## Taylor University Catalog 1986-1988

Taylor University

Follow this and additional works at: https://pillars.taylor.edu/catalogs
Part of the Higher Education Commons

## Recommended Citation

Taylor University, "Taylor University Catalog 1986-1988" (1986). Undergraduate Catalogs. 4.
https://pillars.taylor.edu/catalogs/4

This Book is brought to you for free and open access by the Academic Catalogs at Pillars at Taylor University. It has been accepted for inclusion in Undergraduate Catalogs by an authorized administrator of Pillars at Taylor University. For more information, please contact pillars@taylor.edu.

# Taylor University 

1986-1988 Catalog

## CONTENTS

Information Directory ..... 3
Calendars ..... 4
Taylor University Today ..... 9
Student Life ..... 17
Admissions and Finances ..... 27
Academic Regulations ..... 39
Courses of Instruction ..... 51
Register ..... 135
Index ..... 143

## Taylor University Catalog 1986-1988


a Christian liberal arts college
in Upland, Indiana 46989
phone: (317) 998-2751


Dr. Jay L. Kesler
President, Taylor University


## Information Directory

Information in this catalog, while current at time of printing, is subject to changes based on enrollment, faculty availability, and other considerations.

The administration, faculty, and staff of Taylor University are available to assist anyone who has relevant questions.

The President of the University administers the total program of the institution and receives inquiries on any pertinent matters.

You are invited to address your inquiries on the following subjects to the offices indicated at the address below.

Academic Information: academic grievances, calendar, curriculum, faculty, and scheduling of classes - Vice President for Academic Affairs or Associate Vice President for Academic Affairs

Admissions: applications, campus visits, catalogs, and descriptive literature - Dean of Enrollment

Alumni Affairs: Taylor clubs, alumni publications, homecoming activities - Associate Vice President for Alumni and Institutional Relations

Business Matters: fees, insurance, payment procedures - Controller
Counseling: Counseling services of various types exist on the campus. Inquiries should be directed to the Vice President for Student Development who will make the proper referral

Advancement: bequests, estate planning, fund raising, public relations, university publications - Vice President for University Advancement

Records and Transcripts: academic petitions, grade reports, faculty advising, transcripts, transfer credit - Director of Records

Religious Life: chapel, convocations, gospel teams, spiritual emphasis, Taylor World Outreach - University Chaplain

Student Life: activities, clubs, counseling, housing, orientation, leadership, opportunities, and career development - Vice President for Student Development
Summer Session: summer classes, workshops, field station programs - Associate Vice President for Academic Affairs

Catalog Editor, Janice Shaw Crouse
Assistant Editor, Linda S. Johnson
Photography Editors, Craig W. Moore and Dale Sloat
Word Processing Advisor, Robert D. Hodge
Printing and Design, W. Barry Worthing, Lawhead Press
All correspondence should be addressed to:
Taylor University, Upland, Indiana 46989
The University telephone number is (317) 998-2751

# 1986-87 CALENDAR 



NOTE: Accepted students should plan to attend one of the summer orientationlearly, registration weekends.

SUMMER SESSION I 1986
May 28-June 20 Wednesday-Friday

## SUMMER SESSION II 1986

June 13-14
Friday-Saturday
New Student Orientation/Fall Registration

Classes Begin
New Student Orientation/Fall Registration Summer Session Ends

## FALL TERM 1986

September 3-5 Wednesday-Friday
September 5-8 September 9 September 15-19
September 26
October 10-12
October 24-26
October 29
October 31
November 3-7
November 26
December 1
December 15-18

Friday-Monday
Tuesday, 8:00 a.m.
Monday-Friday Friday
Friday-Sunday
Friday-Sunday Wednesday Friday
Monday-Friday
Wednesday, 12:00 noon
Monday, 12:00 noon
Monday-Thursday

Fac. Conf./Colleagues' College New Student Orientation

Classes Begin Spiritual Renewal Week Campus Visitation Day Parents' Weekend Homecoming Weekend Mid-Term Grades Due Campus Visitation Day
World Opportunity Week Thanksgiving Holiday

Classes Resume Evaluation Week

## INTERTERM 1987

January 6
January 29

Tuesday, 8:00 a.m.
Thursday, after classes

Interterm Begins Interterm Ends

## SPRING TERM 1987

February 2
February 9-13
March 2-6
March 13-15
March 20
March 20
March 31
April 3
April 10-12
April 16
April 21
May 1
May 18-21
May 23

Monday, 8:00 a.m.
Monday-Friday
Monday-Friday
Friday-Sunday
Friday
Friday, 5:00 p.m.
Tuesday, 8:00 a.m. Friday
Friday-Sunday
Thursday, 5:00 p.m.
Tuesday, 8:00 a.m.
Friday
Monday-Thursday
Saturday, 9:30 a.m. 2:00 p.m.

Classes Begin Spiritual Renewal Week Marriage and Family Week National Student Leadership

Conference
Mid-Term Grades Due Spring Vacation Classes Resume
Campus Visitation Day
Youth Conference
Easter Break
Classes Resume
Campus Visitation Day Evaluation Week

Baccalaureate
Commencement

# 1987-88 CALENDAR 

SUMMER SESSION I 1987
May 27-June 19 Wednesday-Friday

## SUMMER SESSION II 1987

June 12-13
June 22
July 10-11
July 24

Friday, 5:00 p.m.
Friday-Saturday
Monday, 8:00 a.m.
Friday-Saturday

New Student Orientation/Fall Registration

Classes Begin
New Student Orientation/Fall Registration Summer Session Ends

## FALL TERM 1987

September 2-4 Wednesday-Friday
September 4-7
September 8
September 14-18
September 25
October 2-4
October 16-18
October 28
October 30
November 2-6
November 25
November 30
December 14-17

Tuesday, 8:00 a.m.
Monday-Friday Friday
Friday-Sunday
Friday-Sunday Wednesday Friday
Monday-Friday
Wednesday, 12:00 noon
Monday, 12:00 noon
Monday-Thursday


## INTERTERM 1988

January 5
January 28

Tuesday, 8:00 a.m.
Thursday, after classes

Classes Resume Evaluation Week
Fac. Conf./Colleagues' College New Student Orientation Classes Begin Spiritual Renewal Week Campus Visitation Day

Parents' Weekend Homecoming Weekend Mid-Term Grades Due Campus Visitation Day World Opportunity Week Thanksgiving Holiday

## SPRING TERM 1988

February 2
February 8-12
March 7-11
March 18
March 25
April 6
April 8
April 15-17
April 22-24
May 6
May 16-19
May 21

Tuesday, 8:00 a.m. Monday-Friday
Monday-Friday Friday
Friday, 5:00 p.m.
Wednesday, 8:00 a.m. Friday Friday-Sunday Friday-Sunday

Friday
Monday-Thursday Saturday, 9:30 a.m. 2:00 p.m.

Classes Begin Spiritual Renewal Week Marriage and Family Week Mid-Term Grades Due Spring Vacation* Classes Resume Campus Visitation Day Youth Conference National Student Leadership Conference
Campus Visitation Day Evaluation Week Baccalaureate Commencement
*Spring break includes Easter

Interterm Begins Interterm Ends


NOTE: Accepted students should plan to attend one of the summer oricntation/ early registration wrekends.

## 1988-89 CALENDAR

## SUMMER SESSION I 1988

May 24-June 17 Tuesday-Friday
SUMMER SESSION II 1988
June 10-11 Friday-Saturday

June 20
July 8-9
July 22

## FALL TERM 1988

Aug. 31-Sept. 2 Wednesday-Friday

September 2-5
September 6
September 12-16
September 30
October 7-9
October 21-23
October 26
October 28
Oct. 31-Nov. 4
November 23
November 28
December 12-15

Friday-Monday
Tuesday, 8:00 a.m.
Monday-Friday Friday
Friday-Sunday
Friday-Sunday
Wednesday Friday
Monday-Friday
Wednesday, 12:00 noon
Monday, 12:00 noon
Monday-Thursday

Fac. Conf./Colleagues'
College
New Student Orientation
Classes Begin
Spiritual Renewal Week Campus Visitation Day Parents' Weekend Homecoming Weekend Mid-Term Grades Due Campus Visitation Day
World Opportunities Week Thanksgiving Holiday

Classes Resume
Evaluation Week

## INTERTERM 1989

January 3
January 26

Tuesday, 8:00 a.m.
Thursday, after classes

Interterm Begins Interterm Ends

## SPRING TERM 1989

January 31
February 6-10
March 6-10
March 10
March 17
March 29
March 31
April 7-9
April 14-16
April 28
May 15-18
May 20

Tuesday, 8:00 a.m.
Monday-Friday
Monday-Friday Friday
Friday, 5:00 p.m.
Wednesday, 8:00 a.m. Friday
Friday-Sunday
Friday-Sunday
Friday
Monday-Thursday
Saturday, 9:30 a.m. 2:00 p.m.

Classes Begin
Spiritual Renewal Week Marriage and Family Week

Mid-Term Grades Due
Spring Vacation*
Classes Resume
Campus Visitation Day
Youth Conference National Student Leadership

Conference
Campus Visitation Day
Evaluation Week
Baccalaureate
Commencement
*Spring Break includes Easter

## 1989-90 CALENDAR

## SUMMER SESSION I 1989

May 23-June 16
May 29
June 3

Tuesday-Friday Monday Saturday

Classes
Memorial Holiday
Classes Meet

SUMMER SESSION II 1989

June 9-10
June 19
July 7-8
July 21

## FALL TERM 1989

Aug. 30-Sept. 1 Wednesday-Friday

September 1-4
September 5
September 11-15
September 29
October *
October *
October 27
October 27
Oct. 30-Nov. 3
November 22
November 27 Monday, 12:00 noon
December 11-14 Monday-Thursday

Fac. Conf./Colleagues' College
New Student Orientation
Classes Begin
Spiritual Renewal Week
Campus Visitation Day Parents' Weekend Homecoming Weekend Mid-Term Grades Due Campus Visitation Day World Opportunities Week Thanksgiving Holiday

Classes Resume Evaluation Week

## INTERTERM 1990

| January 3 | Wednesday, 8:00 a.m. | Interterm Begins |
| :--- | :---: | ---: |
| January 26 | Friday, after classes | Interterm Ends |

## SPRING TERM 1990

January 30
February 5-9
March 5-9
March 9-11
March 16
March 16
March 27
March 30
April 6-8
April 12
April 17
April 27
May 14-17
May 19

Monday, 8:00 a.m. Monday-Friday Monday-Friday Friday-Sunday

Friday
Friday, 5:00 p.m.
Tuesday, 8:00 a.m.
Friday Friday-Sunday
Thursday, 5:00 p.m.
Tuesday, 8:00 a.m.
Friday
Monday-Thursday
Saturday, 9:30 a.m. 2:00 p.m.

Classes Begin Spiritual Renewal Week Marriage and Family Week National Student Leadership

Conference
Mid-Term Grades Due
Spring Vacation Begins Classes Resume Campus Visitation Day Youth Conference Easter Break Begins Classes Resume Campus Visitation Day Evaluation Week Baccalaureate Commencement


NOTE: Accepted students should plan to attend one of the summer orientationl early registration weekends.

[^0]

## Taylor University Today

Taylor University is a Christian liberal arts college with a student body of approximately 1,500 , divided almost equally between men and women.

Taylor is known for certain distinctives. In addition to a concerned, competent faculty and excellent facilities, the university cherishes an atmosphere of uncommon quality which inspires participation and growth spiritually, socially and intellectually.
As a Christian institution, Taylor recognizes that all truth has its source in God. The students' quest for truth begins with this conviction and relates to all aspects of the liberal arts setting including the fine arts, humanities, social and behavioral sciences, and the natural sciences. Academic pursuits at Taylor are intense and demand imagination, dedication, and integrity from both students and faculty.

An independent, evangelical interdenominational liberal arts college, Taylor University is owned and operated by a board of trustees. An affiliated body, the William Taylor Foundation, exists to receive and hold funds, trusts, bequests, and other gifts for the college.

## Historical Setting

The distinctive heritage of Taylor University began in 1846 when the college was founded in Fort Wayne, Indiana. A firm commitment to academic excellence and Christian perspective grew from these early beginnings when the school was first known as the Fort Wayne Female College. A coeducational program was soon begun, and in 1893 the campus was relocated in Upland. The present name was chosen to honor a noted missionary of the Methodist Episcopal Church, Bishop William Taylor.

## The Mission of Taylor University

Taylor University is an interdenominational evangelical Christian undergraduate institution educating men and women for lifelong learning and for ministering the redemptive love of Jesus Christ to a world in need. As a community of Christian students under the guidance of a faculty committed to the Lordship of Jesus Christ, Taylor University offers liberal arts and professional training based upon the conviction that all truth has its source in God.

