterns of endowed chairs. NOTE: After spirited discussion of this point, Mr. Hickman indicated a willingness to reconsider this point); How will the information be used (the answer was that Mr. Hickman did not know); and finally, who will decide what salaries will be included and what salaries will be left out (the answer was that the study is still in the early stages and these things aren't decided as yet). Mr. Hickman concluded by expressing his confidence that the administration favored increasing faculty salaries, and he invited Senators to discuss these things with him informally at any time.

# 5. Committee Reports

A. Admissions and Scholarship - Senator Edie, Chairman, submitted the following final report, noting in addition that the definition of "major" study was complete and had been given to the President of the Senate.

This was both a busy and hopefully productive year for the committee. A number of areas were investigated and the following is a summary of the results:

# 1. Minimum Major G.P.R. for Graduation:

This effort, initiated by the 1977-1978 Admissions and Scholarship Committee, was completed. All but three departments in the University responded with definitions of which courses constitute a "major" with their curriculum. Thus, since in fact nearly all departments can define their major courses one of the major arguments against establishing a 2.0 major G.P.R. requirement for graduation seems to have been refuted. The compilation of these departmental responses is being forwarded to Dean Hurst.

#### 2. Final Exam Policy:

The committee prepared, distributed and tabulated a questionnaire covering faculty attitude and practice concerning final exam policy. This was in response to faculty concern that final exams were not uniformly being emphasized. We found that the overwhelming majority of faculty agree with the University policy of required final examinations. Also a large majority give cumulative final exams which count a significant percentage toward the final course grade. We found little evidence of large differences in the practice of administering final examinations.

#### 3. University Honors Program:

- A. The committee introduced a resolution requesting criteria for honors be published in the graduation program. The administration has agreed to this request.
- B. The committee also introduced a resolution requesting additional faculty release time for administration of the honors program. The administration has now increased the faculty release time to administer this vital program.

C. The committee also introduced a resolution supporting the honor students request for an honors common room.

#### 4. Withdrawal Period:

The committee, after consulting with the faculty members of the undergraduate council introduced a resolution which recommends the course drop period be shortened to six weeks. The Faculty Senate subsequently passed this resolution. This resolution is now before the Undergraduate Council for their approval.

# 5. Undergraduate Schólarships:

The committee drafted a letter of commendation to the Clemson University Alumni Association for its establishment of the Alumni Merit Scholar program. Also a letter to the Office of Development was drafted which urged faculty and staff support of the Faculty-Staff Merit Scholarship program.

#### 6. Professional Test Scores:

The committee introduced a resolution (which was passed by the Senate) requesting a study and publication of the collective results of Clemson students on their respective professional examinations. This study has now been begun by the Dean of the University.

# 7. University Admissions Policy:

After studying the present undergraduate admission policy, the committee introduced a resolution containing proposed policy changes. The Senate passed this resolution. The resolution requested that a formal policy based on academic considerations be established and this policy be made known to all prospective applicants. Also that the Registrar and Office of Admissions report to the Dean of the University and that a permanent University committee on admissions advise the Registrar on admissions policy.

#### 8. Re-examinations:

A resolution asking for the deletion of the present policy of re-examinations for seniors who either have a low G.P.R. or have received an  $\underline{F}$  their last semester was introduced by the committee and passed by the Senate.

 $$\operatorname{\textsc{We}}$$  leave and recommend to the 1979-80 committee consideration of the following items:

- 1. University Class Schedule
- 2. Revision of the Academic Misconduct Policy."
- B. <u>Policy Committee</u> Senator West noted that the Policy Committee awaits the majority report from the Committee on Governance of the University so as to decide what future activity will take place with regard to the proposed new faculty constitution.

- C. Research No Report
- D. Welfare Senator Burt presented a final report which follows, noting in addition that the Welfare Committee has studied the use of visiting professors over a five-year period and decided that these appointments are in compliance with the Faculty Manual's "brief association" provisions. The Welfare Committee feels that a two-year maximum appointment should govern. Senator Burt also suggested that the salaries of visiting professors should be monitored by the Welfare Committee.

"The activities of the Welfare Committee have been divided among three subcommittees; Calendar Year, chairman Bob Mazur; Academic Year, chairman Bob Lambert; Retirement, chairman Steve Melsheimer. The principal concerns of these committees have been to establish quantitative descriptions of frings benefits, to develope a policy for summer school employment and to develop quantitative comparisons between the South Carolina Retirement System and other systems such as TIAA-CREF. Other activities of the subcommittees will be described in the summaries.

As a result of last year's Welfare Committee preliminary report on Faculty compensation, an <u>ad hoc</u> committee on faculty compensation was established by the Senate. This committee, reporting to the Senate in February, determined that Clemson faculty are and have been significantly undercompensated relative to a peer group consisting of public, category I (AAUP classification), southeastern institutions. The committee recommended that these inequities be corrected at each rank in the next two years and that the Welfare Committee monitor compensation henceforth on an annual basis. In order to accomplish this monitoring, we recommend that the Retirement subcommittee enlarge its function and become the compensation subcommittee.

Calendar Year Subcommittee: This subcommittee determined the dollar value attached to the fringe benefits received by faculty. Details may be found in the November 1978 report of the Welfare Committee.

Academic Year Subcommittee: The responses received from Dean Hurst to the Welfare Committee's April 18, 1978 report on employment of Clemson faculty in Summer School were unsatisfactory. The subcommittee's replies, adopted by the Senate, can be found in the February 1979 Minutes. The Senate should continue to push for an equitable Summer School employment policy.

A study of the use of the Visiting appointment over the past five years was made. In most cases it seems that this appointment is being used in compliance with the <u>Faculty Manual</u>. The "brief association" statement in the manual should, in general, limit such appointments to no more than two years. Further details, including statistics, will be filed with this annual report.

Retirement Subcommittee: This subcommittee completed its study of SCRS and TIAA-CREF begun last year. Improvements in SCRS contained in the April 1978 report of the Welfare Committee and the desirability of an optional system were recommended to the Administration. Discussions with President Edwards led to the recommendation by the Council of Presidents that faculty be eligible for optional retirement plans. Details may be found in the February 1979 Minutes. The Senate should continue to press for the recommendations of this report."

- E. Ad hoc Senator Thompson reported that the Ad hoc Committee on Senate Policy Goals will meet on April 18th.
- F. University Councils and Committees Senator Lambert reported that the ad hoc Committee on Faculty Evaluations had completed its work and that a committee report will be out shortly. It will recommend the revision of the forms, the elimination of numbered grades at the end, and one or two other minor revisions. The Senate will be furnished a copy of the report. Senator Lambert was questioned concerning the degree of faculty feed-back to the Committee. He indicated that about one-third of the faculty responded, as did most of the department heads. Many faculty disliked the numbered grades, but some liked the requirement that department heads sit down with individual faculty members to discuss goals. The rest of the reaction was acattered.

President Fleming presented the following report from the <u>Extension</u> Council:

- (1) Non-credit registration in off-campus and continuing education programs amounted to 19,142 for the year 1978 while off-campus credit registrations were 2,364 in 134 courses. When the Cooperative Extension activities are counted, the number of contacts exceeds 2 million.
- (2) A newly-revised affirmative action plan has been adopted by the University and accepted by the S. C. Human Affairs Commission.
- (3) Clemson University has completed plans for implementing The Rehabilitation Act of 1973 requiring access to programs.

- 6. <u>President's Report</u> President Fleming
  - 1. By virtue of my office, I will represent the Faculty Senate on the following University committees during the coming year:

Athletic Council
Council of Academic Deans
Disciplinary Committee
Educational Council
Handicapped Student Advisory Committee
Planning Council
Vending Machine Committee

If I am to represent you adequately on these committees, I will need your views and opinions on issues coming before these bodies.

- 2. Meeting dates have been set for the coming year. If any changes must be made, we must accomplish them immediately.
- 3. On Wednesday, April 4, Bill Steirer and I were invited to have lunch with President-elect Atchley. During our conversation, I extended Dr. Atchley an invitation to speak to the Faculty Senate as soon as practicable after he takes office. He has enthusiastically accepted. I also requested that he consider meeting with each Senate delegation shortly after he takes office and that he use these meetings as additional means of orienting himself to the campus and University programs. He agreed that this would be useful, and we can expect him to be back in touch with us on this matter early in July or as soon as he feels he is ready to undertake this.
- 4. The Senate Ad Hoc Committee on Policy Goals has been appointed. Their report is due to the Senate on May 8, 1979. I have informed Dr. Atchley of formation of this committee and the nature of their work.
- 5. The special committee established by Dean Hurst to examine the proposed Faculty Constitution are completing their work. All that remains is Bill Steirer's minority report. When this is turned over to Dean Hurst, we will be given the majority and minority reports. I hope we can obtain these within the next two weeks. I will be speaking further with Dean Hurst about this matter.
- 6. The Athletic Department has asked us to remind all faculty and staff that May 15 is the deadline for priority on football tickets.
- 7. I have not been able to meet with Admiral McDevitt concerning the proposed University Copyright Policy. However, he has indicated that the policy in its present form is not acceptable to the Administration but that an accommodation probably can be reached. The Administration's concern is that a significant investment of resources by the University be adequately protected but that the policy not be overly burdensome on the producer of copyrightable material. He feels, specifically, that the proposed policy does not adequately protect the University. I will schedule a meeting with Admiral McDevitt within the week and report back to the Senate at our May meeting.