## Christian Orientation

Taylor University is firmly committed to evangelical Christianity. To assure the central place of Christian principles in the philosophy and life of the university, we, the trustees, administration, and faculty believe that 1) God is the ultimate Creator and Sustain-

## Goals and Objectives

er of all things in heaven and on earth; 2) the Holy Bible is the inspired, authoritative written word of God, progressively revealing God's will for mankind who, though created by God in His image, rebelled and needs redemption; 3) Jesus Christ is the Living Word of God, who made known God's plan for redemption in His virgin birth, sinless life, atoning death, bodily resurrection, and ascension; and who will return in power and glory; 4) the Holy Spirit is God present in the life of the believer, testifying to the Lordship of Christ and enabling the believer to live a Godly life; 5) the Church is the community of believers who express their unity in Christ by their love for Him, for each other, and for all mankind.

## Academic Orientation

Taylor University has these academic objectives:
To involve students in liberating learning experiences fused with a vitally Christian interpretation of truth and life.
To require demonstrated depth of learning in an academic major
To anchor specific career preparation for a variety of professions on a foundation of appropriate academic experiences, cultural breadth, and Christian perspectives
To prepare students to become certified elementary and secondary school teachers
To provide pre-professional preparation in ministry, engineering, law, medicine, nursing, and medical technology
To establish foundations for graduate study
To prepare students for conscientious and creative technological leadership
To create specific experiences wherein the integrative focus of a liberal education is clarified, personalized, and applied
To build maximum program effectiveness by consistent study and improvement of curriculum, instruction, and faculty-student relationships
To foster the capacity for making sensitive, value-oriented judgments
To engage in and encourage research in selected areas
To share intellectual expertise with the larger geographical, scholarly, and faith communities
To structure general education within which is disseminated the liberal arts heritage



> Accreditation and Memberships

FREIMUTH ADMINISTRATION ART/THEATRE BUILDINGS / GROUNOS REDIGES CHAPEL/AUTITOFIUM COMMUNICATION/ ART READELISERAL AFTS CENTE AVRES LIBRARY HEAMANSON MUSIC CENTER MORFIS RESIDENCE MALL STUOENT UNION SECURITY

Taylor University is accredited by the North Central Association of Colleges and Sec-
ondary Schools, the Indiana Department of Education, the National Council for Accredondary Schools, the Indiana Department of Education, the National Council for Accreditation of Teacher Education, the National Association of Schools of Music, and the Council on Social Work Education.

Memberships include the American Council on Education, National Association of Independent Colleges and Universities, Council of Independent Colleges, Independent
Colleges and Universities of Indiana, American Association of University Women, Ecodependent Colleges and Universities, Council of Independent Colleges, Independent
Colleges and Universities of Indiana, American Association of University Women, Economic Council for Financial Accountability, National Association of College Auxiliary Services, Indiana Commission on Higher Education, National Association of Student Financial Aid, National Association of College and University Business Officers, Associa-
tion of Governing Boards of Universities and Colleges, Associated Colleges of Indiana, nancial Aid, National Association of College and University Business Officers, Associa-
tion of Governing Boards of Universities and Colleges, Associated Colleges of Indiana, Cincinnati Council on World Affairs, American Association of Colleges for Teacher Education, Indiana Consortium of International Programs.

## Christian College Consortium and Coalition

One of the significant relationships of Taylor is the membership it maintains in the Christian College Consortium. This organization, which includes thirteen Christian liberal arts colleges with programs similar to Taylor's, exists to provide a variety of professional and academic experiences for faculty and students. Of special interest to students
are the visiting students' options on the other campuses and cooperative overseas prosional and academic experiences for faculty and students. Of special interest to students
are the visiting students' options on the other campuses and cooperative overseas programs. Inquiries about Consortium programs may be addressed to the Office of Academic Affairs.

Taylor University is also one of seventy members in the Christian College Coalition, a Washington, D.C.-based organization which was founded in 1976. Students benefit directly through participation in the Washington-based American Studies Program, serv-
ing as interns and participating in an academic seminar program. Students also live in rectly through participation in the Washington-based American Studies Program, serv-
ing as interns and participating in an academic seminar program. Students also live in community with Christians from different geographical regions and denominational backgrounds.

The program is designed for juniors and seniors with a wide range of academic majors and vocational interests. Students are involved in the American Studies Program for periods of three or four months. The internship seminar opportunity is available September through May, with a special concentrated study period during the January interim. Summer internships are also available.
Because of its unique location in the nation's capital, this "Washington campus" for the Coalition colleges is viewed as one way of challenging students to consider the meaning of proclaiming the Lordship of Jesus Christ in all areas of life, including career choices, of prolaing the Lordship or Jesus Chist in all areas of life, indig carer choics,

## The Taylor Program

public policy issues and personal relationships. The Coalition also operates a program in San Jose, Costa Rica.

Additional information is available through the Office of Academic Affairs.

## Wesleyan Urban Coalition

Taylor University is also affiliated with the Wesleyan Urban Coalition. This coalition serves as a cooperative educational center linking the Olive Branch Mission in Chicago with ten Christian colleges and seminaries. Its objective is to foster personal and corporate discipleship in the context of the city of Chicago through involvement in urban ministry, living in Christian community and study of urban life and systems.

Specific programs range from weekend field trips to month-long programs in January and semester-long programs in the spring. Up to 4 semester hours credit is available for the January experience and up to 16 semester hours for the semester program. Credit is available in a wide variety of fields. More information is available from the Office of Academic Affairs.

## The Undergraduate Program

The academic calendar includes a fall and spring semester, an interterm in January, and two summer sessions. Dates are subject to change, so students should confirm registration with their advisor.

## Summer Program

The summer program involves a combination of early-, mid-, and late-summer activities on campus, at the biologiçal field station, and abroad. A biological field station and an art center near Mancelona, Michigan, offer a variety of courses in biology, natural resources management, physical education, and arts and crafts.

For more information on the summer session programs write to the Associate Vice President for Academic Affairs, Taylor University.

## Interterm

Interterm promotes a change of pace for students and professors in terms of scheduling and learning styles. Because students concentrate on a normal maximum of four hours, the design permits flexible learning activities including domestic or international travel. Students may supplement their programs with interdisciplinary or nontraditional courses or take a required course in a varied format. Students are encouraged to choose creative options to complement their programs during this period.

## Credits-in-Escrow

The Credits-in-Escrow program provides opportunity for outstanding high school students to enrich and expand their educational experiences through summer study at a Christian college.

In addition, a variety of both credit and non-credit institutes, workshops, and short term sessions are held. These are designed to meet the needs of teachers, church workers, and others with special interests.

## Study Abroad

Students of superior achievement may, with approval, spend the junior year studying in one of several foreign countries.
With departmental approval, students may also select overseas experiences from several opportunities, such as Practicum, Spanish in the Dominican Republic, Institute of Holy Land Studies, and cooperative programs with other colleges.

In many instances Taylor personnel plan and accompany students in the actual experience. Student proposals for overseas programs are to be submitted to department heads during the term prior to the desired experience.

## Continuing Education

Taylor University sponsors a wide variety of courses for continuing education credit or for the personal enrichment of life-long learners. Courses are offered on campus in the evenings or Saturdays as well as at off-campus locations when arranged by a community group, organization, or company.
For further information regarding the program, contact the Director of Continuing Education or the Associate Vice President for Academic Affairs.

The campus property of Taylor University consists of approximately 250 acres, located on the south side of the town of Upland, Indiana. The main campus is developed on 170 acres and contains major campus buildings and the recreational and athletic fields. An additional 80 acres adjacent to the main campus is utilized for the headquarters of the service facilities and for future campus development. Twelve major buildings have been added to the campus since 1965. Major remodeling of two additional buildings was accomplished during 1972. A brief description of the major campus buildings is as follows:
The Reade Memorial Liberal Arts Center is a 35,000 square foot, air-conditioned facility containing classrooms, faculty offices, and the Learning Resources Center.
The Nussbaum Science Building is named for Dr. Elmer N. Nussbaum who was Professor of Physics at Taylor for 31 years. Dr. Nussbaum's distinguished academic career and humble, caring spirit left an indelible impact on generations of Taylor students. The building is an air-conditioned, 45,000 square foot structure, contains biology, chemistry, and physics laboratories, classrooms, and faculty offices. The Computing Center houses a DEC PDP 11/70 and a DEC VAX $4 / 750$ computer plus a mini-computer and peripheral equipment.
The Zondervan Library was completed and occupied in 1986. The library building was named for Peter J. "Pat" Zondervan and his wife, Mary. Pat Zondervan is Chairman and co-founder of The Zondervan Corporation, a Christian publishing company committed to the production of quality books in harmony with the Bible.

Zondervan Library Nearing Completion


This new 61,000 square foot building holds more than 140,000 volumes and has room for 70,000 more. It also contains seating for more than one third of the student population in both private study carrels and group study rooms. The space in the library is complimented by provisions for present and future technology. Communication conduits no more than five feet from most points in the library provide access to online services.

An online public access library catalog is replacing the traditional card catalog. The circulation system is being automated with barcodes placed on patron cards and all library materials. All cataloging and inter-library loan has been done online through the OCLC computer network for the past decade. As a part of the online catalog, patrons have immediate access to the online holdings of six other Indiana libraries. As a member of EIALSA, a regional library cooperative, the library has access to the holdings of 80 other libraries, and the OCLC network gives access to over 6,000 libraries worldwide. Materials can then be ordered through inter-library loan.

The library has an excellent reference collection, over 700 current periodical and daily newspaper subscriptions, as well as information retrieval through DIALOG, an online computer system of over 100 databases on an ever-expanding number of topics. A large number of periodicals and two major newspapers are also available in microform and may be used on one of several readers or printers. An after-hours study room is available off the beautiful walk-through Galleria.

The Archives of Taylor University is housed adjacent to the Galleria. The Archives contains materials relating to the history of Taylor University and the local community. The Special Collections of the Library, containing old and/or rare books, is shelved on compact mechanical shelving.
The Learning Skills Center, in the southwest wing of the library, has personnel and technology to provide individual instruction in the improvement of skills including reading comprehension, writing ability, and math and computer skills. Individual and group music listening is also provided in this wing of the Library.
The Ayres-Alumni Memorial Building is a 19,000 square foot facility housing the Neil and Renee Compton art museum and other university facilities.
The Art/Little Theatre Building is a 10,000 square foot structure, remodeled in 1972, which contains classrooms, studio facilities, an art gallery, and faculty offices on the first two floors of the building. The third floor is utilized as an experimental little theatre and as a classroom and includes costume making and storage areas.
Sickler HaII, the major Communication Arts Building, contains classrooms and faculty offices, and includes a prayer chapel which is furnished for individual and small group devotional experiences.
Ferdinand Freimuth Administration Building is a 14,000 square foot structure, remodeled during 1972. The offices of the President and the Provost/Executive Vice President are located on the second floor. Financial Aid, Admissions and Alumni offices are on the first floor. This facility houses the executive offices of academic affairs, business and finance, and advancement. The major remodeling of this building was made possible by the gift of Mr. Ferdinand Freimuth, a Fort Wayne stockbroker and philanthropist.
The Hermanson Music Center, a 23,000 square foot structure, is a new sound-proof, airconditioned facility. It houses teaching studios, classrooms, rehearsal rooms, practice rooms, faculty offices, conference rooms, faculty and student lounges. Also, a 250 -seat recital hall, housing a Boesendorfer Imperial grand piano and a Steinway, is designed to provide the best possible acoustical qualities. The entire facility is designed to be totally accessible to the handicapped.
The Don J. Odle Physical Education Facility was completed early in 1975. This 45,000 square foot facility contains two handball courts, a wrestling room, a weight room, classrooms, faculty offices, and a varsity basketball court with three cross courts. This building was constructed with generous gifts from alumni and friends. It replaced the nearly fifty-year-old Maytag Gymnasium.

The Field House is a newly-remodeled steel-paneled building providing additional opportunities for physical education and athletics. The football team room and nautilus weight lifting equipment are also contained in this facility.
The Biological Field Station of Taylor University operates at Big Twin Lake in northern Michigan. The campsite is located on a 130 -acre tract of land on the shores of Big Twin Lake and is surrounded by the AuSable State Forest. The modern, new facilities consist of a large dining lodge and lounge, an interpretive center, a biology laboratory, staff and student cabins, a utility building, and waterfront facilities.
The Milo A. Rediger Chapel/Auditorium was completed in the spring of 1976. This 1600 -seat facility, formerly Maytag Gymnasium, was remodeled into a new building through the generosity of many alumni and friends of the University. In addition to its spacious and beautiful auditorium, this building houses Student Ministries, the Center for Student Development, the Counseling and Psychological Services Center, and the Career Development Center.
Samuel Morris Hall is a men's residence with 88 double rooms, a public lounge on the first floor and student lounges on each of the four floors. The building is named for Sammy Morris, a former student from Africa, who is featured in the film, "Angel in Ebony."
Swallow-Robin Hall, a three-story brick building, has been a residence for men. This building was made possible by the gift of Dr. S.C. Swallow of the Central Pennsylvania Methodist Conference, and was named Swallow-Robin in honor of Dr. Swallow and his wife, whose maiden name was Robin.
Grace Olson Hall, a residence hall for 293 women, was constructed and ready for use in 1966. It is decorated with lounges, a fireplace, and carpeted hallways.

South Hall, constructed in 1971, is a four-story residence hall. This structure, consisting of living-study suites, provides the intimacy of apartment-style accommodations with the dynamics of a larger group of students.
Mary Tower English Hall is a women's residence hall housing 226 residents. It was opened in 1975. English Hall is designed in much the same manner as South Hall, providing private living room areas for each eight women. This residence is located on the south end of campus near several other residences and the health center.
Arthur L. Hodson Dining Commons is a $\$ 1,300,000$ air-conditioned facility completed in 1972. It is located on the southwest corner of the campus overlooking the campus lake. This structure, which seats approximately 950 persons in the main dining hall, also contains a banquet room and private dining area. A four-way fireplace is a central focal point for this facility.
Student Union - This dome-shaped, air-conditioned facility provides space for student activities, the snack bar, and the campus store. A 100 -foot diameter circular area, provides lounge, reading, listening, and recreational space on the lower level. The upper level accommodates offices of Leadership Development and Student Programs, Taylor Student Organization, Student Activities Council, Student Services Council, campus newspaper, and yearbook.
Haakonsen Health Center is a 4,000 square foot facility located on the south end of campus. This structure was completed early in the summer of 1975 and contains five twobed rooms in addition to examining rooms and doctor's offices.
Wengatz Hall is a 133 room residence hall for men. It was constructed in 1965 and includes several lounges and a recreation room.
President's Home - The home of the Taylor University President graces a rustic wooded area west of the tennis courts and practice field. In this spacious two-story brick residence, the presidential family hosts numerous social functions.
The Lake - A picturesque 8-acre lake on the Taylor property provides swimming opportunity in summer and excellent ice skating facilities in winter. Part of the lake is used for studies in ecology, and nearby' is a wooded picnic area.


## Student Life

The college program is designed not only to embrace a wide diversity of interests but also to use that diversity to challenge and strengthen the minds and spirits of each member of the student body.
The student's "whole person" development is enhanced by residence life programs specifically designed to enrich and support the classroom experience. Among those are a new-student program, a student leadership program, a student activities program, a student ministries program, living-learning seminars, residence hall activities, and a four-year-long career development program.

## Residence Life

Taylor University is a residential campus with a strong emphasis on its residence life program. These living-learning centers serve as focal points for many meaningful experiences and activities.

## Social Life

The academic year at Taylor is punctuated by a variety of social functions including professional entertainment, a contemporary Christian concert series, films, banquets, special weekends (Homecoming, Parents Weekend, etc.) and student variety and talent shows.

## Student Ministries and Worship Experiences

Student Ministries at Taylor is committed to the strategic task of helping students to have a growing intimacy with God - knowing Him and loving Him - in a dynamic developing relationship. Student ministries makes its impact through an aggressive chapel program. Chapel meets each Monday, Wednesday, and Friday and includes two weeks for spiritual renewal; a week emphasizing cross cultural missions; and a marriage, family, and singleness week. Students are encouraged to attend a local church or the Sunday morning and evening services which are held on campus. The discipleship program on campus provides a student discipleship coordinator on each residence wing (one for each 30 students). An important part of this ministry is a small group program committed to the goals of Bible study, quality burden bearing/sharing fellowship, mutual prayer, and individual group outreach projects. Student Ministries is committed to hands-on experience in ministry and leadership. Taylor World Outreach (TWO) is the agency through which this is accomplished. There are six student-led departments committed to leadership development and outreach. These are Community Outreach, World Christian Fellowship, Taylor Christian Artists, Youth Conference, Lighthouse (interterm mission to Nassau, Bahamas) and the Residence Hall Discipleship Coordinator program.

## Cultural Activities

An artist series features nationally-known performers in a series of concerts, theatre presentations, and lectures. The theater department presents frequent dramatic productions, and the music department offers chorale, oratorio chorus, band, orchestra, jazz band, and senior recital concerts.

## Athletics

The athletic program provides a valuable addition to the educational experience of the men and women of Taylor University. Athletics provide a model of life in which the participant may function as a whole person.
Intercollegiate sports for men include baseball, basketball, cross country, football, golf, soccer, tennis, and track and field. On the intercollegiate level, women compete in cross country, basketball, softball, tennis, track and field, and volleyball.
Taylor holds membership in the National Association of Intercollegiate Athletics (NAIA) and the National Christian College Athletic Association (NCCAA).
A strong intramural program offers additional recreational and competitive participation for both men and women.

## Campus Government

Students participate in the affairs of Taylor University through the Taylor Student Organization, student-faculty committees, and personal interaction with faculty and administrators. The president of TSO is a member of the University Cabinet (the President's advisory council).

## Student Organizations

For students with specialized interests there are various clubs with social, practical, and academic benefits. They include organizations in the natural sciences, social sciences, radio, music, languages, and pre-professional areas. There are also dramatic, athletic, cultural, and political groups as well as student organizations which exist to add vitality to the spiritual life of the university.

## Student Publications

Students with writing ability and photographic or artistic skills may use them in the production of these student publications: The Echo, a weekly newspaper which serves as a sounding board for student views and carries news, editorials, photographs,

and features; Parnasus, an annual literary magazine which features original work of stu-
dents and faculty; Ilium, the yearbook, a student publication reflecting in photographs and copy an overview of the year at Taylor and highlighting the major events and people of the year.

## The Counseling Center

The Counseling Center offers a wide range of psychological services to students on a non-fee basis. Services include stress management and interpersonal skills training, therapy and growth groups, and individual counseling. These services are coordinated by the University Psychologist. The Counseling Center is located on the lower level of the Rediger Chapel/Auditorium in the Center for Student Development.

## Health Service

Taylor University employs a full time resident physician and a full time nursing staff. The university also maintains a 10 -bed health center that is open 24 hours a day. Equipment to care for most illnesses and injuries that might occur during the school year is available at the health center. This includes equipment for $x$-rays and other items needed to care for emergencies other than those requiring hospitalization. Hospitalization for injuries and diseases that cannot be cared for at the health center may be arranged by the resident physician.

Taylor students have the unique opportunity of enjoying a variety of experiences, both social and academic, through the Wandering Wheels program. The three phases of the Wandering Wheels ministry provide excellent educational opportunities - coast to coast bicycling, extended mobile retreats aboard the "possum" buses, and the unique 'Upland-based retreat center, all emphasize the vitality of the Christian life. Developed as an extension of Taylor's community outreach, Wandering Wheels sponsors many programs in which current students may participate for college credit.

1. We believe in equality of all people as imbedded in Biblical teachings and as an integral part of our Christian commitment. We acknowledge that this is affirmed in the Constitution of the United States of America.
2. We believe in an environment in which people can live and work cooperatively, valuing the multiple cultures from which they have come without violating institutional values.
3. We believe in multicultural education as an interdisciplinary effort to prepare graduates who understand, appreciate and work effectively with those who are different from themselves.
4. We believe in global interdependence, implying the need to graduate people who are capable of functioning as global citizens.

Taylor University is a community of Christians who are united in the pursuit of academic progress, personal development, and spiritual growth. Participation in the university community is based on the foundation of commitment to the Lordship of Jesus Christ. Together we seek to honor Him by integrating faith and learning while our hearts and lives reflect the process of maturing in Christ.
The purpose of this statement is to identify the expectations for participation in our community that will assist us in living together and in meeting our institutional objectives. We acknowledge that it is impossible to create a community with expectations which are totally acceptable to every member. Nevertheless, certain expectations must be specified to assure orderly community life. When individuals join the Taylor community, they freely and willingly choose to take upon themselves the responsibilities outlined in this statement.

## Multicultural Philosophy Statement

Expectations and Responsibilities for Community Life at Taylor University

## Assumptions

1. Loving God and being accountable to Him are the primary motivations for Christian relationships and behavior.
2. The Bible is our authority; it provides the essential teachings and principles for personal and community conduct.
3. God, through the Holy Spirit, places in every believer the inner resources and attributes to minister to others through supportive relationships.

## Responsibilities for Relationships

Living in daily fellowship with other Christians is a privilege and an expression of God's grace. In recognition of this privilege great value is placed on the quality of relationships in our community. We acknowledge that we are living in a fellowship where we are dependent on and accountable to one another. The New Testament word for fellowship is koinonia. It is translated as partaker, communion, communication, contribution, distribution. Members, therefore, are encouraged to seek as many opportunities as possible to demonstrate koinonia.

Within our community the greatest expression of fellowship and the highest principle for relationships is love.

We should love one another. This is how we know what love is: Jesus Christ laid down His life for us. And we ought to lay down our lives for our brothers . . . let us not love with words or tongue but with actions and in truth. Since God so loved us, we also ought to love one another. Whoever loves God must also love his brother (I John 3:11-16, 18; 4:11, 21 NIV).
For the purpose of our community we have identified the following specific expressions of love as being among the most desirable in our relationships.

## Edification

We expect each member of the community to strive consciously to maintain relationships which support, encourage, and help others.

We who are strong ought to bear the weaknesses of those without strength and not just please ourselves. Let each of us please his neighbor for his good, to build him up (Romans 15:1-2 NIV).

## Bearing with One Another

Because of our humanness, difficulties in relationships can occur. ln such cases we are to respond as the Scripture states:
. . . clothe yourselves with compassion, kindness, humility, gentleness and patience. Bear with each other and forgive whatever grievances you may have against one another (Colossians 3:12 NIV).

## Burden-Bearing

We are responsible to come alongside those experiencing grief, discouragement, illness, tragedy, or other personal trial. Expressions of bearing one another's burdens include comfort, encouragement, consolation, and intercession.

## Speaking the Trutt in Love

A community such as ours can be strengthened by speaking the truth to each other with love. Problems in relationships and behavior can be resolved constructively by confronting one another in an appropriate spirit. If the welfare of the one being confronted is paramount and if the confronter is acting in love, the process can produce growth.


## Reconciliation, Restoration, and Restitution

Healing broken relationships is necessary for a healthy community. When relationships have been harmed, regardless of the reason, individuals are expected to reach out to one another, to forgive one another, to restore relationships, and to make restitution. II Corinthians 5:18-19 NIV states:
. . . and He (Christ) has given us the ministry of reconciliation . . . and He has committed to us the message of reconciliation.
Implementing the above expressions of love in relationships requires continual effort and sensitivity to others. Relationships of this quality enrich our lives, honor God, and are necessary in achieving the goals of the university.

## Responsibilities for Behavior and Attitudes

## Biblical Expectations

Scripture teaches that certain attributes are available to individuals through the Holy Spirit. These attributes include 'love, joy, peace, patience, kindness, goodness, faithfulness, gentleness, and self-control. Against such things there is no law" (Galatians 5:22-24 NIV). These "fruits of the Spirit" are to be sought, encouraged, and demonstrated in our relationships.
In contrast to encouraging these positive attributes of the heart, Scripture condemns attitudes such as greed, jealousy, pride, lust, and hatred. Although these attitudes are sometimes difficult to discern, they can hinder relationships with God and others and lead to unacceptable behavior.
Certain behaviors are expressly prohibited in Scripture and therefore should be avoided by members of the university community. They include theft, lying, dishonesty, gossip, slander, backbiting, profanity, vulgarity (including crude language), sexual promiscuity (including adultery, homosexual behavior, premarital sex), drunkenness, immodesty of dress, and occult practices.
In keeping with scriptural admonitions to bring ourselves under the authority of government, members of the Taylor University community are expected to uphold the laws of the local community, the state of Indiana, and the nation. An exception would be
those rare occasions in which obedience to the civil authorities would require behavior that conflicts with the teaching of Scripture. On such occasions, each individual would submit voluntarily to the civil penalty for his behavior. Behavior resulting in civil arrest on or off campus is subject to review within the university's disciplinary procedures.

## University Expectations

In addition to subscribing to biblical expectations, members of the Taylor University community voluntarily commit themselves to the following standards of behavior. This commitment results from the conviction that these standards serve the good of the individual as well as the institution. These standards are not set forth as absolutes or as an index of Christian spirituality but rather as expectations of this community. Because of the importance of trust in and responsibility to one another, violations of these standards are regarded as a serious breach of integrity within the community.