- 8. Dean Hurst has asked the Council of Academic Deans to check on the availability of scores and related information on how Clemson students/ graduates fare on their respective professional examinations. The deans have indicated a willingness to comply with the Senate's request that this information be made available regularly. But because of the difficulties they foresee in locating some of the results, problems in monitoring exams taken by graduates several years out of college and the fact that some examinations are given in segments over a period of time, it may be some time before we know how feasible our request is.
- 9. A revised University Mission Statement has been published. A copy is attached hereto.
- 10. The Board of Trustees will meet on campus this Friday and Saturday, April 20-21.

President Fleming also presented the following Clemson University Mission Statement, noting that there was some disappointment expressed by some Deans over the concluding four recommendations. Mr. Hickman pointed out that the Mission Statement was arrived at by a Task Force of the S. C. Commission on Higher Education in its effort at creating a Master Plan for Higher Education in South Carolina, and thus, it was not arrived at solely by Clemson officials.

#### CLEMSON UNIVERSITY MISSION STATEMENT

#### Background and Organization

Clemson University was founded in 1889 when the General Assembly accepted the terms of the will of Thomas Green Clemson, conveying land and other property to the State for that purpose. The institution opened its doors in 1893 as Clemson Agricultural College, and land-grant institution, and has evolved to its present mission as a University emphasizing the sciences and technology. In addition to the usual land-grant responsibilities of Agricultural Research and Cooperative Extension, Clemson University administers the State's Division of Regulatory and Public Service and Livestock-Poultry Health programs that in other states are handled by separate governmental agencies.

Enrollment in the University was initially limited to men; women were admitted as residential students for the first time in 1955. The Graduate School was formally organized in 1957, although post-baccalaureate programs had been offered in a few selected areas of study for some years prior to that time.

In accordance with the conditions set forth in the will of Thomas Green Clemson and the Act of Acceptance by the General Assembly, Clemson University is governed by a Board of Trustees consisting of 13 members. Of these, six are elected by the General Assembly and seven are life members who elect their own successors.

For the purpose of carrying out its roles in instruction, research, and public service, Clemson is currently organized into nine colleges: Agricultural Sciences, Architecture, Education, Engineering, Forest and Recreation Resources, Industrial Management and Textile Science, Liberal Arts, Nursing and Sciences.

#### Academic Programs

Programs leading to baccalaureate and master's degrees are offered through all of the nine colleges. Doctoral programs are currently authorized in 24 specialities in the Colleges of Agricultural Sciences, Engineering, Industrial Management and Textile Science, and Sciences.

Clemson offers numerous degree programs not offered elsewhere in the State, including the following: agriculture, architecture, city and regional planning, building construction and management, agricultural education, industrial education, textiles, forestry, wood utilization, bioengineering, ceramic engineering, environmental engineering, and recreation and park administration.

Degree programs through the doctorate in the physical and biological sciences and in mathematics provide the foundations of basic knowledge required in all other technological fields of study. Selected programs in the humanities, in letters, and in the arts are currently authorized.

The number of new degree programs required at Clemson is not expected to increase significantly in the foreseeable future. The University is currently planning the addition of new programs at the bachelors and masters levels in computer science and computer engineering, and at the doctoral level is exploring the feasibility of new programs in vocational and technical education and in nursing.

#### Research and Public Service

Research is an indispensable part of most post-baccalaureate education, and Clemson provides research opportunities in all the fields in which graduate instruction is offered. Major emphasis is placed on the sciences and technology. In keeping with its land-grant role, Clemson's research and graduate programs concentrate on activities that directly support the economic growth and development of the state and the improvement of the quality of life of its citizens. Faculty consulting and advisory activities are important to state industry and as backup support to state government agencies.

Clemson is designated as the land-grant university to serve South Carolina under the terms of the Morrill Act of 1862, and the University is assigned the responsibility for the S. C. Agricultural Experiment Station under the provisions of the Hatch Act of 1887, as well as for the operation of the Cooperative Extension Service authorized by the Smith-Lever Act of 1914. Agricultural Research is conducted not only on campus but through six branch Experiment Stations. The Cooperative Extension Service, no longer limited solely to agriculture, seeks practical applications of developing technology to the production, distribution, and marketing of products and services.

Clemson has long been assigned by the General Assembly the responsibility to administer numerous regulatory functions. These programs are administered through the Division of Regulatory and Public Service Programs and the Livestock-Poultry Health Division.

The Division of Regulatory and Public Service Programs is comprised of the Plant Pest Regulatory Service, the Department of Seed Certification, the Department of Fertilizer Inspection and Analysis, and a portion of the activities of the Department of Agricultural Chemical Services. This division has the responsibility of assuring consumers that fertilizers, pesticides, and seeds meet the standards to produce marketable and profitable crops and also has the responsibility to require that various quarantines and rules and regulations promulgated for the protection from certain insects, weeds, and plant diseases are adequately and impartially enforced.

The mission of the Livestock-Poultry Health Division is to control and eradicate certain infectious and contagious diseases of livestock in South Carolina, to supervise and inspect animals moving through livestock auction markets, to promulgate animal import regulations to protect against the introduction of new diseases, and to supervise the proper inspection of meat and poultry.

Currently, every College of the University offers continuing education programs, many off campus and not all for degree credit, with the largest enrollments occurring in the Colleges of Agricultural Sciences, Engineering, Industrial Management and Textile Science, and in Nursing.

#### Students

By policy of the Board of Trustees, Clemson limits its enrollment of full-time students on the campus to approximately 10,000. Including all registrants for degree credit, on- and off-campus, total enrollment in Fall, 1978, was about 11,300. This figure is not expected to increase significantly in the foreseeable future. Of this number, undergraduate students comprise about 80%, a proportion that is not expected to change significantly. The undergraduate student body is predominantly residential and full-time. Admissions requirements include a combination of class rank and aptitude test scores sufficient to indicate satisfactory progress toward the desired degree at Clemson.

#### Special Considerations

Clemson's role as the major land-grant institution in the state greatly increases its public services activities and responsibilities as a postsecondary institution.

In the spirit of cooperation with the state's other postsecondary institutions, Clemson conducts activities, both by formal agreement and informally, with a majority of the State's other universities and colleges, including USC, S. C. State, the Citadel, Winthrop, MUSC and TEC. In addition, Furman University and Clemson jointly administer, in Greenville, a program leading to the Master of Business Administration degree, to meet the needs of that area for such training. This unusual venture constitutes the only known instance wherein an earned degree is awarded by two universities, one public and one independent.

#### Recommendations

It is recommended that:

- (1) Clemson University continue to maintain the State's primary programs at the baccalaureate level and above in agriculture, architecture, city and regional planning, building construction and management, agricultural education, industrial education, textiles, forestry, wood utilization, bioengineering, ceramic engineering, environmental engineering, and recreation and park administration.
- (2) Clemson University continue to focus its principal efforts, particularly at the post-baccalaureate levels, in the above areas and in the sciences and technologies, keeping in mind the need for strong supporting programs in the liberal arts, social sciences and humanities areas.
- (3) The state continue to look to Clemson University as a major source of skilled manpower, research and public service, particularly in those areas where the University already provides the sole source of this training and these services.
- (4) Clemson University continue to limit its enrollment to approximately 10,000 full-time on-campus students.

It was suggested by Senator Young that the proposed Senate Meeting with President Atchley be scheduled at some time other than in the summer. Pres. Fleming agreed.

Senator Edie noted that too much long-range planning at Clemson occurs without faculty input. He expressed the desire that we be consulted in the future. Pres. Fleming expressed optimism in this regard because of his initial impression of the new administration.

#### 7. Old Business

- A. Copyright Policy Admiral McDevitt has not yet met with the Faculty Senate with regard to the proposed Copyright Policy. President Fleming senses that the administration does not feel that Clemson is adequately protected where substantial support has been given for the production of copyrightable material. On the other hand, President Fleming feels that the administration intends to be liberal in its attitude toward self-generated material. President Fleming and the chairman of the Research Committee will meet with Admiral McDevitt soon and will report to the Senate.
- B. <u>FS-79-3-5</u> This resolution on Academic Misconduct which was tabled during the March Meeting was left on the table at the request of Senator Edie who wished it to be considered by the new Admissions and Scholarship Committee. A motion to re-commit the resolution to that committee was approved unanimously.
- C. The following revised version of a letter of appreciation to President Edwards was approved unanimously and will be sent to him in the near future.

President Robert C. Edwards Sikes Hall Clemson University

Dear President Edwards:

The Faculty Senate commends you for the decision made last July to comply with the law of the land (Title VI) and not to participate in the golf tournament at Orangeburg. It is good to know that Clemson does not need to be forced to do what is both right and necessary in the area of Civil Rights. We hope that Clemson University continues to take the lead among institutions of higher education in the area of race relations.

Sincerely yours,

William F. Steirer, Jr.

Horace W. Fleming, Jr.

WFS/HWF/lm

## 8. New Business

The following persons were elected to the Faculty Senate Advisory Committee:

Agricultural Sciences:	 -	 -	В.	R.	Smith
Architecture:	 -	 -	J.	L.	Young
Education:	 -	 -	W.	E.	West
Engineering:	 -	 	J.	C.	Hester
Forest & Recreation Resources:	 -	 -	D.	L.	Ham
Industrial Management & Textile Science:	 -	 -	G.	н.	Worm
Liberal Arts:	 -	 	С.	Α.	Grubb
Library:	 -	 -	М.	Α.	Armistead
Nursing:	 -	 	Р.	М.	Kline
Sciences:	 -	 	D.	S.	Snipes

9. The meeting adjourned at 5:35 p.m.

Respectfully Submitted,

Thuin Mauth Edwin M. Coulter

Secretary

#### Senators Absent:

Agricultural Sciences: A. R. Mazur

J. W. Dick

H. M. Harris (substitute present)

Education:

L. H. Blanton

Sciences:

H. F. Senter

EMC/1m

# Calendar of Campus Events

- 15 -- Art Exhibition: "Oils and Ceramics." Wide variety of works from a number of South Carolina artists on loan from the South Carolina Art Collection. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m. 4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
- 17-8/4 -- Camp Logan. Co-sponsored by the South Carolina Department of Mental Health and the RPA Department. Open to emotionally disturbed children. Call 656-2477 for more information.
- 17-23 -- Jaycee Camp Hope. Co-sponsored by the S.C. Association for Retarded Citizens, S.C. Jaycees and the RPA Department. Open to mentally retarded South Carolinians between 13 and 18 years of age. Call 656-2477 for more information.
- 18-19 -- New Student Orientation.
  - 18 -- Monday Night Baseball. Sponsored by University Union, Edgar's, 8 p.m. University ID and proof of age required.
- 18-30 -- Videotape: "Maddog and the Wrestling Queen." Sponsored by University Union, loggia, shown on request. Open to students, faculty, staff and guests, no charge.
  - 19 -- Film: "Magoo, Man of Mystery." Sponsored by University Union, Edgar's, 9 p.m. University ID and proof of age required, 25¢ admission charge.
  - 20 -- Film: "The Quiet Man." Sponsored by University Union, Edgar's, 9 p.m. University ID and proof of age required, 25¢ admission charge.
- 21-22 -- New Student Orientation.
  - 21 -- Thursday Afternoon Delight: Watermelon slices. Sponsored by University Union, front entrance to the Union, 12 noon-1 p.m., 10¢ charge.
  - 21 -- Live Entertainment at Edgar's. Sponsored by University Union, Edgar's, 9 p.m. University ID and proof of age required, 50¢ admission charge.
  - 21 -- Tube races. Sponsored by University Union, East Bank, 4 p.m., prizes awarded. Call 656-2461 for more information.
- 24-30 -- Jaycee Camp Hope. Co-sponsored by the S.C. Association for Mentally Retarded Citizens, S.C. Jaycees and the RPA Department. Open to mentally retarded South Carolinians between 8 and 12 years of age. Call 656-2477 for more information.
  - 25 -- Monday Night Baseball. Sponsored by University Union, Edgar's, 8 p.m. University ID and proof of age required.
  - 25 -- Amateur Snapshot Contest. Sponsored by University Union, entry deadline 6/22, sign-up and details at Union Information desk.

- 26 -- Film: "Damn the Defiant." Sponsored by University Union, Edgar's, 9 p.m. University ID and proof of age required, 25¢ admission charge.
- 27-28 -- Examinations, 1st session summer school.
  - 27 -- Film: "Star Trek-Menagerie." Sponsored by University Union, Edgar's, 9 p.m. University ID and proof of age required, 25¢ admission charge.
  - 28 -- Live Entertainment at Edgar's. Sponsored by University Union, Edgar's, 9 p.m. University ID and proof of age required, 50¢ admission charge.

# NEWSLETTER

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY



Vol. 18 No. 21

#### CAR RENTAL CONTRACT SIGNED WITH HERTZ

James M. Boleman, Jr., director of the purchasing and supply service systems division, has announced that the Division of General Services has awarded a contract to Hertz Corp. for car rental services for state employees.

Hertz will provide rental service of compact automobiles to South Carolina State employees when such vehicles are required for official business. Normally such use will be required when the employee has traveled away from his duty station by means other than automobile, and requires an automobile for transportation upon arrival. Most requirements will be for out-of-state points of origin.

The following options are available under this contract:

- a. Contract Rate: \$23 per day includes unlimited mileage and no discount. Vehicles must be returned to original renting location.
- b. Discount Rate: Applies to rentals of vehicles under the Rent It Here/Leave It There policy. A 20% discount applies, and gas is not included.

Any University employee wishing to utilize these services can obtain an authorization sticker from the Purchasing Division, Service and Support Facility on Perimeter Road.

#### BIOMEDICAL RESEARCH GRANTS AWARDED

As a result of announcements in the April 15, 1979, issue of the Clemson University Newsletter and a March 23, 1979, memorandum and notice to all appropriate deans and department heads, the University Biomedical Research Support Grant (BRSG)

July 1, 1979

Committee received seven applications (proposals) for support under the current University award (\$18,020).

BOUTH CAROLINA ROOM

After peer review for scientific merit and consideration of the Committee goals and objectives, the following awards, totaling \$19,100 were made by the Committee:

R. C. Turner (Physics), "An EPR Study of Free Radicals in Bone Cement," \$3,400; D. C. Speckhard (Biochemistry), "The Role of Zinc in Bovine Liver RNA Polymerase," \$4,700; E. L. Kline (Microbiology), "The Effect of Imidazole and Imidazoleacetic on Melanoma Cells in vivo and in vitro," \$6,100.

Also, E. M. O'Brien (Electrical and Computer Engineering), "Modification and Evaluation of a Tactile Hearing Aid," \$4,000; F. R. Sias, Jr. (Electrical and Computer Engineering), "The Effect of Aging on Homeostatic Control Mechanisms," \$900.

#### AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

- B. L. Dillman (Assoc Prof) and Peter C. Luisa (former Grad Res Asst), presented a paper, "An Entropy Analysis of Areal Concentration for Manufacturing Plants," at the annual meetings of the Southern Regional Science Association April 4 in Nashville, TN.
- M. S. Henry (Assoc Prof) delivered a paper, "A Benefit-Cost Approach to the Evaluation of Survey vs. Nonsurvey Input-Output Models," at the Southern Regional Science Association meetings April 6 in Nashville, TN.
- S. C. Lilley (Vstg Asst Prof) discussed "Regionalization of Net Migration Rates by States, 1950-1970" at the annual meeting of the Population Association of America

in Philadelphia, PA, April 26-28. The paper was co-authored by Prof. Lilley, E. L. McLean (Prof) and Paul E. Lovingood Jr. (Univ of South Carolina).

J. C. O. Nyankori (Asst Prof), Earl R. Swanson (Univ of Illinois) and Donald G. Smith (Univ of Illinois) co-authored a paper, "Have Corn and Soybean Yields Reached a Plateau?" in the Journal of the American Society of Farm Managers and Rural Appraisers, 43 (1): 7-11.

Prof. Nyankori and J. W. Courter (Univ of Illinois) co-authored an article, "A Potential Source of Income for Farms with Small Land Base," in the <u>Journal of the American Society of Farm Managers and Rural Appraisers</u>, 43 (1): 71-73.

Prof. Nyankori, J. W. Courter, C. M. Sabota, and R. E. Westgreen (Univ of Illinois) co-authored a presentation, "Customer Distribution and Purchases of Selected Pick-Your-Own Strawberries in Illinois," in <a href="Proceedings 1979">Proceedings 1979</a>, Illinois Strawberry School, March 6, Mt. Vernon, IL, University of Illinois at Urbana-Champaign, and Cooperative Extension Service, College of Agriculture, Horticulture Series 14, pp. 40-49.

Prof. Nyankori, C. M. Sabota and J. W. Courter (Univ of Illinois) co-authored a presentation, "Survey of 'Pick-Your-Own' Strawberry Customers, 1978," in Proceedings 1979, Illinois Strawberry School, Mt. Vernon, IL, March 6, and Cooperative Extension Service, College of Agriculture, University of Illinois at Urbana-Champaign, Horticulture Series 8, pp. 50-51.

B. H. Robinson (Prof) attended the spring meeting of the Southern Extension Public Affairs Committee and discussed "Use-Value Taxation for Agriculture and Forestry." Prof. Robinson was elected chairman of SEPAC for 1979-80.

W. A. Tinsley (Prof) was chairman of a one-day session, "Extension Computer Applications in Agricultural Economics," at a regional meeting on Extension Computer Use held in Atlanta April 18.

Prof. Tinsley demonstrated the use of time sharing computers in evaluating careers and planning teenage family budgets at a 4-H Conference at North Carolina State University, Raleigh, NC, May 8.

M. L. Wise (Asst Prof) participated in a meeting of the "Economics of Local Government" group in St. Louis, MO, May 2-5.

#### CHEMICAL ENGINEERING

Dan D. Edie(Assoc Prof) was chairman and lecturer for a short course, "Spinnerette Design for Melt Spinning," which was sponsored by Continuing Engineering Education and the Department of Chemical Engineering May 24 and 25. The course was held in Greenville and was attended by over 150 engineers form 17 states and six foreign countries.

Prof. Edie published a paper, "Spinnerette Design Calculations for Melt Spinning," in the April 1979 issue of <u>Fiber Producer</u> magazine.

S. S. Melsheimer (Assoc Prof) presented a paper, "Latent Heat Energy Storage Using Direct Contact Heat Transfer," at the 1979 International Congress of the International Solar Energy Society in Atlanta, GA, May 31. Co-authors were Prof. Edie, J. C. Mullins (Prof) and J. F. Marra (Grad Stu).

#### CHEMISTRY

Keith McDowell (Assoc Prof) has published a paper, "Pair Theory and Reduced Green's Functions," in Chem. Phys. Lett. 63, 82 (1979).

#### ENGLISH

Sterling Eisiminger (Asst Prof) published "College Slang and Tradition" in Let's Look at America (Seoul, Korea: Hyung-Seul, 1979), a text designed for secondary schools in Korea. He also served in May as a regional judge for the Achievement Awards in the Writing Program of the National Council of Teachers of English.