The following standards apply to students, faculty, and administrators at Taylor University.

1. Members of the community are expected to observe the Lord's Day (Sunday) by attending worship services at a church of their choice. Sunday is a day set apart primarily for worship, fellowship, ministry, and rest. While activities such as recreation may be a part of the day, "business as usual" relative to university programs and services will not be sanctioned or encouraged except where absolutely necessary.
2. Corporate worship, fellowship, and instruction are essential for campus community goals. Therefore, students, faculty, and administrators are expected to attend chapel. Regular attendance is understood as a mature response to these community goals. The attendance policy is not a voluntary one; it is dependent upon individual honor and allows three or fewer absences each term.

In addition, members of the community are encouraged to participate in universityrelated religious activities as well as those of their own church.

3. The community recognizes the danger to one's physical and psychological well-being in the use of certain products. Therefore, members of the community are to refrain from the use of tobacco in any form, alcoholic beverages, hallucinogenic drugs and substances (including marijuana) or narcotics not authorized by a physician. Under no circumstances are the above to be used, possessed, or distributed on or away from campus. Members are expected not to abuse the use of legal substances.
4. Gambling (exchange of money and goods by betting or wagering) is viewed as an unwise use of God-given resources and therefore is not acceptable in any form.
5. Because a significant number of evangelical Christians view that social dancing is a morally questionable activity, social dancing is not permitted on or away from campus. However, acceptable forms of expression in the academic program may include sanctioned folk dance, ethnic games, and the use of choreography in drama, musical productions, and athletic events.
6. Because of our concern for the worth and dignity of persons, each member of the community is expected to be sensitive to special needs existing in our society and on our campus. Therefore, discrimination against others on the basis of race, national origin, sex, or handicap is not acceptable.
7. Any kind of demeaning gesture, threat of violence, or physical attack directed toward another person will not be tolerated. Vandalism of property is also unacceptable.
8. The university urges its members to be selective in their choices of entertainment and recreation. Activities and entertainment that are of questionable value or diminish a person's moral sensitivity should be avoided.
9. The pornography industry exploits people. Further, the use of the industry's products is immoral. Therefore, pornographic materials are not to be used, possessed, or distributed on or away from campus.
10. Consideration for others and standards of good taste are important to Taylor; therefore, all activities should be limited by this principle.
11. Members of the community are subject to the demands of academic integrity such as honesty and giving credit to sources.
12. Compliance with day-to-day policies and procedures of the community is expected from members. These routine items are listed in the Student Life Handbook, the University Catalog, and the Taylor University Faculty and Administrative Staff Handbook.

## Conclusion

The intent of this statement is to identify expectations that assist Taylor University in functioning as a Christian community and in achieving its goals as an institution of higher learning. The statement addresses relationships and behavior; these emphases are parallel and vital to the quality of our experience together. The behavioral portion of the statement includes standards that are specific to the university. These standards are important to our community and must be consistently maintained to assure a proper climate for learning. Nevertheless, these standards must be kept in perspective with the biblical responsibilities for relationships and behavior.
The book of Colossians provides an appropriate summary of the goals for our community:

Therefore, as God's chosen people, holy and dearly loved, clothe yourselves with compassion, kindness, humility, gentleness and patience. Bear with each other and forgive whatever grievances you may have against one another. And over all these virtues put on love, which binds them all together in perfect unity. Let the peace of Christ rule in your hearts, since as members of one body you were called to peace. Let the word of Christ dwell in you richly as you teach and admonish one another . . . And whatever you do, whether in word or deed, do it all in the name of the Lord Jesus, giving thanks to God . . . (Colossians 3:12-17 NIV).


## Application

Students are responsible for implementing the relational and behavioral expectations listed above when the university is in session, when they are part of a university program, or when they are living in university-approved housing.
Because the policies of the university are not intended to infringe upon the government of the home, resident students who are home for vacation or the weekend are assumed to be a part of that family unit and under the direction of their parents. Students who commute from the homes of their parents are expected to abide by these policies except when university regulations conflict with the governance of the home.

## Housing

Residence hall facilities at Taylor are designed as living-learning centers. Taylor tries to fulfill two goals: first, to provide a community living experience through which students will be exposed to a variety of learning opportunities which go beyond the scope of their chosen courses; second, to provide attractive physical facilities and professional staff to assist students in developing a high degree of self-direction and responsible citizenship. Each residence hall director is a qualified educator, counsellor, and a member of the faculty.

## Housing Deposit

Students who have been admitted to Taylor University and have paid the $\$ 150$ advance payment will receive residence hall application material from the Center for Student Development. This material is to be filled out and returned to the Center for Student Development. Students who have made an advance payment for interterm or spring term will automatically receive a housing assignment in the mail approximately three weeks prior to their arrival on campus. Of this advance payment, $\$ 50$ is a housing deposit and is returned when a student leaves college or cancels on acceptance (note refund policy). Charges for damage to residence hall property and other university-administered facilities are deducted from this housing deposit.

The advance payment plus the application for housing must be made before residence hall space will be reserved.

## Residence Requirements

All single students not commuting are required to live in university-owned or approved housing. Exceptions will be considered by the student development staff upon application in writing to the Center for Student Development. Only cases of need such as unusual health problems certified by the university health center and significant age differential between the student and general age range of the student body are considered.

## Community Housing

University-approved community housing for upperclassmen is available for use when residence hall facilities are exhausted. Application for such housing is made through the Center for Student Development. Students living outside the college residence halls may not change their place of residence without first receiving permission from the Center for Student Development and they are expected to observe the same regulations and have the same responsibilities which apply to all resident students.

## Room Assignments

Room assignments are made prior to the beginning of the fall term. Room and roommate preferences are honored within the limits of available space. The university reserves the right to assign space as it deems appropriate.

## Hall Regulations

The responsibility for determining residence hall regulations rests with the residence hall staff and the Student Life Committee. Changes in regulations will be made from time to time when such changes are considered to be in the best interest of the total university community.

## Room Furnishings

Residence hall rooms are furnished with the following items: window shades or draperies, beds, mattresses, desks, chairs, dressers, and study lamps. The university provides and launders two sheets, a pillowcase, two towels, and a washcloth. All but one sheet is exchanged for clean linen each week. Additional bedding not mentioned above must be furnished by the student.

The Career Development Office is responsible for assisting students in ascertaining their career interests and broadening their awareness of the numerous opportunities available through a liberal arts education. This office also assists students in securing employment upon graduation and maintaining their placement files.

The Taylor University Alumni Association engages alumni, parents, and friends in a meaningful, continuing relationship with the University. The Association, which is directed by a twenty-member National Alumni Council, accomplishes its objectives by means of campus events and various projects in regional Taylor University Clubs.
The Alumni Association participates in both alumni- and student-oriented programs such as Homecoming and Senior Recognition Dinner. Members become involved in numerous ways which are beneficial to the students, faculty, administration, and the general development of the University.

The Alumni Association supports and encourages Taylor University in its whole-person approach to education.

## Career Development

## Alumni Association



# Admissions $\mathcal{E}$ Finances 

Through the Offices of Admissions and Financial Aid, prospective students may obtain information about how they may become involved in the unique educational experience at Taylor, which weaves together scholarship in the liberal arts tradition, Christian nurture and awareness, and concern for career development.
Students are invited to request particular information on admissions from the Dean of Enrollment and about financial aid from the Director of Financial Aid. Students may call Admissions directly, toll free, (National) 1-800-882-3456, (Indiana) 1-800-882-2345.

Application to Taylor is made on forms available by phone or by writing the Office of Admissions, Taylor University, Upland, Indiana 46989. Students are encouraged to submit the required credentials early in the year preceding their desired enrollment. Credentials include the application form, high school transcript, recommendations from a guidance counselor and a minister, a photograph, and aptitude test scores, either the SAT or ACT scores being acceptable. In some cases a personal interview may be requested by the Dean of Enrollment.
Transfer students will present the same credentials as high school seniors and, in addition, an official transcript from each institution previously attended and a report on good standing from the last college attended. Generally a minimum B-average is required; test scores are not required if a full term of college work has been successfully completed.
International students desiring admission should write to the Office of Admissions for special instructions.
An applicant to Taylor should have graduated in the upper half of his class from an accredited secondary school and present satisfactory aptitude test scores. Aptitude test scores are used to help interpret a student's high school record, the primary document in the evaluation of academic potential. Recommendations from a guidance counselor and a minister are important as are a student's achievements in extracurricular activities. None of these is an acceptable substitute for academic achievement.
Applicants to Taylor should have four years of high school English, two years of mathematics (one of algebra, the other preferably geometry), a year of laboratory science, and two years of social studies. Two years of a foreign language are strongly recommended.
Aptitude tests may be taken as early as May of a student's junior year of high school or as late as January of the academic year preceding enrollment. Test scores must be sent to the Office of Admissions, Taylor University, Upland, Indiana 46989, either through the high school guidance counselor or directly from the College Entrance Examination Board or the American College Testing service to be considered official.

## Early Admissions

Students with exceptional academic credentials may apply for admission during their junior year of high school.

## Admissions

## Tuition-Free Summer Programs

Taylor offers two tuition-free summer programs for outstanding high school students who have completed their junior year. These programs are for children of alumni and for honor students. Students may enroll for up to six hours of college credit to be held in escrow until their high school graduation.

## Notification of Admission

Taylor uses a rolling admission procedure. Admission decisions are mailed to applicants approximately two weeks after all credentials, including test scores, have been received.

## Advanced Standing

## Advanced Placement and Credit

To seek advanced standing or college course credit, an applicant may take an Advanced Placement examination administered by the College Entrance Examination Board. Students who have passed an Advanced Placement examination with a grade of 3 or better may be eligible for placement at the next level of the college sequence and may receive college credit if the overall quality of their performance merits such recognition.
Advanced credit without limit may also be gained through the subject exams of the College-Level Examination Program (CLEP). Complete information may be secured from the Director of Testing.
In French, German, and Spanish, advanced credit may be earned upon satisfactory completion of skills tests selected and administered by the department of modern languages. Complete information may be obtained from the department.

## Transfer Students

Transfer students are welcomed at Taylor where attempts are made to facilitate their academic and social adjustment. Taylor University accepts in transfer those courses carrying grades of $C$ or above from accredited institutions.

Transfer students from junior colleges may receive up to 66 term hours of transfer credit.

## Correspondence Credit

Correspondence study credit from approved institutions may be considered for transfer. A maximum of 6 term hours is permitted.


An advance payment of $\$ 150$ is required. A student accepted before April 1 should pay this by April 10. Students accepted after April 10 make this payment within 15 days of acceptance. Of this amount $\$ 100$ is credited to the student's first-term bill, and $\$ 50$ is a refundable housing deposit. Payment of this fee reserves for the student a position in university housing. All returning students are required to remit an advance payment of $\$ 100$ before June 1 as evidence of their intention to return for the fall term. Late payment will be accepted only if residence hall and class space is available.

## Deposit Refunds

Refunds of deposits are granted to new and readmitted students according to the following schedule:

| For Fall Term Admission | Refund |
| :--- | ---: |
| between May 1 and May 31 | $\$ 145$ |
| between June 1 and August 1 | $\$ 100$ |
| after August 1 | $\$ 50$ |
|  |  |
| For Interterm and Spring Term Admission |  |
| before November 1 | $\$ 145$ |
| between Nov. 1 and Nov. 30 | $\$ 100$ |
| after November 30 | $\$ 50$ |
| Refunds of deposits are granted to returning students according to |  |
| the following schedule: |  |
| between July 1 and July 14 | $\$ 75$ |
| on July 15 or after | none |

Students attending Taylor University are paying only a part of the actual cost of education. Each student receives an educational subsidy to the extent that the amount billed is less than the institution's cost of providing the educational experience. Income from contributions, earnings on the endowment, grants, and other sources offset the total cost of a Taylor education in the determination of student costs.

The college reserves the right to increase rates if and when necessary.

Please refer to the Taylor University tuition and fee schedule for the current costs for an academic year.

Certain other charges are assessed for courses requiring private or special instruction and for administrative costs for special services and transportation. See the tuition and fee schedule for details.

Minimum music fees include one ( $1 / 2$ hour) lesson and five practice periods per week.

## College Level Examination Program

$\$ 28$ is charged as an examination fee for each test administered, and a $\$ 15$ recording fee is assessed for each course for which college credit is granted.

## Supervised Student Teaching

$\$ 150$ fee includes an orientation visit to the student teaching center, an honorarium for supervising teachers, the cost of applying for certification, and the informative studentteacher reception.


## Special Materials

Certain classes may require the student to purchase materials for specific projects or may require a basic material charge. These costs will vary by course and cover only the materials used by the individual student.