William Koon (Assoc Prof) published "'Hep Me Not To Be So Mean': Flannery O'Connor's Subjectivity," in The Southern Review, 15 (1979), 322-332.

Roger Rollin (Lemon Prof) chaired a session, "Popular Culture and the Sexual Revolution," at the annual meeting of the Popular Culture Association in Pittsburg and read a paper, "Playboy and the Sexual Revolution," April 25-28.

Five members of the English faculty contributed to The South Carolina Review, 11 (Spring, 1979): Fred Baldwin (Vstg Inst), "Horses on Horseback," fiction, p. 17; Frank Day (Assoc Prof), review of Richard Lebeaux's Young Man Thoreau; Letters of Horace Hosmer to Dr. S. A. Jones, p. 83; Claud B. Green (Prof and Dean of Undergraduate Studies), reviews of Robert B. Downs' Books That Changed the South and C. Hugh Holman's The Immoderate Past: The Southern Writer and History, pp. 78-80; Robert Hill (Assoc Prof), review of Laurence Lieberman's Unassigned Frequencies: American Poetry In Review, pp. 82-3; and Victor Rudowski (Assoc Prof), review of Mark P. O. Morford and Robert J. Lenardon's Classical Mythology, pp. 75-6.

#### DAIRY SCIENCE

S. E. Mills (former Grad Stu) and B. F. Jenny (Assoc Prof) published a paper, "Effects of High Concentrate Feeding and Fasting on Plasma Glucocorticoids in Dairy Heifers," in the <u>Journal of Animal Science</u>, 48:961.

#### ENVIRONMENTAL SYSTEMS ENGINEERING

Paul B. Zielinski (Assoc Prof) presented a paper, "Studies of a Prawn Pond Reaeration Model," co-authored with W. E. Castro (Prof, Mech Engr) at the American Society of Agricultural Engineers meeting at Winnipeg, Manitoba, Canada, June 24.

A. W. Elzerman (Asst Prof) presented a paper, "Po-210 and Pb-210 Enrichment in the Sea Surface Microlayer," at the

American Geophysical Union meeting in Washington, DC, in early June.

Prof. Elzerman had a paper, "Particulate Zn, Cd, Pb and Ca in the Surface Microlayer of Southern Lake Michigan," published in the July issue of Environmental Science and Technology.

#### **FORESTRY**

The Annual Meeting of the South Carolina Society of Consulting Foresters was held at Litchfield Beach April 27-28. J. L. Haymond (Instr) served as coordinator for the program "Computing and Forest Management." L. D. Reamer (Assoc Prof), A. Marsinko (Asst Prof) and S. K. Nodine (Res For) were also invited participants.

#### HISTORY

Richard M. Golden (Asst Prof) published an article, "Religious Extremism in Mid-Seventeenth Century: The Parisian Illumines," in European Studies Review, IX (1979), 195-210.

#### MATHEMATICAL SCIENCES

Clayton V. Aucoin (Prof) attended the Conference on Experiental Applied Mathematics Education held by the Claremont Colleges, Claremont, CA, May 31-June 2. He presented an invited address, "Clemson's Graduate Programs in the Mathematical Sciences as Developed with the Aid of an N.S.F. Grant."

W. Robert Boland (Prof) in collaboration with J. S. Kowalik and E. R. Kamgnia (Washington State Univ) has had a paper, "An Exponential Function as a Model for a Conjugate Gradient Optimization Method," published in the Journal of Mathematical Analysis and Applications. 67, 476-482 (1979). In collaboration with M. Walton Powers (former Grad Stu), Prof. Boland has had another article, "The Solution of a Problem in the Theory of Epidemics," published in the Journal of Mathematical Analysis and Applications, 67, 565-585 (1979).

John Kenelly (Prof) directed the reading of the Advanced Placement Examinations in Mathematics at Princeton, NJ, June 6-13. As chief reader in mathematics, Prof. Kenelly coordinated the work of 126 mathematics faculty members from all over the United States. During the week, 25,000 mathematics examinations were scored.

John K. Luedeman (Assoc Prof) with Antonio M. Lopez Jr. (former Grad Stu) had a paper published in Czechoslovak Mathematical Journal, 29 (104) 1979, Praha. The paper is titled "Quasi-Injective S-Systems and Their S-Encomorphism Semigroup."

Prof. Luedeman graded Advanced Placement Examinations at Rider College in Lawrenceville, NJ, June 8-13.

T. G. Proctor (Prof) was chairman of a meeting of the Education Committee of the Society for Industrial and Applied Mathematics (SIAM) in Toronto, Canada, June 13. This committee is sponsoring a number of education activities, including publishing a careers booklet for applied mathematicians and conducting a national survey on the careers chosen by mathematical sciences graduates.

#### PHYSICS AND ASTRONOMY

Philip B. Burt (Prof) gave a seminar at the University of Georgia May 29 on "Solutions of Nonlinear Partial Differential Equations."

John Ray (Prof) and James Reid (Adjunct Research Assoc) recently published a paper, "More Exact Invariants for the Time-Dependent Harmonic Oscillator," <a href="Physics Letters">Physics Letters</a>, 71A 317 (1979).

#### PLANT PATHOLOGY AND PHYSIOLOGY

The following papers have been published:

A. P. Nyczepir (Grad Res Asst) and S. A. Lewis (Assoc Prof), 1979, "Relative Tolerance of Selected Soybean Cultivars to <u>Hoplolaimus columbus</u> and Possible Effects of Soil Temperature, "J. Nematol., 11: 27-31.

C. W. Blackmon (Assoc Prof) and Prof. Lewis, 1979, "Response of Soybeans and Populations of the Lance Nematode, <u>Hoplo-laimus</u> columbus, to Fumigant Nematicides Applied at Planting," <u>Nematropica</u>, 9: 3-7.

#### PROFESSIONAL DEVELOPMENT

J. Michael McDonald (Asst Prof, IM) will chair a one-day workshop, "Professional Development for Secretaries," to be held on campus July 18.

Carl Gooding (Assoc Prof, IM) is chairperson for a three-day seminar, "Essentials of Purchasing for Newly Appointed Buyers," to be held July 30-August 1 at the Ramada Inn in Greenville.

#### REDFERN HEALTH CENTER

Dr. Judson E. Hair (Director of Student Health Services) recently attended the 57th annual meeting of the American College Health Association in Washington, DC. He was elected moderator of the Representative Assembly which includes a seat on the Executive Board of the American College Health Association.

# MINUTES OF THE COUNCIL OF ACADEMIC DEANS MEETING, MAY 14, 1979

The Council of Academic Deans met May 14, 1979, in the Jordan Hall Conference Room. Dean Hurst called the meeting to order at 9:00 a.m. with the following persons present: Dean Anderson, Dean McClure, Dean Landrith, Dean Box, Dean Trevillian, Dean Cox, Dean Labecki, Dean Vogel, Dean Green, Dean Schwartz, Dean Willis, and Dr. Fleming. Attending briefly were Mr. Jack Wilson, assistant vice president for facilitating services; Mr. Ronald T. Herrin, director of payroll/employee benefit programs; and Mr. Ray L. Thompson, director of personnel.

Messrs. Wilson, Herrin and Thompson had several matters to bring before the deans.

First, they discussed ways that we might improve our system for processing CUBO-402's to expedite getting new employees on the payroll. Mr. Herrin stated that a computer study conducted over the past several months indicated that only about one-third of new employees were receiving their first paycheck on schedule. Mr. Thompson indicated that this printout could be broken down by colleges to show where the delays are occurring. The deans requested that this information be made available to them. Mr. Thompson also distributed a memorandum containing suggestions for accelerating the paperwork on new appointments and asked the deans for their input in response to these recommendations.

Secondly, Mr. Herrin addressed the deans on the matter of payroll charges to federal grants or contracts. He indicated that institutions using the appointment and workload distribution system of professional salary charges are encountering problems in trying to satisfy federal auditors that monthly reviews have actually been made. He stated that the time lag has been too great in making payroll corrections for changes in the source of funds and that a computerized study has been made in this regard which will be broken down by college and made available to the deans to help them pinpoint their problem areas. Mr. Herrin distributed some materials to further clarify the requirements to be met in attesting to the accuracy of the individual payroll charges to each grant or contract.

The recommendations made by the Undergraduate and Graduate Councils at their April 6 meetings were approved, with one exception: the Department of Mathematical Sciences had recommended the approval of a new option, Computer Engineering for the B. S. program, and there was considerable discussion over whether this should be called an option or a minor, and just what the difference is. Dean Vogel requested that we hold on this for the time being, and Dean Hurst requested Dean Green to compile a "glossary of terms" defining the various terms such as option, minor, concentration, emphasis area, etc.

Dean Hurst cautioned the deans not to continue "Visiting" persons beyond one or two years. He stated that when they are continued indefinitely, they come to expect consideration in terms of tenure and promotion.

Dean Hurst stated that the situation is not clear relative to new positions for 1979-80. At the present time, no new positions are being approved on E & G monies except temporary positions. New position requests that have come forward over the past several weeks have been held in Personnel, and will be returned to the colleges by Dean Hurst with explanations.

Dr. Fleming expressed his concerns over the fact that our faculty members who travel out of the country representing the University frequently must use their own personal funds to cover their expenses. Dr. Fleming feels we should request permission from the Budget and Control Board for state monies for this purpose, and he hopes that this policy will be changed in the near future.

Dean Hurst announced that by the fall of 1980 we will be completely synchronized with listings in the University Catalog and Schedule Booklet. All items to appear in the 1980-81 catalog must be approved by the Educational Council on or before January 1980. Dean Hurst stated that we will make exceptions only for the remainder of this year, but beginning with the fall of 1980, courses not listed in the catalog will not be taught.