## Graduation Fee

$\$ 30$ is charged to all candidates for graduation and is included in the cost for the last term of the senior year. It includes the diploma, cap and gown, and other graduation expenses.

## Student Insurance

Taylor University provides a student insurance program which is available to all students. The program is not mandatory; although students are encouraged to participate in it. Coverage is available for single students, for husbands and wives, and for families. Rates are available upon request from the Office of Business Affairs.

## Change of Registration

$\$ 25$ is charged when adding a course after the first week of classes.

## Late Registration

$\$ 25$ per week or fractional week is charged after the designated registration day of any term.

The bill for the fall term is mailed to each pre-registered student at least one month prior to the beginning of the fall term. Charges for interterm will be included on the billing for spring term which is mailed at least three weeks prior to the beginning of spring term. Pre-registered students are required to make the minimum payment two weeks prior to the first day of classes. Students not pre-registered must make the minimum payment on registration day to be enrolled in classes.
Payment of the amount due for each term may be handled in one of the following ways:
(a) Payment in full: Required of all students carrying less than 7 hours.
(b) Minimum payment: One half of the net amount due (i.e. charges minus financial aid listed on statement) must be paid two weeks prior to the start of the semester. The remaining balance will be due the last working days of October and March respectively. Any balances that are not paid by the due date will be subject to a $1.25 \%$ per month ( $15 \%$ annual) interest charge.
(c) Taylor Time Payment Plan: This method of payment provides for monthly payments beginning in June in anticipation of fall enrollment.
Additional information can be found in the Brochure on Payment Policy. This publication may be secured in the Business Office.
(d) Special arrangements: Hardship cases must be worked out in advance of registration day with the Office of Business Affairs.
A charge will be made for collection of overdue bills. If permission has been granted for a delay in the completion of the final payment due each term, a $1.25 \%$ per month or $15 \%$ annual carrying charge will be added.
All accounts must be paid in full before academic credit is granted and before a student can begin the next academic semester.

Withdrawal forms may be secured from the receptionist in the Office of Student Development.
Tuition charges for course withdrawal from a single class are refundable in full if the student clears the withdrawal with the Records Office during the first three weeks of classes. There is no refund of tuition if a course is dropped after the third week, but the student must still clear the withdrawal with the Records Office so as not to receive an F grade.
Refunds of student charges for tuition and private instruction in cases of withdrawal from college are based on the following schedule:

| Withdrawals to the end of |  |
| :--- | ---: |
| Second week | $90 \%$ |
| Third week | $75 \%$ |
| Fourth week | $60 \%$ |
| Fifth week | $45 \%$ |
| Sixth week | $20 \%$ |
| Withdrawals after end of sixth week | none |
| Basic fees | non-refundable |
| Board | prorated |
| Room | non-refundable |

Refunds are based on the total term's bill and on the date the official withdrawal form is completed. The advance payment and housing deposit will be forfeited for students who complete registration but must withdraw before attending classes. Any deviations from the refund policy are at the discretion of the Vice President for Academic Affairs and the Vice President for Student Development.

If a student is receiving financial aid, funds will be returned to the aid source(s) according to the Taylor University Refund \& Repayment Policy. Copies of this policy are available upon request from the Office of Financial Aid.

## Financial Aid

How to Apply for Financial Aid

The financial aid program at Taylor recognizes that it is the basic responsibility of students and their families to finance a college education. However, the rising cost of education has made it necessary for many students to enlist financial assistance outside their personal resources. Through financial aid, it is possible for nearly every qualified student who seriously desires to attend Taylor to do so regardless of financial resources.

The financial aid programs offer assistance to students in need in the form of scholarships, grants, loans, and employment. Financial aid is awarded primarily on the basis of financial need, except in the case of merit scholarships which require superior academic achievement and ability.

Financial need is defined as the difference between a family's resources and the total cost of attending college. If there is a difference between the total cost of attending Taylor (including all tuition, fees, room, board, books, supplies, personal expenses, and travel expenses) and the ability of the family to meet these educational costs, the student is determined to have financial need. The factors taken into consideration when evaluating financial need include parental income and assets, student assets and expected savings from summer employment, family size, and number of family members in college.

To determine the extent of the student's financial need and the family's ability to pay for educational expenses, Taylor uses the Financial Aid Form of the College Scholarship Service. An analysis of this statement yields the amount that the family can be expected to contribute.

It should be noted that most aid programs require that a student be enrolled full-time (minimum of 12 credit hours per term). Students who plan to enroll on a part-time basis should consult the Director of Financial Aid about the availability of financial aid programs.

To continue to receive financial aid, a student must re-apply each year. To maintain eligibility for financial aid, a student must also meet the criteria established in the Taylor University Satisfactory Academic Progress Policy. Copies of this policy are available upon request.

Students interested only in merit-based programs may disregard steps 3 and 4 below. Students applying for financial aid based on need must

1. Be accepted for admission to Taylor (for incoming students).
2. Complete a Taylor University Financial Aid application and submit it to the Office of Financial Aid.
3. Complete a Financial Aid Form (FAF) and submit it to the College Scholarship Service (CSS).
4. Submit a Financial Aid Transcript from each previously attended college to the Office of Financial Aid (for incoming transfer students).

These forms should be received by the Office of Financial Aid by April 1 in order to receive preferential consideration in the awarding of financial aid. Students whose forms are received after this date will be considered for financial aid only if funds are available. All of the above-mentioned forms are available in the Office of Financial Aid.

Families should complete the Financial Aid Form as soon as possible after January 1 and send it to the appropriate branch of the College Scholarship Service for processing. An


#### Abstract

allowance of 4 to 6 weeks should be made for processing and mailing time between the date the FAF is mailed and the date it is to arrive at Taylor. Although it may be helpful, it is not necessary for a family to complete their income tax return before completing the FAF. Be sure to indicate on the FAF that a copy should be sent to Taylor University (code 1802). Additionally, students desiring scholarships or grants from the State of Indiana, New Jersey, Pennsylvania, or Massachusetts should request that a copy of the FAF be sent to the appropriate state agency. All students should apply for a Pell Grant (formerly Basic Grant) by checking the appropriate box on the FAF.

Indiana residents: To be considered for state aid, the FAF must be postmarked before March 1.

Special note: Due to legislation pending in Congress at the time of printing, some of the above-mentioned forms may change.


## Student Leadership Scholarships

Taylor University sponsors a scholarship competition each November at the High School Student Leadership Conference. The competition results in three students winning a $\$ 5,000$ scholarship for each of their four years at Taylor. Details of the Conference and the competition are available from the Leadership Development Office.

## President's Scholarship

This program is open to incoming freshmen who: (1) have an SAT-combined score of 1200 with a minimum SAT-verbal of 500 and (2) graduate in the top $10 \%$ of their high school class.

The amount of this award is $\$ 1,000$ without regard to financial need; however, it may range up to $\$ 2,000$ if financial need is demonstrated. The award is renewable if a 3.0 GPA is maintained.

## Dean's Scholarship

This program is open to incoming freshmen who: (1) have an SAT-combined score of 1100 with a minimum SAT-verbal score of 450 and (2) graduate in the top $15 \%$ of their high school class. The amount of this award is $\$ 750$ without regard to financial need; however, it may range up to $\$ 1,500$ if financial need is demonstrated. The award is renewable if a 3.0 GPA is maintained.

## Trustee's Scholarship

This program is available to incoming freshmen who: (1) have an SAT-combined score of 1000 with a minimum SAT-verbal score of 400 and (2) graduate in the top $20 \%$ of their high school class. Incoming transfer students may also qualify if they meet the above criteria and have a 3.0 GPA at their previous college. The amount of this award is $\$ 500$ without regard to financial need. The award is for one year only.

## National Merit Scholarship

Taylor sponsors two such scholarships each year to qualified applicants entering as freshmen. The amount of the award will vary from $\$ 500$ to $\$ 2000$ depending upon the applicant's financial need.

## Valedictorian/Salutatorian Scholarship

Incoming freshmen who graduated first or second in their high school class are eligible for an award for one year only in the amount of $\$ 500$ without regard to financial need.

## Miscellaneous Scholarships

There are a number of scholarships available that are made possible through the generous contributions of friends of Taylor. Students applying for financial aid are automatically considered for them. A complete listing is shown below:

Alumni Scholarship Ancient Language Scholarship Mary Rose Apple Scholarship Rev. Alfred H. Backus Memorial Scholarship Evan Bergwall Scholarship Bowker/Kuhne Foundation Scholarship James M. Bragan Memorial Scholarship Charles W. Carter Award Chi Alpha Omega Scholarship Coburn Award Communication Arts Merit Scholarship Coughenour Scholarship Marion L. Crawley Award Rose Stanley Cozzens Award Virginia H. Dillard Memorial Scholarship Dillon-Long Scholarship Eisenhower Memorial Scholarship G. Harlowe Evans Chemistry Scholarship Faculty Scholarship Friends of Music Scholarship Lester C. Gerig Music Talent Scholarship Aileen Gortner Memorial Merit Scholarship Grace Educational Assistance Grant Granitz-Nelson Award Gladys M. Greathouse Speech and Drama Scholarship Taylor University Women's Guild Scholarship<br>Ralph and Ida Herber Scholarship<br>Huffman Educational Assistance Grant<br>International Student Scholarship<br>Alyce C. Isaacsen Award<br>Fern I. Jackson Memorial Scholarship<br>Charles H. and Wilma Dykeman Jennings Memorial Scholarship<br>Robert A. Johnson Scholarship<br>Dorothy Knight Scholarship<br>Charlotte Knox Canida Award<br>Lange Scholarship<br>Math Alumni Merit Scholarship<br>Willard J. McLaughlin Scholarship<br>William C. McClennan Memorial Award<br>Rosselle McKinney Scholarship<br>Robert and Coleen Midwood Merit Scholarship<br>Charles R. Miller Scholarship<br>Dorothy Beatty Miller Memorial Scholarship<br>Phillip J. Miller Memorial Scholarship<br>Sammy Morris Memorial Award<br>Muncie District-United Methodist Church Scholarship<br>Diane Newman Memorial Scholarship<br>Grace D. Olson Memorial Scholarship<br>Physics Alumni Foundation Merit Scholarship<br>Poplar Run Church Memorial Scholarship<br>Precision Scholarship<br>Presser Foundation Scholarship

## New Scholarships

Donors wishing to establish scholarships may contact the office of University Advancement.

## Music Scholarships

A student majoring in music may apply for any of the several music scholarships which are awarded to students who display special talent with musical instruments or voice and who show promise of superior accomplishments in this field. Students interested in applying should contact the Head of the Music Department.

## State Scholarships

In the past, the states of Connecticut, Massachusetts, Pennsylvania, Rhode Island, and Vermont have operated scholarship programs which permit the student to take a scholarship award to a college in another state. Interested students should contact their high school counselor or write the scholarship agency of their state for more information.


## Grants

## Loans

## Pell Grant (federal)

This grant program, formerly called Basic Grant, is designed to be the floor upon which all other aid is built. A student may automatically apply for this grant by checking the appropriate box when submitting the Financial Aid Form.

## Supplemental Educational Opportunity Grant (federal)

These grants are available to students who demonstrate an exceptional financial need.

## Rediger Educational Grant

These grants are awarded to students on the basis of financial need.

## Indiana Higher Education Award

The State of Indiana offers grants to qualified residents on the basis of financial need. Both initial and renewal applicants must have a copy of their Financial Aid Form sent to the State Student Assistance Commission of Indiana postmarked before March 1.

## Indiana State Freedom of Choice Grant

The State of Indiana offers grants to students receiving Indiana Higher Education Awards who are attending private colleges and have high financial need.

## Taylor University Student Sponsorship

This program is designed to assist needy students through the contributions of friends of Taylor University.

## National Direct Student Loan (federal)

This long-term, low-interest loan program is designed to assist students who demonstrate financial need as determined by the Financial Aid Form. Repayment and interest on this loan do not begin until after the student ceases to be enrolled on at least a halftime basis.

## Guaranteed Student Loan (federal)

This long-term, low-interest loan program available through many commercial lenders is designed to assist students. Repayment and interest on this loan do not begin until after the student ceases to be enrolled on at least a half-time basis.

## Parent/Auxiliary Loan (federal)

This loan program available through commercial lenders is designed to assist selfsupporting students or the parent(s) of a dependent student. Repayment and interest on this loan begin 60 days after the funds are disbursed.

## Taylor University Student Loan

This long-term, low-interest loan program is designed to assist students who demonstrate financial need as determined by the Financial Aid Form. Repayment and interest on this loan begin after a student ceases to be enrolled on at least a half-time basis at Taylor. These loans are made possible through the generous contributions of friends of Taylor and are listed below:

Ray F. Barnes Student Loan Fund
Betts Loan Fund
Bourquard-Caffray Student Loan Fund
Rev. John Campbell Memorial Fund


Dr. W.T. Carver Loan Fund
Rev. and Mrs. Harold Dakin Memorial Loan Fund
Daniel and Nancy Dame Student Loan
Nelva Snider Dober Loan Fund
G. Harlowe Evans Student Loan Fund

Indiana Federation of Clubs Fund
International Loan
Erwin and Eva King Fund
Frank Montgomery Fund
Peavy-Barnett Student Loan
Raymond E. and Garnet I. Rice Memorial Student Loan Fund
Schleicher-Utley Student Loan Fund
Daniel Schwenk Student Loan Fund
Mrs. Beatrice Shepherd Student Loan Fund
Speicher Charitable Trust Fund
Robert M. and Arthur D. Stewart Memorial Loan Fund
Elmer H. Stockman Loan Fund
Elizabeth Studabaker Student Loan Fund
Taylor Student Organization Loan Fund
Linton A. Wood Student Loan Fund

## Taylor University Emergency Loan

Short-term loans are available which permit a student to borrow up to $\$ 100$ for a period of 60 to 90 days.

## College Work-Study Program (federal)

 meeting their educational expenses. To participate, a student must demonstrate financial need as measured by the Financial Aid Form.A detailed brochure on financial aid is available upon request. Specific questions about financial aid should be addressed to

Additional
Information
Director of Financial Aid
Taylor University
Upland, IN 46989
(317) 998-5358


## Academic Regulations

Academic policies and regulations are administered by the Vice President for Academic Affairs, the Associate Vice President for Academic Affairs, and the Director of Records.

Students are admitted to Taylor University under the following categories:
Regular Status: This classification represents the normal admission category for applicants. Students must meet two of the three following minimal criteria: 1) top $1 / 2$ of high school graduating class, 2) high school grade point average of 2.5, and 3) combined SAT scores of 850 or the ACT equivalent.

Honors Status: This classification is designed for the academically gifted. Any incoming freshman wishing to enter the program must have a 3.5 high school grade point average, rank in the top $10 \%$ of the graduating class, and have a combined SAT score of 1200 or more. (ACT equivalent scores are accepted.)

Guided Status: This classification is for applicants who do not meet the minimal academic standards of Regular Status. Students admitted under this classification must earn a grade point average of 1.7 during their first year as a full-time student in order to remain at Taylor. A grade point average of 1.7 achieved before that time will constitute Regular Status. Credits earned on Guided Status may apply toward a degree when Regular Status is attained. A student may not participate in intercollegiate athletics while on Guided Status.

Summer School Guided Status: This classification is for applicants who, because of major academic deficiencies, require a summer school experience to earn fall acceptance. A student must earn a 3.0 in 4 hours of summer session to be accepted for the fall semester. Those students earning a 3.0 in summer school will be accepted for Regular Status.

Guest Status: This classification is considered for the following:

1. Those who desire to take one or two courses at Taylor for the specific purpose of transferring the credit earned to a parent institution.
2. Those high school students who wish to take college courses and apply these hours to credits-in-escrow.
3. Those students who attend one of the consortium schools and desire to complement their course work at Taylor.
4. Those individuals who wish to take one or two courses solely for the purpose of self improvement.

No evaluation of transfer credit is prepared but a statement of good standing from the parent institution is required.

| Grade | QPA | Interpretation | Grade | QPA | Interpretation |
| :--- | ---: | :--- | :--- | :---: | :--- |
| A | 4.0 | Superior | E | 0 | Condition |
| A- | 3.7 |  | F | 0 | Failure |
| B+ | 3.3 |  | P | 0 | Pass |
| B | 3.0 | Good | CR | 0 | Credit |
| B- | 2.7 |  | W | 0 | Withdrawal from course |
| C+ | 2.3 |  | WP | 0 | Withdrawal passing |
| C | 2.0 | Acceptable | WF | 0 | Withdrawal failing |
| C- | 1.7 |  | INC | 0 | Incomplete |
| D+ | 1.3 |  | NR | 0 | Grade not reported |
| D | 1.0 | Passing | NC | 0 | No credit passing |
| D- | .6 | Minimal passing | AUD | 0 | Audit |

THE UNIT OF CREDIT IS THE SEMESTER HOUR. GRADE POINT AVERAGE: points earned divided by hours attempted. Credit hours earned and carrying no quality point value do not appear in HOURS ATTEMPTED since they are excluded from the scholastic index computation. They are included in HOURS COMPLETED and TOTAL HOURS.

| Classification Code |  |  |
| :--- | :--- | :--- |
| FR - Freshmen | SR - Senior | PG - Post-Gradute |
| SO - Sophomore | SP - Special | PC - Pre-College |
| JR - Junior | UN - Unclassified | OC - Other Colleges |

## Academic Standards

The following table describes the minimum grade point averages required to be considered in good academic standing.

| Class | Cumulative Hours | Required GPA Overall |
| :--- | :---: | :---: |
| freshman | $0-12$ | 1.6 |
|  | $13-30$ | 1.7 |
| sophomore | $31-60$ | 1.8 |
| junior | $61-94$ | 1.9 |
| senior | $95-128$ | 2.0 |

Candidates for Associate Degree must have at least 64 hours with a GPA of at least 2.0.
A student who falls below these minimums will be placed on Academic Probation and will enter a special advisement program with an academic advisor and the Associate Vice President for Academic Affairs. Restrictions on extracurricular activities will be imposed. No student will be eligible to participate in intercollegiate athletics until returning to good academic standing. Failure after one semester to reach the minimum requirements may result in suspension from the university unless during the most recent semester a 2.3 or better is earned. First time suspension is for one semester and second time suspension is for one year after which time the student may apply for readmission.

Academic Load

## Academic Schedules

Registration for 12 or more hours constitutes full-time standing. A normal academic load is 15 to 16 hours per term and 4 hours during interterm. Freshmen who are employed on campus are not permitted to carry more than the normal load, except in the case of students participating in musical ensembles. Students with at least a C average may take 17 hours. A 3.0 grade point average is necessary to carry 18 hours; 3.3, 19 hours; and 3.6, 20 hours. In addition, approval to register for more than 17 hours must be secured from the Director of Records.

## Incompletes and NR Records

A condition (E), incomplete grade (INC), or a grade not yet reported (NR), may be used when a student is unable to complete work by the end of the term due to circumstances beyond control (E or INC) or due to the design of the course (NR). Such grade reporting must be authorized by the Associate Vice President for Academic Affairs. The grade should be reported to the Office of Records as soon as the work is completed but not later than the last day of classes (the week before evaluation week) of the following full (fall or spring) term. If the grade is not reported to the Office of Records by that last day of classes, it is recorded as an F. When a condition grade is reported, the mark attained may not be higher than $C$.

## Withdrawal

Withdrawal occurs after the period during which changes of registration are permitted. In the case of a withdrawal from a course, the student's standing will be recorded as either passing or failing. Withdrawals must be cleared by Records Office. Refer to pages 31 and 42 for further information.

## Grades

All requests for change-of-grade (except an $1 N C, N R$, and $E$ ) must be approved by the Associate Vice President for Academic Affairs. Such a change can occur only before the end of the next term the student is in attendance after the original grade was awarded.
Full-time students are named to the Dean's List when they have earned a 3.6 or better GPA for the term and when at least one-half of their hours carry credit point values.
In order to maintain the minimum graduation standard of the college, students are required to earn a scholarship rating equivalent to at least two quality points for each credit hour for which they are registered. The average scholarship rating in terms of quality points is found by dividing the total number of hours for which the student is registered into the total number of quality points earned. For example, 15 scheduled hours and 30 quality points indicate a scholarship rating of 2.0 , i.e., an average of C. Pass-Fail and Credit courses are exceptions to the above.


## Pass-Fail Courses

Students may select to register for a course on a pass-fail basis subject to the following rules:

1. Open only to second-term sophomores or above with at least a 2.3 GPA , the exception being the Practicum which is open to all qualified students in good standing.
2. No course in the major field (except the Practicum) and no general education course may be taken pass-fail until all requirements in those areas are met.
3. The choice to take a class pass-fail must be declared by the end of the first week of classes.
4. Pass-Fail courses do not affect the GPA if passed.
5. Pass-Fail courses are limited to one course per term and a total of 13 term hours including the Practicum if taken Pass-Fail. Courses offered only on a pass-fail basis are not included in this total.

## Mid Term Reports

At the midpoint of each term the Director of Records sends a progress report to students whose level of work at that time is below $\mathrm{C}-$. A copy of this report is also sent to each student's parents. These grades are not recorded in any way on the student's record. Final grade reports are sent to students and their parents at the end of each term.

## Repeated Courses

For various reasons students request permission to repeat courses. By action of the faculty, a student may repeat any course at Taylor. All attempts in a course will be reflected on the student's transcript, and the cumulative GPA will reflect the most recent grade in the repeated course.
Duplicate credit hours are not given for two or more passing efforts.

## Intercollegiate Athletics

For participation in intercollegiate athletics a student must meet the requirements described above as well as those of the National Association of Intercollegiate Athletics and the National Christian College Athletic Association. Details may be obtained from the Director of Athletics.
A student athlete who drops below the 12 hour course load minimum required to maintain eligibility immediately becomes ineligible to participate in intercollegiate athletics.

## Registration and <br> Advisement

Each student is assigned a faculty academic adviser in the department of the student's expressed interest. Students are expected to take initiative in choosing their courses to meet departmental and university graduation requirements; faculty advisers are available to students for consultation regarding course selection and registration.
Advance registration provides an opportunity for both new and returning students to register in advance for their courses and pay fees either in person or by mail before the opening of each term. Students not registered in advance may register and pay fees at the beginning of the term.
Changes of registration must be made within the first week of the term on the official form provided for that purpose. Courses dropped during the second and third weeks of the term will appear on the student's permanent record with a $W$. Any course dropped after this period and up to two weeks after mid-term, will receive either a WP or a WF. When a course is dropped later than two weeks beyond mid-term, the grade automatically is WF. The effect of WF on the GPA is the same as that of a full-term failing grade. All of the above procedures begin in the Records Office and require the approval of the adviser and the Director of Records.

Late registration is possible only by consent of the Associate Vice President for Academic Affairs and only through the third week of classes. Students registering after two weeks are limited to 12 class hours. The late registration fee is $\$ 25$ per week or fractional week.
Audit registration can occur only through the third week of classes.
Taylor University awards three baccalaureate degrees and the associate of arts degree. The Bachelor of Arts degree is a liberal arts degree available to students from any major program who fulfill the general education and language requirements specified below; and the Bachelor of Science and Bachelor of Music degrees are awarded for the completion of the general education requirements listed below and the career patterns identified elsewhere in the curricular programs. Every baccalaureate degree candidate must complete the degree requirements for General Education and the requirements in the appropriate major field of study, listed with each department. Only one degree will be awarded for the same major. Students completing two majors may select either the Bachelor of Arts or Bachelor of Science degree providing all requirements for both majors have been met. The associate degree will be awarded to students who complete the courses of study outlined in the catalog.
Students may elect to meet the graduation requirements which are in effect at the time they enter Taylor University, provided they complete their work within seven years. Otherwise, they must meet graduation requirements which apply to the class with which they are graduated.