Dean Vogel recommended that Dean Vickery's office provide the deans and others who are members of the stage party at commencement with some type of pass that would get them through the barrier at Littlejohn Coliseum, since they must be there early.

Dr. Fleming distributed a "Report of the Ad Hoc Committee on Policy Goals" which was approved by the Faculty Senate at their May meeting and will appear in the Newsletter as a part of their minutes. He solicited the deans' comments on this report.

Dean Willis asked the deans to see that CUBO-402's are processed for their faculty members who are receiving tenure this year.

There was considerable discussion relative to our graduation exercises. There were suggestions for changing certain aspects in order to maintain the dignity and decorum that has been long-standing at Clemson University. It was also recommended that the designation of "highest honors" include only those with a 4.0 GPR, and that only those with "highest honors" be recognized at commencement exercises. Dr. Fleming stated that the Faculty Senate will be coming up with some thoughts with regard to changes that should be effected relative to graduation, and he felt that the administration, faculty and possibly students should be

looking at the matter, and that the entire question should be addressed as soon as possible after July 1.

Dean Schwartz stated that one of the top concerns that should be addressed to Dr. Atchley is the level of graduate student stipends. Since we will be putting the budget together in August, he feels we need to get something together by the first of August. Dean Schwartz asked for the counselof the deans, and Dean Hurst stated he will get together with Dean Schwartz to appoint a committee of deans to study graduate assistant salary levels.

The meeting was adjourned at 11:30 a.m.

Respectfully submitted, Annette H. Kesler

# Calendar of Campus Events

- 1-13 -- Jaycee Camp Hope. Co-sponsored by the S.C. Association for Retarded Citizens, S.C. Jaycees and the RPA Department. Open to mentally retarded South Carolinians 13 years and older. Call 656-2477 for more information.
- 2-20 -- Special Institute Course: "Graphic Arts." Hands-on laboratory oriented program offering 3 semester hours of credit at the graduate or undergraduate level. Co-sponsored by The Printing Industry of the Carolinas Association (PICA) and the Department of Industrial Education. Open to industrial arts and graphic arts teachers, artists and art educators. Pre-registration required, fee will be charged. Call 656-3447 for more information.
- 5-6, 9-10, -- New Student Orientation.
- 5-8/15 -- Summer Program: "Introduction to Economics." Funded by the National Science Foundation and administered by the Economics Department. Open to rising high school seniors from Anderson, Oconee, and Pickens counties.

  Call 656-3497 for more information.
  - 6 -- Registration for second session summer school.
  - 7 -- Classes begin.
- 9-8/31 -- Art Exhibition: "Student Work in the College of Architecture." Projects at all levels and phases of study including architectural projects, solar energy projects, printmaking, ceramics, painting, drawing, graphic design and photography. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m.-4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.

CALENDAR OF CAMPUS EVENTS (Cont.)

10-12 -- Seminar: "Textiles in Civil Engineering." Sponsored by Professional Development Office. Call 656-2200 for more information.

### PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of Public Relations, Trustee House. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of Public Relations, Trustee House. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to Dr. Claud B. Green, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

# SOUTH CAROLINA ROOM

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY



Vol. 18 No. 22

July 15. 1979

#### FACULTY AND STAFF INVITED TO MEET PRESIDENT ATCHLEY

All Clemson faculty and staff members are invited to a "Bill Atchley Night" dinner to be held Monday, Aug. 6, in Littlejohn Coliseum.

The 7 p.m. event is the first of a series of 12 to be hosted by  $l \propto al$  volunteer commit-proposed series of interviews with 40 tees across South Carolina during the next eight months to introduce Clemson's new president to the people of the state.

This first meeting is sponsored by the Oconee-Pickens Atchley Visit Committee, headed by Charles E. Dalton of Pickens.

Dalton said the Aug. 6 program will feature "an excellent meal, a talk by President Atchley and then a chance for people in the audience to ask him questions and hear his views first-hand."

Dalton said, "Bill Atchley has said on several occasions that one of his top priorities is to meet the people -- to find out what's on their minds. We know how enthusiastic he is about this program, we're extremely proud to help him get started, and we hope that every Clemson employee will plan to attend."

Tickets for the dinner (\$10 each) are available at Jervey Athletic Center and the Alumni Center. Tickets may also be ordered from the Oconee-Pickens Atchley Visit Committee, P. O. Box 693, Pickens, S. C. 29671.

Some faculty and staff members who live outside the counties of Pickens and Oconee might not receive written invitations for the Aug. 6 event because of the "regional" nature of the 12 planned statewide meetings. But Dalton took pains to point out "that we want to personally invite very Clemson employee in the area to attend this first 'Bill Atchley Night.'"

#### WEPR'S ''BREAKFAST SHOW'' CITED BY SECA

"The Breakfast Show: With Strom Thurmond," a radio show produced by upstate public radio station WEPR-FM, has been awarded a certificate of merit by the Southern Educational Communications Association.

"The Breakfast Show" is the pilot of a prominent South Carolinians active in public affairs.

The programs are recorded in the guest's normal breakfast surroundings and broadcast the following morning over five stations of the South Carolina Educational Radio Network, of which WEPR is a member.

The Strom Thurmond segment, which initially aired last December, was produced by Bob Austin and co-directed by WEPR station manager Lily Roland-Hall and Charles W. Dunn, head of the Department of Political Science.

Co-hosts for the segment were Austin and Cole Blease Graham, professor of political science at the University of South Carolina.

"The Breakfast Show: With Strom Thurmond" was re-broadcast Friday, July 6 at 8:30 a.m. Also airing in July will be conversations with Jim Clyburn, head of the S.C. Human Affairs Commission, and Dr. Lou Gray, a pioneer in adult education in the state.

The Clyburn segment was July 13, while the Gray segment will air July 20 at 8:30 a.m. Co-hosting with Bob Austin for the Clyburn segment was Jack Bass, writer-in-residence at S.C. State College. Co-host for the Gray segment will be Ken East, head of adult education with the S.C. Department of Education.

With studios at Clemson University, WEPR is also the upstate affiliate for the National Public Radio Network.

#### GRANTS AWARDED TO ACCOUNTING AND FINANCE

One of the nation's largest accounting firms, Peat, Marwick, Mitchell and Co., has presented Clemson with two checks totalling \$2,110 to support academic programs in the Department of Accounting and Finance.

The checks represent two unrestricted grants from the Peat, Marwick, Mitchell Foundation.

A \$1,110 grant includes \$550 in contributions from two partners and 11 employees of the firm, most of them in the Greenville office. Their gifts were matched by the company foundation.

#### WORKSHOP OFFERED ON INTERPERSONAL SKILLS

The Counseling Center is offering a workshop for University staff members on "Effective Interpersonal Skills."

The workshop will cover the following topics: 1) effective communication with co-workers; 2) resolving conflicts with co-workers, students and supervisors; 3) appropriate expression of feelings, opinions and beliefs; and 4) making requests and other assertive skills.

The workshop will be offered from 8:30 to noon on Tuesdays for two weeks, July 24th and 31st. Interested persons are asked to call the Counseling Center at 2451 to sign up.

This workshop will be limited to fifteen participants. Subsequent workshops in this area will be offered if warranted by interest.

#### ALUMNI ASSOCIATION

Thomas C. "Thom" Taylor has been named a field representative with the Alumni Association. He was editor of the Clemson student newspaper, The Tiger, and a Greenville News-Piedmont scholarship recipient. He worked for one year after graduation as a reporter for the Clearwater (Fla.) Sun. As field representative, Taylor will travel throughout South Carolina and the Southeast meeting with Clemson alumni groups.

#### CHEMICAL ENGINEERING

W. B. Barlage (Prof and Hd) presented invited seminars, "Diffusion of Solutes in Non-Newtonian Fluids Under Conditions of Known Shear Rate," at Georgia Institute of Technology May 7 and the University of Florida May 18.

#### CITY AND REGIONAL PLANNING

Olgun Ersenkal (Assoc Prof), Phillips
Hungerford and Barbara Jones (Grad Students)
delivered papers on "Fiscal Impacts of Land
Development" to the annual meeting of the
American Planning Association, S. C. Chapter, as part of its professional development
program June 1 at Hilton Head.

#### DAIRY SCIENCE

F. E. Pardue (Prof) participated in a Task Force Committee meeting in Philadelphia of the National 4-H Dairy Program. This meeting, which was sponsored by Insurance Company of North America (the National 4-H Dairy sponsor), looked into the total 4-H Dairy Program and developed recommendations that hopefully will strengthen the National 4-H Dairy Program.

Prof. Pardue, C. B. Reeves (Assoc Prof) and P. R. Perry (Ag Sci Assoc) developed, in conjunction with the Communications Department, two educational slide-tape programs on the Sumter Dairy All-Jersey Program and Peeler Farm Fresh, Inc. These programs were presented at the 21st Annual Meeting of National All-Jersey, Inc. and the 11lth Annual Meeting of the American Jersey Cattle Club.

#### DIVISION OF ENGINEERING SERVICES

Ron Kopczyk (Dir) attended a one-week workshop at M.I.T. on "High-Speed Photography and Videography."

#### **ECONOMICS**

Rex L. Cottle (Assoc Prof and Hd) presented a paper, "Supply and Demand for Unemployment," at the annual meeting of the Western Economic Association held June 18 in Las Vegas, NV.