All students at Taylor University share certain common educational requirements. The central purpose of these requirements is to develop an integrated Christian view. Representing nearly half of each baccalaureate program, general education provides bases for learning, breadth of intellectual experiences, and coherent understanding. It supports preparation for the world of work and enhances the study of the student's major. The faculty of Taylor University affirms that general education is intended to develop students who evidence the following values, knowledge, and skills and who can apply them creatively to all of life:

1. To recognize that all truth is God's truth and that the Christian faith should permeate all learning
2. To foster Biblical understanding with emphasis on knowledge of God in creation, redemption, and personal relationship
3. To integrate faith and learning into a consistent Christian life of worship, service, stewardship, and world outreach
4. To communicate the intellectual and experimental dimensions of the Christian faith
5. To write and speak effectively and appropriately
6. To achieve scientific, mathematical, and computer literacy
7. To acquire skills and attitudes appropriate for physical fitness and use of leisure time
8. To gain discerning enjoyment of the fine arts and contemporary culture
9. To develop self-discipline, emotional stability, and effective health practices
10. To accept the responsibility of a Christian within the family and society
11. To evidence enlightened acceptance of responsibilities within a culturally pluralistic world
12. To desire learning and intellectual challenges
13. To identify, develop, and use effectively one's learning skills and personal learning styles
14. To think critically in the acquisition of knowledge and in assessing the validity and relationship of ideas
15. To attain breadth in the liberal arts growing from historical perspectives, a knowledge base of the academic disciplines, and exposure to great ideas

## Degree Requirements

General Education Requirements

Required Courses for General Education

| FRESHMAN LEVEL | IAS 101 | Freshman Orientation | 1 hr |
| :---: | :---: | :---: | :---: |
|  | IAS 110 | Freshman Seminar | 3 hrs |
|  | REL 110 | Bible Literature I | 3 hrs |
| Should be completed during Freshman year | ENG 110 | Expository Writing | 4 hrs |
|  | HPR 100 | Fitness for Life | 1 hr |
|  | CAS 110 | Public Speaking | 2 hrs |
|  |  | (Substitutes: CAS 120, 201, 331, or 372) |  |
| SOPHOMORE <br> and <br> JUNIOR <br> LEVELS | REL 210 | Bible Literature II | 3 hrs |
|  | REL 313 | Historical Christian Belief | 3 hrs |
|  | $\left\{\begin{array}{l} \text { ENG } \\ \text { CAT } 200 \\ \text { FRE, SPA } \end{array}\right.$ | Literature |  |
|  |  | or |  |
|  |  | Oral Interp of Literature |  |
|  |  |  |  |
|  |  | Modern Language Literature | 3-4 hrs |
| Select from two different areas: one must be a lab course | $\left\{\begin{array}{l}\text { CHE or PHY } \\ \text { BIO } \\ \text { OTHER }\end{array}\right.$ | I. PHYSICAL SCIENCE LAB COURSE <br> or <br> II. BIOLOGICAL SCIENCE LAB COURSE <br> or |  |
|  |  |  |  |
|  |  |  |  |
|  |  | III. EARTH AND SPACE SCIENCE OR MATHEMATICS (GEO 210, GEO 240, ENS 351, PHY 201, MAT 140, MAT 151) | 8 hrs |
|  | HPR 200 | Skills Courses (2) <br> (Substitutes for ONE skills course: PEH 240, PEH 200-Acting (with CAT 212), or Intercollegiate Athletics, or Contract programs) | 2 hrs |
|  | HIS | ONE History Course and courses from ECO, GEO, POS, or SOC | 6-8 hrs |
|  | $\left\{\begin{array}{l}\text { HUM } 230\end{array}\right.$ | Arts as Experience (Fine Arts) or |  |
|  | HUM 330 | Arts and Ideas (Fine Arts) and | 4 hrs |
|  | HUM 250 | ART, CAT, or MUS participation coded: PA (Participation must be arranged by the department and faculty member of the student's choice) | 1 hr |
|  | CC | ONE CROSS CULTURAL COURSE (available in various departments and designated with CC) | 3 hrs |
| SENIOR LEVEL | IAS 493 | Senior Seminar (Capstone) | 4 hrs |
|  | PHI 413 | Contemporary Christian Belief | 3 hrs |

[^1]A degree candidate must spend at least the senior year in residence at Taylor University. Exceptions to this rule include students majoring in natural science, or any special cases where the Educational Policies Committee has granted advance permission.
One-half of the hours in the major field must have been earned at Taylor University. Freshmen are permitted to take 100 and 200 level courses only. Seniors who register for 100 level courses for each 3 credit hours must add one hour above the total (128) required for graduation.
In most programs, a minimum of 128 term hours is required for graduation. Candidates for two degrees must submit a minimum of 158 term hours. No grade below D-is counted toward fulfillment of these hours, and no student may graduate with an overall grade point average below $C(2.0)$. Higher averages are required in certain curricula.
In the major field a student must earn a 2.3 grade point average. Courses above the 100 level will not be counted toward a major if a grade of $D$ is earned. Grades below $C$ - will not be used in computing the grade point average of a student's major but will be included in his overall grade point average.
A minimum of 42 term hours of upper-division ( $300-400$ level) courses must be satisfactorily completed to meet graduation requirements.
All associate degree programs must include a minimum of 64 hours for graduation with a minimum overall GPA of 2.0. Any additional point requirements will be specified in the individual program. Graduates of any associate degree program must have spent the last two semesters in the program in residence at Taylor University and must have met the English proficiency requirement.

## English Proficiency

Students showing an acceptable level of proficiency on the English entraduation with granted permission by the English Department to enter ENG 110. Those students who do not show an acceptable level on the English tests will enter ENG 100 first. Students completing ENG 100 with a C - grade or above, will then be granted permission to enter ENG 110. Not meeting the $C$ - or above standard will require either repetition of ENG 100 or an individualized developmental program administered by the Proficiency Committee.

A student transferring in comparable Expository Writing credit but not showing an acceptable level of proficiency on the entrance tests will remedy the deficiency under the direction of the Proficiency Committee. A student transferring in comparable Expository Writing credit and showing an acceptable level of proficiency on the entrance tests will be exempted from ENG 100 and ENG 110.

## Language Requirement

Candidates for the Bachelor of Arts degree must demonstrate the equivalent of two years of a foreign language for graduation. Those students who enter with a year or more of high school foreign language study must take the Modern Language Association proficiency tests before continuing in that language. Students will then be placed in language classes at the level indicated by these tests. Those who place beyond the intermediate level of the language will be considered to have fulfilled the language requirement and may be eligible to receive six hours credit by further testing. Students placing into 202 may receive credit for 201 if the grade earned in 202 is a " C " or higher. Students of languages other than those offered at Taylor University must demonstrate proficiency equivalent to two years of college study.

## Comprehensive Examinations

A candidate for every degree must pass a comprehensive examination in the major field of study. This examination is given during the senior year. In secondary education, the

## Graduation

comprehensive examination is in the major teaching field. A student may make a maximum of three attempts to pass the comprehensive examination in any single major. If a student intends to graduate with more than one major, a comprehensive examination is required for each. The examinations are to be marked superior, pass, or fail, and the superior grade will be used only for work at the honors level.

A student may complete requirements for graduation at midyear, in the spring, or in August. Commencement ceremonies are held only at the end of the spring term, at which time formal announcement of graduation is made and all degrees are conferred.
Candidates for graduation must fill out an Application for Graduation available in the Records Office. This form starts the process of credit evaluation to determine when graduation requirements have been met. Prior to their Senior year, students should check the Schedule of Classes and registration procedures to determine the deadlines for submitting the Application for Graduation.
Taylor University diplomas are dated either the May or August following completion of graduation requirements.
Attendance at graduation exercises is required. Petitions for the in absentia granting of degrees should be directed to the Director of Records.

## Graduation Honors

In recognition of superior scholarship, the college awards three grades of honors at graduation: cum laude, magna cum laude, and summa cum laude. Cum laude is awarded those students with GPA of at least 3.5. Magna cum laude is awarded those students with a GPA of 3.7. Summa cum laude is awarded those students with a GPA of 3.9.
Graduation honors for transfer students are awarded under the following conditions:

1. The last 30 hours of graded courses must be Taylor University hours.
2. The GPA will be figured according to all hours which are applicable toward graduation from all institutions attended.
3. Honors will not be granted for a cumulative grade point higher than earned at Taylor University.
Chi Alpha Omega is a scholastic honor society, election to which is limited to not more than $10 \%$ of the seniors and $5 \%$ of the juniors.

## Class Attendance

Students are expected to attend all sessions of classes for which they are registered. Any necessary deviations from this expectation must be reported by the student to the professor of the class to be missed.
Excused Absences (with permission to make up work) will only be granted in the cases of

1. Admittance to a hospital, including Health Center (verified by Health Center).
2. Serious emotional illness (verified by Vice President for Student Development).
3. Group absence for approved academic events. Students must make alternate arrangements with the professors whose class(es) they will miss.
4. Death of a family member or hospitalization of an immediate family member.
5. Very unusual circumstances as evaluated by the professor.

Unexcused Absences "Cuts" (without permission to make up work) must not exceed one per credit hour of the course. Penalty for excessive cuts will be communicated in each course syllabus. Cuts should be used for travel difficulties, bad weather, conflicting schedules, oversleeping, minor sickness, doctor or dentist appointments.


## Chapel Attendance

All students are expected to attend chapel and convocation services which meet Monday, Wednesday, and Friday each week.

## Academic Grievance Procedure

Students who feel that unfair treatment may be taking place in their academic experiences may raise questions with the Vice President for Academic Affairs who will provide them with information, without judgment, regarding the procedure for filing an academic grievance.

## Transcript of Academic Record

A transcript of the student's academic record includes a list of all courses attempted at Taylor, grades and quality points earned, and credit received. The transcript also includes other information such as the high school graduation date and transfer credits.
Each student is entitled to one free transcript. Additional copies are $\$ 2$ each. The payment must accompany the transcript order. No transcript will be issued unless all bills to Taylor University have been paid or are current according to an agreement with the Office of Business Affairs.

Transcript requests must be made in writing. Two weeks should be allowed after the close of a term for the issuance of an up-to-date transcript.

## Practicum Courses

Most major programs offer a practicum, a course which involves both a significant applied experience and a meaningful supporting component (e.g., reading, interaction with professor) to provide background information and interpretive skills relative to the experience. Registration for a practicum takes place in the same way as any course through the Records Office before the term in which the practicum credit is to be given. For further information, consult the practicum course description.

## The Honors Program

The Taylor University Honors Program is a challenging academic experience for high ability, highly motivated students. The Honors Program student may choose from all general offerings plus Honors courses. More than does the curriculum in general, Honors courses emphasize integration of faith and learning, ideas and values in content, and discussion and student initiative in format.

All Honors Program students who complete a minimum of 18 hours of Honors Program courses and maintain an overall GPA of 3.3 will earn the designation "Honors Program Graduate" on their official university transcript.
Students may apply for honors admission at any time prior to the freshman year or during their freshman or sophomore years. Those with tightly-scheduled majors will want to enter the program as early as possible, making it possible to enroll primarily in Honors courses that substitute for general education requirements rather than in those serving only as electives.


Normally an entering freshman wishing to begin the program should have earned a 3.5 high school grade point average and a combined SAT score of 1100 (or comparable ACT or PSAT scores). Those applying after completing a semester at Taylor should have demonstrated an ability to perform college work at the Honors Program level (3.3 GPA).
High school juniors with a high school record generally consistent with the criteria for admission to the regular program are eligible to apply for admission to the tuition-free, five-week summer college experience for students entering their senior year of high school. Successful completion of the summer term will allow the participants, upon high school graduation, to apply the credits toward a Taylor degree as a regular Honors Program student. Or if the student elects to enroll in another college, the record of credit may be sent to that school.
All high ability students should be aware of the Taylor merit scholarship program and the advanced placement and credit program.
Further information including application procedures may be obtained by writing to the Director of the Honors Program. Further information on the summer high school program is available from the Admissions Office.

## Individual Goal-Oriented Major

The individualized, goal-oriented major program recognizes that departmental majors may not meet the unique needs of some students who attend Taylor University. This major allows a student with faculty guidance to design from existing courses a program of study which is valid academically, which meets personal and/or professional goals, and which results in a BA degree. This liberal arts major rests upon the broad base of general education courses required of all Taylor graduates.
To declare an independent major, a student must do the following:

1. Obtain a preliminary declaration of interest form at the Records Office. (Students must declare before the beginning the junior year.)
2. Fill out the form and arrange an appointment with the Chair of the lndividual Goal Oriented Major Sub-Committee.
3. Obtain an Individual Goal Oriented Major Application Form from the Sub-Committee Chair.
4. Secure two faculty members who are willing to work as primary and secondary advisors. With their help, complete the application with a proposed program and submit three copies to the Sub-Committee Chair.
5. The full Sub-Committee will review the application and recommend it be accepted, modified as specified, or rejected with advice to pursue an established major.
6. After proposal approval, work with the advisors as if pursuing an established major.
7. At the end of the junior year, obtain a Junior Progress Report Form from the SubCommittee Chair. Submit a completed copy to each advisor and to the SubCommittee Chair.
8. At the end of the first semester of the senior year obtain a Senior Progress Report Form from the Sub-Committee Chair and complete. Submit a copy to each advisor and to the Sub-Committee Chair.
9. As the departmental portion of the senior seminar (formerly senior capstone) write a senior paper which integrates the several components of the major.
10. Select a faculty member from the sub-committee to serve on the Reading Committee. Make four copies of the Senior integrative paper. Submit one copy to the primary advisor, one to the secondary advisor, one to the sub-committee member, and one to the Sub-Committee Chair.
11. Arrange an oral evaluation session with the Reading Committee with the primary advisor as chair and be prepared to discuss the paper with this committee.
12. To graduate, the major must total a minimum of 40 hours.