#### FOOD SCIENCE

M. G. Johnson (Assoc Prof) was co-author of three research papers presented at the National American Society for Microbiology Meeting in Los Angeles May 4-8. The papers are as follows:

"Indole-3 Acetic Acid: Effect on Synthesis of Enterotoxin B by Staphylococcus aureus S-6," co-authored with Linda M. McCaskill (Res Tech) and E. L. Kline (Asst Prof, Micro).

"Sublethally Heated Cells of Shigella flexneri M4243 and Shigella Sonnei require 3 h to Regain Tolerance to Bile Salts No. 3," co-authored with S. B. Tollison (Grad Res Asst).

"Fractionation of Dermal Necrotic Factor from <u>Bacillus</u> <u>cereus</u> B-4ac Cultures," co-authored with K. L. Hellenga (Grad Res Asst).

Prof. Johnson also was co-convenor at the ASM meeting of a workshop on "Application of Statistics to the Examination of Food and Water."

Two faculty members were honored and several others participated in and presented research papers at the 39th Annual Institute of Food Technologists Meeting in St. Louis, MO, June 10-13. J. H. Mitchell Jr. (Prof Emeritus) and C. V. Morr (Stender Prof) were each honored by election to "Fellows of the Institute" of IFT. This award, one of the highest bestowed by IFT, the national professional

society for Food Science, was made in recognition of the outstanding contributions made by Profs. Mitchell and Morr to the field of food science, specifically in their research with oilseed proteins and milk proteins.

- J. C. Acton (Assoc Prof) was co-chairman of a research paper session on "Nitrite" (use in cured meat and poultry products).
- J. J. Jen (Assoc Prof) was co-author with A. Seo (Res Tech) and W. H. Flurkey (Grad Res Asst) of a paper, "Tomato Peroxidase: Purification and Characterization of Homogeneous Isoenzyme."

Prof. Johnson was co-author with Maryanne Tsivitse (Grad Res Asst) of a paper, "Effect of Fat Level in Peanut Milks on Acid Production by Starter Cultures."

Prof. Johnson was co-chairman of a research paper session, "Microbial Hazards," and was reappointed editor of the  $\underline{\text{IFT}}$  Food Microbiology Division Newsletter.

- S. S. H. Rizvi (Asst Prof) served as chairman of the election committee for the IFT Food Packaging Division.
- T. C. Titus (Assoc Prof) attended the planning meeting of the National IFT Short Course Committee which developed and presented a program on "Sensory Evaluation Methods for the Practicing Food Technologist" June 13-15.

Prof. Titus was reappointed Regional IFT communicator for South Carolina. He also served as co-coordinator of an IFT sponsored Food Editors Conference in Charleston March 1-4 and assumed chairmanship of the Dixie Section of IFT on July 1.

Prof. Morr was elected chairman, Dairy Foods Division, American Dairy Science Association at the annual meeting in Logan, UT, June 24-27.

Recent publications by faculty members include:

C. V. Morr - "Milk Protein Research in Retrospect," J. <u>Dairy Science</u> 62 (4): 4-8, 1979.

C. V. Morr - "Utilization of Milk Proteins of Starting Materials for Other Food Stuffs," J. Dairy Research 46 (2): 369-376, 1979.

#### INDUSTRIAL MANAGEMENT

T. W. Zimmerer (Prof) conducted a workshop on "Performance Appraisal" in Greenville May 24, sponsored by the Greater Greenville Chamber of Commerce. Prof. Zimmerer conducted a workshop for "Engineering Managers" in Greenville May 15-16, sponsored by the Greater Greenville Chamber different college board regions and the of Commerce. He also addressed the South Florida Chapter of the American Production and Inventory Control Society June 4 on the topic of "Improving the Management of Your Most Valuable Asset." Prof. Zimmerer co-authored with Deborah Panson an article in the Journal of Industrial Management and Textile Science entitled "Organizations and Creativity."

Earl W. Arp (Assoc Prof) spoke to the Piedmont Section of the American Society of Safety Engineers on "Environmental-Epidemiologic Studies" May 17 in Greenville.

#### INTERDISCIPLINARY STUDIES

Andreas F. Recum (Prof), in close cooperation with Joon B. Park (Assoc Prof) and Gerry H. Kenner (Assoc Prof), has been awarded funding for four of the six research proposals that were submitted for funding to NIH. The NIH funding totals \$345,000 for a three-year research period. Research subjects cover the development of percutaneous conduits and problems associated with artificial hips.

#### MATHEMATICAL SCIENCES

C. V. Aucoin (Prof) has been appointed by Dr. Bernstein, president of the Mathematical Association of America, to the Committee on Service Courses.

Prof. Aucoin has had a paper published in the Newsletter of the Conference

Board of the Mathematical Sciences, Vol. 14, No. 3. The paper is entitled "The Evolution of a Department of Mathematical Sciences."

John Kenelly (Prof) has been appointed chairman of the College Board's Committee on calculus development. This national committee is responsible for the calculus level examinations in the College Board Programs, and a primary committee function is the writing of the Advanced Placement examinations in mathematics. The committee consists of six faculty members from the chief reader in mathematics from the Educational Testing Service. Prof. Kenelly has just completed a four-year term as chief reader, and the committee chairmanship substantially increases his involvement with the Advanced Placement Programs.

#### PHYSICS AND ASTRONOMY

Philip B. Burt (Prof) has published a paper, "Collapsons, New Nonlinear Waves," in Group Theoretical Methods in Physics, the proceedings of the Seventh International Colloquium and Intergrative Conference on Group Theory and Mathematical Physics held in Austin, TX, Sept. 11-16, 1978.

A. L. Laskar (Prof) presented a seminar on "Recent Developments in the Studies of Charge and Mass Transport in Ionic Solids" at the University of Georgia, Athens, June 21.

John Ray (Prof) had a recent publication, "Dissipation and Quantum Theory," published in Letter Nuovo Cimento 25 47 (1979).

#### POLITICAL SCIENCE

Martin Slann (Assoc Prof) published a review of Dan Horowitz and Moshe Lissak's Origins of the Israeli Polity: Palestine Under the Mandate in Perspective, Vol. 8, No. 4 (May 1979) p. 77.

#### PROFESSIONAL DEVELOPMENT

E. Earl Burch (Prof, IM) is chairperson

JULY 15, 1979

for a seminar, "The Design and Analysis of Experiments," to be held at the Ramada Inn in Greenville Aug. 1-2.

Claude S. Simpson Jr. (Instr, IM and Asst Dir, Prof Dev) is course chairperson for a seminar, "How to Control Absenteeism," to be held on campus Aug. 6-7.

J. David Acker (Asst Prof, Acct and Fin) is chairperson for a two-day seminar, "Financial Accounting for Non-Financial Executives," to be held at the Quality Inn in Columbia Aug. 7-8.

John Marvin (Assoc Prof, Text) is chairperson for a seminar, "Practical Yarn, Fabric, Dyeing and Finishing Calculations," to be held on campus Aug. 7-9.

J. Michael McDonald (Asst Prof. IM) is chairperson for a two-day seminar, "Improving Customer Service: How to Keep Customers and Control Service Costs," which will be held Aug. 14-15 at the Ramada Inn in Greenville.

Hassan Behery (Assoc Prof, Text) and Ernest ly been awarded a three-year grant B. Berry (Assoc Prof, Text) are co-chairpersons for a workshop, "Technical Workshop on Shuttleless Looms," to be held at the Rodeway Inn-Airport in Charlotte, NC, Aug. 15; at the Ramada Inn in Greenville Aug. 16; and in Spartanburg

Aug. 17.

#### RECREATION AND PARK ADMINISTRATION

Paul Richard Saunders (Vstg Instr) presented a paper, "Management of Spruce-Fir Forests," at the 5th Annual Scientific Research Meeting, Uplands Area of the Southeast Region, National Park Service, held in Great Smoky Mountains National Park, TN, June 20-24.

#### TEXTILES

Broaddus L. Rutledge II (Assoc Prof) was elected general chairman of the Southern Textile Research Conference at the annual meeting held in May at the Holiday Inn in Hilton Head. Prof. Rutledge will serve in this capacity during the coming year.

#### ZOOLOGY

Alfred P. Wheeler (Asst Prof) has recent-(\$94,836) from the National Science Foundation. The grant is for collaborative research on comparative studies on unifying mechanisms of carbonate calcification.

# Calendar of Campus Events

- 15-21 -- Camp Running Brave. One-week residential camping program for young male hemophiliacs from the Carolinas and Georgia. Co-sponsored by South Carolina Chapter of the National Hemophilia Foundation and Recreation and Park Administration Department, call 656-2477 for more information.
- 15-8/31 -- Art Exhibition: "Student Work in the College of Architecture." Projects at all levels and phases of study including architecture, solar energy, printmaking, ceramics, painting, drawing, graphic design and photography. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m. -4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
  - 16-20 -- Conference: "S.C. Vocational Agricultural Teachers' Conference." Annual meeting of in-service education for updating teachers on latest research and developments in rapidly changing fields of modern agriculture and education. Co-sponsored by Agricultural Education Department and College

#### CALENDAR OF CAMPUS EVENTS (Cont.)

of Agricultural Sciences, P&AS Auditorium. Open to all agriculture teachers, high school principals, and district superintendents. Admission by registration.

- 18 -- Short Course: "Professional Development for Secretaries." Sponsored by Professional Development Office, call 656-2200 for more information.
- 20-21 -- Conference: "Stochastic Dynamical Systems Theory and Applications."
  Forum for discussion of common problems among researchers and students in areas of dynamical systems, control theory, diffusion processes and stochastic differential equations. Sponsored by Mathematical Sciences Department, call 656-3434 for more information.
  - 21 -- Classes meet.
- 22-28 -- Jaycee Camp Hope. Co-sponsored by S.C. Association for Retarded Citizens, S.C. Jaycees and Recreation and Park Administration Department. Open to mentally retarded South Carolinians over 18 years of age. Call 656-2477 for more information.
  - 24 -- Beer Garden with live entertainment. Sponsored by University Union, Hanover House lawn, 4:30 - 7 p.m. University I.D. and proof of age required, beer available at 25¢ per glass.
- 24-27 -- Conference: "Annual State 4-H Conference." Sponsored by College of Agricultural Sciences, Littlejohn Coliseum. Expected attendance 600 plus.
- 24,31 -- Workshop: "Effective Interpersonal Skills." Sponsored by Counseling Center, 200 Tillman Hall, 8:30 a.m. noon. Open to all University staff members, registration required. Call 656-2451 for more information.
- 27-29 -- Short Course: "Beekeeping Short Course." Commercial and hobby beekeepers will be interested in discussions that cover all aspects of beekeeping.

  Sponsored by College of Agricultural Sciences, call 656-3013 for more information.
- 29-8/3 -- Workshop: "School Publications Photography Workshop." Hands-on laboratory program for school newspaper or yearbook advisers and student staff members. Sponsored by Industrial Education Department, call 656-3447 for more information.
- 29-8/4 -- Camp Sertoma. Serves more than 100 young people who would not normally be able to attend a residential camp due to financial limitations. Cosponsored by Sertoma Clubs of South Carolina and Recreation and Park Administration Department, call 656-2477 for more information.



#### PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of University Relations, 102 Fike Recreation Center. Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of University Relations, 102 Fike Recreation Center. Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to the office of the Dean of Undergraduate Studies, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.

INFORMATION FOR THE FACULTY AND STAFF OF CLEMSON UNIVERSITY

SOUTH CARC

LENSON UNIVERSITY LIBRARY

LINA ROOM

Vol. 18 No. 23

August 1, 1979



WHAT BETTER PLACE to accept a check for tobacco research than in an experimental plot at Clemson's Pee Dee branch of the S.C. Experiment Station at Florence? Experiment Station Director Cecil Godley, right, accepts the gift from Jerry Shiffert of R. J. Reynolds Tobacco Company. The grant will fund research on host plant resistance to the tobacco budworm which will be conducted by Dr. A. W. Johnson, entomologist at the Pee Dee Station, assisted by a Ph.D. graduate student.

#### ENGINEERING PLAYED HOST TO THREE SUMMER **WORKSHOPS**

The College of Engineering hosted three summer programs for pre-engineering high school students -- an interactive computing workshop, a minority students program and a workshop for high school girls.

They began the first week in June and ran until the end of July.

The computing program, directed by Robert Snelsire and Jim Thurston, drew 90 high schoolers from throughout the Carolinas to three different sessions.

The minority students workshop, also directed by Snelsire, introduced 60 black, Hispanic and other minority students to chemical, civil, computer, electrical and mechanical engineering.

Both first-year and advanced students, attending the workshop for a second summer, participated in a communications exercise in which they wrote papers on their experiences at Clemson. The secondyear students also composed a newspaper detailing interviews with campus figures and their impressions of Clemson.

Funding for the minority workshop was provided by almost 30 businesses and industries throughout the nation.

The engineering workshop for high school girls, directed by Silvia Cathey, was a first attempt by Clemson at increasing interest in engineering among young women in the Carolinas. Twenty-five girls attended, learning about different engineering fields, building crystal radios and talking with professional women engineers. The Appalachian Regional Council of Governments funded the workshop.

The 1979 summer programs are in direct response to a demand which has increased each year since the first interactive computing workshop was presented in 1972.

#### GREENVILLE HOSPITAL SYSTEM CITES EDWARDS' LEADERSHIP

The Greenville Hospital System Board of Trustees expressed their appreciation and congratulations to retired president R. C. Edwards in a unanimous resolution passed last month.

The resolution cites Edwards' "enlightened leadership and progressive educational efforts" and his cooperation in planning

and coordinating health care programs between the University and the Greenville Hospital System. Clemson nursing and medical technology students receive clinical experience at GHS facilities.

The resolution states that Edwards' efforts "brought our two institutions closer together...in a significant and harmonious manner."

# AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

- M. S. Henry (Assoc Prof) delivered a paper, "Agricultural Exports and Regional Employment Change," at the Mid-Continent Regional Science Association annual meetings in Minneapolis, MN, June 1.
- J. C. Hite (Prof) served on a panel discussing State and Local Tax Limitation Initiatives at the Mid-Continent Regional Science Association meetings. Prof. Hite also chaired a session on Local Tax Systems.
- E. L. McLean (Prof) presided over the 1979 annual meeting of the Southern Rural Sociology Research Committee, Atlanta, GA, June 29. Prof. McLean will chair a subcommittee to conduct an inventory of graduate programs in rural sociology and sociology in the South, 1979-1980.
- S. E. Miller (Asst Prof) and David Kenyon (VPI & SU) presented a paper, "Empirical Analysis of Live Hog Futures Price Use by Producers and Packers," at the Livestock Futures Research Symposium in Chicago, IL, June 13-14. The symposium was co-sponsored by the Chicago Mercantile Exchange and NC-117 Food Systems Research Group.

#### ARCHITECTURE

Tom Dimond (Coordinator of Educational Media and Exhibits) participated in the Chiaha Seventh Annual Juried Exhibition held April 8-27 at the National City Bank, Rome, GA. Mr. Dimond had two paintings selected for the Southeastern Regional

exhibit and received the purchase award for his watercolor "Diagvari Three."

Mr. Dimond also participated in the Sofa Exchange Art Competition held April 8-May 4. This was sponsored by Bernhardt Industries, Lenoir City, NC. He won second prize for painting "Arhirit."

Mr. Dimond participated in the 43rd Annual Greenville Artist Guild Spring Exhibition, May 7-28, Greenville County Museum of Art, Greenville. He had two paintings selected.

#### BUILDING SCIENCES

M. David Egan (Assoc Prof) chaired a "Special Session on Education in Architectural Acoustics" June 13 at the meeting of the Acoustical Society of America. This meeting was held at the Massachusetts Institute of Technology, Cambridge, MA.

Prof. Egan also presented a paper on "Building Firesafety for Architects and Builders" at the Associated Schools of Construction (ASC) Meeting at Purdue University, West Lafayette, IN, April 20.

#### CHEMISTRY AND GEOLOGY

Joe F. Allen (Prof) presented a two-day "Water and Wastewater Instructor Workshop" for the Washington Environmental Training Resonance Center and the Washington State Board for Community College Education, Ellensburg, WA, June 6-7.

- C. B. Bishop (Assoc Prof), M. B. Bishop (Assoc Prof) and Prof. Allen attended a workshop, "Use of Chem-TIPS," for college chemistry teachers at the University of Wisconsin, Madison, June 8-16. This program is financed by the Exxon Foundation.
- J. C. Fanning Jr. (Prof) and Prof. Allen have received an NSF grant to teach a course on "Basic Chemistry Concepts for Secondary School Teachers." This course is structured to help high school and junior high school science teachers introduce short, inexpensive experiments and

demonstrations into their teaching programs.

R. A. Abramovitch (Prof and Hd) has received a new grant from DHEW. The grant, which is for a three-year period, is for work on "Novel Sultams and Lactams as Potential Anticonvulsants." Novel compounds will be synthesized and tested by the National Institutes of Health for their anticonvulsant properties. The amount of the grant for the first year is \$36,919.

#### DAIRY SCIENCE

B. F. Jenny (Assoc Prof) and G. D. O'Dell (Prof) published a paper, "Ration Digestibility and Mineral Balance in Steers Fed a Complete Ensiled Diet," in the <u>Journal of Animal Science</u> 48:1525.

#### ENTOMOLOGY AND ECONOMIC ZOOLOGY

The summer meeting of the S. C. Chapter of the Wildlife Society was held on campus July 11 and 12. Representatives of federal, state, and private agencies reported on current wildlife research programs in the state. T. T. Fendley (Asst Prof) and J. R. Sweeney (Asst Prof) reported on Clemson University's research programs.

T. R. Adkins (Prof) and J. C. Morse (Assoc Prof) received a \$25,500 contract from the U. S. Army Corps of Engineers to conduct a mosquito survey in the area of the proposed Richard B. Russell Reservoir.

Prof. Adkins received \$13,840 from USDA, Southern Regional Pesticide Impact Assessment Program, to conduct a campaign of the efficacy of dichlorvos and malathion against flies attacking cattle.

Louis C. Hearn (Grad Stu) and T. E. Skelton (Prof) published "Recovery of Bathyplectes curculionis from Alfalfa Weevil Larvae in South Carolina" in the Journal of Georgia Entomological Society, Vol. 14, No. 2, pp. 126-131.

Thomas M. Brown (Asst Prof) has been awarded a \$1,000 grant from the FMC Corporation to participate in a nationwide program of monitoring for resistance to synthetic pyrethroid insecticides in the tobacco budworm. This program is part of an integrated approach to combatting this major pest of cotton and tobacco and was described in the July 1979 issue of Progressive Farmer.

#### FERTILIZER INSPECTION AND ANALYSIS

H. V. Rogers (Hd) was elected president of the Association of Southern Feed, Fertilizer and Pesticide Control Officials at the annual meeting at Biloxi, MS, June 17-20. He has been on the board of directors for three years and was program chairman of the 1979 meeting.

#### HISTORY

Richard M. Golden (Asst Prof) published a review of Cissie Fairchild's <u>Poverty and Charity in Aix-en-Provence</u>, <u>1640-1789</u> in Church History, 48 (June 1979), 223-24.

#### HISTORY AND VISUAL STUDIES

John T. Acorn (Prof and Hd) was invited to participate as guest artist/lecturer for the second session, June 15-30, of the Penland School in the sculpture studio.

Sam Wang (Assoc Prof) participated in the first session as guest artist/lecturer of the Penland School photography studio June 1-15.

Ireland Regnier (Prof) is presently serving as guest artist/lecturer in the painting studio of the Penland School.

#### MATHEMATICAL SCIENCES

Robert E. Fennell (Assoc Prof) coordinated a conference on "Stochastic Dynamical Systems - Theory and Applications" July 17-21. The conference was sponsored by the Mathematical Sciences Department with partial NSF support.

Stanley M. Lukawecki (Prof), as a member of the Program Committee of SCCTM, met with that group in Easley to assist in finalizing the selection of speakers and topics for the fall meeting of the South Carolina Council of Teachers of Mathematics which will be held in Columbia Oct. 19-20.

K. T. Wallenius (Prof) has been awarded a \$58,825 renewal for continuing research on an ONR project, "Topics in Applied Statistical Analysis." This increment, which increases the total funding to \$350,000, will support the research of five members of the department.

Prof. Wallenius was the invited speaker at the Stanford University Statistics Department colloquium on July 10 and spoke on the topic "Empirical Model Building and Subsequent Inference Based on the Same Data."

Prof. Wallenius conducted a series of seminars on "The Use of Statistical Sampling in the Analysis and Negotiation of Price Proposals" at various defense contractor establishments, including Todd Shipyards, San Pedro and Seattle; Lockheed Shipbuilding Co., Seattle; and Lockheed Missile and Space Division, Sunnyvale, CA. The seminars, sponsored by the Office of Naval Research, were designed to disseminate information on new sampling methodology developed at Clemson under an ONR research grant.

#### POULTRY SCIENCE

The July issue of <u>Poultry Science</u> contained papers by Poultry Science faculty as follows:

"Hematology of Single Comb White Leghorn Pullets Fed Aflatoxin-Contaminated and Ammonia-Treated Corn" by B. L. Hughes (Assoc Prof) and J. E. Jones (Prof).

"Comparison of Fish Meal and Soybean Meal in the Prevention of Fatty Liver-Hemorrhagic Syndrome in Caged Layers" by D. V. Maurice (Asst Prof), L. S. Jensen (Prof, U of GA) and H. Tojo (Grad Stu, U of GA).

#### PROFESSIONAL DEVELOPMENT

Thomas W. Zimmerer (Assoc Prof, IM) is chairperson for a workshop, "Improving Managerial Skills of Textile Supervisors," to be held August 20-21 on campus.

Pr

Carleton W. Roberts (Prof, Text) is chairperson for a two-day seminar, "Textile Laboratory Safety," to be held August 21-22 on campus.

Ralph E. Knowland (Prof and Hd, Bldg Sc) is chairperson for a course, "Construction and Contract Law," to be held August 28-29 on campus.

#### SECURITY

Jack W. Weeden retired July 1 as chief of public safety after 18 years service with the University. He joined the staff in 1961 as chief of security, coming to Clemson from Fort Jackson where he served as provost marshal.

#### UNIVERSITY RELATIONS

Margaret C. Pridgen (University Science Editor) attended a management workshop on "Women in Advancement," sponsored by CASE (Council for Advancement and Support of Education) and the Higher Education Resources Service/Mid-Atlantic region, July 8-9, in New Orleans, LA. She also attended the CASE Annual Assembly and Awards Banquet, where she accepted on behalf of the department the 1979 Newsweek/CASE Grand Award for Excellence in News and Information Writing.

MINUTES OF THE COUNCIL OF ACADEMIC DEANS MEETING, JUNE 11, 1979

The Council of Academic Deans met June 11, 1979, in the Horticulture Conference Room of the P&AS Building. Dean Hurst called the meeting to order at 9 a.m. with the following persons present:

Dr. Steve Chapman (for Dean Anderson), Prof. James Dalton (for Dean McClure), Dr. Alfred Newton (for Dean Landrith), Dean Wilcox, Dean Box, Dean Trevillian, Prof. Frank Day (for Dean Cox), Dean Labecki, Ms. Janie Dillon (for Dean Vogel), Dean Schwartz, Dean Willis, and Dr. Fleming.

Dean Hurst stated that he will be out of his office June 18-20 and June 22-July 4, and that he could be reached through his office if he is needed during this period.

Dean Hurst informed the deans that Parents' Day will be observed on campus Nov. 3, 1979, (Clemson vs. Wakeforest). He explained that this year there will be an expanded concept in that parents of all students are invited, whereas in the past only those parents of football team members were invited. He stated that the program is incomplete at this time but that probably it would begin with an address to the parents by President Atchley and Coach Ford. Following this there would be an Open House in the various academic departments with hosts and student guides available. Dean Hurst will keep the deans informed as further plans are developed.

Dean Hurst announced that there will be a Deans' Meeting on Thursday, June 21 at 8:30 a.m. in the Board Room, at which several matters will be discussed. He requested the deans to bring persons from their areas who are familiar with personnel papers, budgets, and specifically, positions as they relate to contract research.

Dean Hurst stressed the importance of having validation of all degrees in the files of faculty members. He explained that in order for the faculty files to be considered complete, they must contain an official transcript for each degree awarded. The transcript must state the degree awarded and the date it was awarded, and the transcript must bear the official college/university seal and be signed by the registrar. Dean Hurst requested that this information be completed by Jan. 1, 1980, so our files will be in order before our next self-

study visit by the Southern Association of Colleges and Schools. Dean Hurst further informed the deans that the faculty member should bear the responsibility for obtaining this information and, because it is sometimes difficult to obtain information from Registrars' offices, they should persist until their own records are complete.

There was a lengthy discussion regarding post-secondary education in Greenville. Dean Hurst will forward the deans' comments to President Edwards.

The only new course on the agenda, RPA 705, was approved.

Action was deferred relative to the proposal to establish a "Center for Economic Education" until Dean Trevillian can confer with Dean Landrith.

Dean Schwartz gave a progress report on the "Student Data Base" which DAPS began developing approximately six months ago. Much discussion ensued regarding the capabilities of this data base and the problems involved in getting it operational. Dean Schwartz stated it will be approximately 18-24 months longer before the system will be fully functional. In order to have adequate input at the deans' level, Dean Hurst appointed an ad hoc committee consisting of the following: Dean H. F. Landrith, chairman, Dean H. M. Cox, Dean H. E. Vogel, Dean L. P. Anderson, and Dean A. E. Schwartz, ex officio.

Some of the deans expressed concern over an action approved in the "Minutes of the Meetings of the Deans and Directors of The Clemson Agricultural College" on Aug. 15, 1949, as follows: "That no credit be given transfer students for work completed elsewhere with a grade of 'D' (or the equivalent lowest passing grade) unless it will be followed by a subsequent 'C' or higher grade in a course of the next level at the same institution." Dean Hurst stated that he will circulate this material to the deans and it will be discussed again.

Dean Willis distributed new "Procedures

Policy revised, See Dean

for Recruiting, Selecting, and Hiring Respectfully submitted, Faculty" which are self-explanatory.

The meeting was adjourned at 11 a.m.

Annette H. Kesler

## Calendar of Campus Events

- 1-31 -- Art Exhibition: "Student Work in the College of Architecture." Projects at all levels and phases of study including architectural and solar energy projects, printmaking, ceramics, painting, drawing, graphic design and photography. Sponsored by College of Architecture, Rudolph E. Lee Gallery, 9 a.m. - 4:30 p.m. weekdays, 2-5 p.m. Sundays. Open to the public, no admission charge.
  - 4 -- Classes meet.
- 6-7 -- Workshop: "Absenteeism: How to Control It." Sponsored by Professional Development Office, call 656-2200 for more information.
- 7-9 -- Workshop: "Yarn and Fabric Practical Calculations." Sponsored by Professional Development Office, call 656-2200 for more information.
- 8-9 -- Examinations, second session summer school.
- 8-9 -- Workshop: "Counseling and Coaching Techniques for Supervisors and Managers." Sponsored by Professional Development Office, call 656-2200 for more information.
  - 11 -- Graduation, Littlejohn Coliseum, 11 a.m.
  - 11 -- Air Force Commissioning Exercises, Air Force ROTC offices, Tillman Hall, 9 a.m.
- 12-18 -- Camp Lions Den. A one-week residential program serving visually handicapped South Carolinians. Co-sponsored by Lions Clubs of South Carolina and Department of Recreation and Park Administration. Call 656-2477 for more information.
  - 13 -- Workshop: "Computer Programming for Graphical Displays." Sponsored by Continuing Engineering Education, call 656-3308 for more information.



### PROCEDURES FOR SUBMITTING NEWSLETTER MATERIAL

All Calendar items of campus events (speakers, films, meetings, seminars, sporting events, etc.) should be submitted by written memorandum directly to the Office of University Relations, 102 Fike Recreation Center Information and news items from the Office of the President, Vice President for Business and Finance, Vice President for Executive Affairs, Vice President for Student Affairs and the Vice President for Development should be submitted by written memorandum to the Office of University Relations, 102 Fike Recreation Center Information and news items from all areas under the Vice President for Academic Affairs should be submitted by written memorandum to the office of the Dean of Undergraduate Studies, Room E-102, Martin Hall.

The following deadlines prevail: Items to appear in the Newsletter published the 1st of each month must be submitted by the 20th of the previous month; items to appear in the Newsletter published the 15th of each month must be submitted by the 5th of each month.