## Courses of Instruction

Taylor University offers programs leading to various Bachelor's degrees, several Associate degrees, and pre-professional training. Each student selects a major (or possibly two majors) and meets the requirements for the chosen course of study. In addition, every student meets general requirements (see General Education, pages 43-44) and may select from electives to complete his or her studies. A foreign language is required of students pursuing the Bachelor of Arts degree (see page 45). Nearly every program may be combined with any other curricular ingredients (e.g., a language major may combine with a certificate in missions) while some programs are only available when combined with a BA or BS major (Environmental Science, Systems Analysis, Geography and certificates, endorsements and minors).

## FIELDS OF STUDY AT TAYLOR UNIVERSITY

## Bachelor of Arts

## Accounting

Art
Biology
Business Administration
Chemistry
Communication Studies
Computer Science
Economics
English
French
Health, Physical Education
and Recreation
History
Individual Goal-Oriented
Mass Communication

## Mathematics

Music
Philosophy
Philosophy of Religion
Physics
Political Science
Psychology
Religion
Biblical Literature
Christian Education
Missions
Religious Studies
Sociology
Spanish
Theatre Arts

## Bachelor of Science

## Teacher Education

Art
Communication Arts
Early Childhood
Elementary Education
English
French
Health, Physical Education and Recreation

Mathematics<br>Music<br>Science<br>Social Studies<br>Spanish<br>Recreational Leadership<br>Social Work

Bachelor of Music

Sacred Music

## Pre-Professional

Engineering
Law
Medical Technology
Medicine
Nursing
Theology
Associate of Arts
Business Administration
Early Childhood Ed.
Management lnformation Systems

## Special Programs

An honors program is available for academically outstanding students.
The following cognates may be added to any Bachelor's degree program:
Environmental Science
Systems Analysis
Minors are available in many fields of study. Departments provide information.

Taylor University reserves the right to withdraw a course or to limit its enrollment when for any reason it becomes impractical to offer it as previously scheduled.
The text which follows provides the details of the courses of study. Listed alphabetically by departments, the material contains faculty names and course descriptions. A course description generally tells what the course content is, the level of difficulty of the course, and any prerequisites which apply. Courses not offered annually are identified.

## Course Numbers and Levels

Course numbers indicate, in general terms, the level of difficulty of a course. Courses numbered from 100-199 are primarily for freshmen, from 200-299 are primarily for sophomores, from 300-399 are designed for juniors, and from 400-499 are intended for seniors. The prefix indicates the offering department or academic unit. Freshmen are not permitted to take courses above the 200 level. Seniors who may be permitted to register for 100-level courses must present one additional hour for each three toward the total for graduation.

## Numbers Used by All Departments

The following courses are offered in several departments, with descriptions for these courses the same for all departments. Descriptions are provided here, but these courses carry department prefixes.

## 283 Selected Topics 1-4 hours

A course offered on a subject of interest but not listed as a regular course offering. Does not count toward the departmental major.

## 293 Selected Topics 1-4 hours

A course offered on a subject of interest but not listed as a regular course offering. May count toward the department major.

170, 370 Selected Topics 1-4 hours
A course offered on a subject of interest but not listed as a regular course offering.

## 360 Independent Study 1-4 hours

An individualized, directed study involving a specified topic. lt is open to students with the consent of a supervising professor and the approval of the department head.

## 393 Practicum 1-4 hours

Supervised learning involving a first-hand field experience or a project. It is offered primarily during interterm and summer with the consent of a supervising professor, the approval of the department head, and registration through the Records office prior to the experience.

## 450 Directed Research 1-4 hours

Investigative learning involving closely directed research and the use of such facilities as the library
or laboratory. Consent of a supervising professor and the approval of the department head are required.

480 Seminar 1-4 hours
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

## 490 Honors 1-2 hours

Individualized study or research of an advanced topic within a student's major. It is open to students with at least a B average in the major field and with the consent of a supervising professor and the approval of the department head.

## 493 Senior Seminar 4 hours

A senior-level course designed to provide an overview and integration of the major field with reference to its relationship to the Christian faith. It is offered interterm. Senior Seminar is described more fully on page 128.


## Accounting

## Ancient Language

See Religion, Philosophy, and Biblical Languages

## Art

Head, Professor Bullock, Assistant Professor Moore

The Art Department at Taylor University has three aims: to offer liberal arts students general art courses which will contribute to their broad general education, especially for those who plan to utilize art in other related professions; to provide training for students who select the teaching of art in the public schools as a career; and, the training of professional artists.
The purpose of the Art Department is to educate those who will benefit themselves and others through the practice of the visual arts, and to offer opportunity to students in the university to broaden and enrich their experience by avocational study. Educational activities enable each student to increase his or her capabilities and resources for art and to develop responsibility for the images produced. The art program offers experiences dealing with a wide variety of ideas, principles, and materials. A major goal is the mastering of basic skills and techniques by providing the individual with a thorough background in the disciplines that are primary for effective creative expression. A major concern of the Art Department faculty is to perpetuate an environment conducive to creative development and at the same time emphasize the significance of visual art in the Christian context, thereby realizing the universality of art with the hope of developing a better understanding of mankind.
Art majors pursuing the Bachelor of Arts degree must take 30 hours in art including ART 101, 201, 322, 412, either 321 or 332, and 493. Also the following program is offered which leads to the Bachelor of Science degree in Secondary Education with a major in art. This major includes ART 101, 201, 202, 211, 300, 331, 412, 493, HUM 230; PHI 342; and EDU 312. A total of 36 hours of art courses completes this program. The Art Department also offers the area major for students desiring certification in elementary and secondary education with a major in art. Students pursuing this program must complete 52 hours in art including those courses listed for the 36 -hour teaching major. A 24 -hour teaching minor is available in conjunction with the teacher education program.
Art majors are required to present an art exhibition in the Chronicle-Tribune Art Gallery at Taylor University during the fall, interterm, or spring of their senior year.

## ART 101 Beginning Drawing 3 hours

Basic drawing which directs the student in mechanical/visual methods of observation utilizing pencil, charcoal, pen and ink, and felt pen.

## ART 102 Advanced Drawing 2 hours

Advanced drawing problems dealing with a variety of figural and object themes exploring a wide range of media. Prerequisite: ART 101.

ART 201 Art Fundamentals/Design 3 hours
An introduction to the basic elements and principles of design in relationship to image formation through projects focusing on two-dimensional visual ideas utilizing a variety of media.

ART 202 Three-dimensional Design 3 hours
Three-dimensional design explored through structure and volume problems with emphasis on the understanding of form and space. Elements of plastic form are approached through the various media: clay, plaster, wood, glass, stone, and metal. Prerequisite: ART 201.

ART 211 Ceramics: Handbuilt Forms 3 hours
An introduction to basic clay formation techniques with emphasis on acquiring knowledge for the basic ceramic process: forming, glazing, and transformation through firing.

ART 212 Ceramics: Wheel Throwing 2 hours
An introduction to the potter's wheel, including emphasis on throwing, design, glazing, and firing. Prerequisite: ART 211.

HUM 230 Fine Arts 4 hours See HUM 230 under Inter-Area Studies, p. 128
HUM 250 Participation in the Arts 1 hour See HUM 250 under Inter-Area Studies, p. 128. Non-Art majors only.

ART 300 Art for Teachers 3 hours
Opportunities for the development of skills and experiences appropriate for use in the early childhood and elementary school programs. Easily available materials are utilized in art activities.

## ART 301 Printmaking 3 hours

Exploration of most major aspects of the graphic arts workshop including: woodcut, linocut, intaglio, and serigraphy.

## ART 311 Jewelry 3 hours

An examination and practice of enameling and study and construction of the simplest wood and metalworking processes with emphasis on construction of silver jewelry. Casting is introduced. Offered 1986-87.

ART 312 Teaching in Secondary Schools 2 hours See EDU 312
ART 321 Painting: Oil/Acrylic 3 hours
A studio course with still life, landscape, and original concepts as subject matter.

## ART 322 Lettering/Commercial Design 3 hours

An introduction to graphic design and visual communication; includes experience in typography, layout, and fundamentals of advertising art.

## ART 331 Introduction to Art Education 3 hours

A survey of the history and philosophy of art education in western civilization with emphasis on artistic growth and development and the relationship of art to the total school program. Offered 1987-88.

## ART 332 Painting: Water Color 3 hours

Emphasis is on increasing watercolor skills. A variety of tools, techniques, approaches and ideas lead to larger finished works.

## CAT 341 Stagecraft and Design 3 hours See CAT 341

ART 342 Aesthetics 2 hours See PHI 342. Offered 1987-88.
ART 344 Arts and Crafts 3 hours
Designed for the Recreational Leadership Major and the Art Major to further develop pesonal expression through an exploration of art and craft media. Experiences in arts and crafts will be related to development, understanding, and administration of arts and crafts programs. Offered Summer Session at Cedar Bend Farm.

ART 352 Advanced Commercial Design 3 hours
Involves the use of word and image in publication design. Areas include corporate identity, packaging and layout. Students explore the impact of graphic communication and its influence on contemporary society. Strong emphasis is placed on concept and technical application of design principles in graphic arts. Prerequisite: ART 322.

ART 401 Photography 3 hours
Exploration of major aspects of photographic art including: history, design, developing, enlarging, kodalith, superimposing, solarization, and other artistic techniques.

ART 412 History of Art 4 hours
Survey and cultural analysis of the interelated fields of architecture, sculpture, and painting. Offered 1986-87.

IAS 493 Senior Seminar 4 hours

## Biology

Head, Professor Burkholder; Professors G. Harrison, Squiers; Associate Professors Rothrock, Whipple

The biology major consists of 40 hours, including BIO 101, 103, 104, 203, 204, and 493 which are required courses. The student's academic advisor shall provide guidance in the selection of other courses leading to the Bachelor of Arts degree. A minimum of 36 hours in the major must be in courses other than BIO $360,393,450,490$. Also required are two terms of chemistry (CHE 201, 202); however, four terms are strongly recommended. PHY 211, 212 and NAS 480 are also strongly recommended.
All majors (except pre-medical) are required to take at least 6 hours in the Taylor summer field program (or its equivalent). The specific program to fulfill this requirement shall be determined by the department.

The department, in cooperation with other science departments and the education department, offers a science teaching major with a primary emphasis in biology leading to the Bachelor of Science degree.
For pre-medical, pre-nursing, and pre-medical technology program requirements, see Pre-Professional Studies. "Pre-medical" is interpreted to mean a student who follows the specified pre-medical program and takes the MCAT at the designed time.
A biology major may be combined with a concentration in environmental science. (See Environmental Science program.) This combination is particularly valuable for students with career goals involving ecosystem analysis, environmental planning and resource management, human ecology, or outdoor education. This biology track, which is supportive of the environmental science emphasis, leads to the Bachelor of Science degree.
Individuals who are interested in the more technical aspects of natural resources management, such as forestry, fisheries and wildlife, parks and recreation, and resource development, may elect to obtain a Bachelor of Science degree in Biology with an emphasis in environmental science at Taylor. They would then be prepared to complete their advanced training in natural resources at another institution.
Taylor University is affiliated with the AuSable Trails Institute of Environmental Studies in Mancelona, Michigan. Taylor students may take summer courses for credit at AuSable Trails and may also complete requirements for certification as naturalists, environmental analysts, land resources analysts, or water resources analysts. Certification requires a summer of work at AuSable in combination with specific courses taken on the Taylor campus. Detailed information is available from the Chairman of the Biology Department.

## BIO 100 General Biology 5 hours

Concepts and principles of biology imparting basic knowledge that assists the student to meet his/ her obligations as an informed citizen. Four hours lecture and two hours laboratory per week. Fulfills biology general education requirement but is not available to biology majors.

BIO 101 Principles of Cell Biology 3 hours
Study of generalized subcellular structures and metabolism emphasizing dependence of function

on structure, principles of organization and capture and utilization of energy. Two hours lecture and two hours laboratory per week. Does not normally satisfy biology general education requirentent; see department head for more specific information.

BIO 103 Introductory Plant Biology 3 hours
Introduction to plants, monerans, algae, and fungi. Structure, growth, and development of the flowering plant body are emphasized. Two hours lecture and three hours laboratory per week. Does not normally satisfy biology general education requirement; see the department head for more specific information.

## BIO 104 The Animal Kingdom 3 hours

A taxonomic survey of the major phyla in the animal kingdom from Protozoa through Chordata. Classification, characteristics, representative forms, relations to man. One hour lecture and four hours laboratory per week. Does not normally satisfy biology general education requirement; see the department head for more specific information.

## BIO 203 Principles of Genetics 3 hours

Fundamental principles of Mendelian inheritance as they apply to living organisms. Population genetics will be studied as well as natural selection and the concepts of evolution and creation. Two hours lecture and two hours laboratory per week. Does not normally satisfy biology general education requirement; see the department head for more specific information.

## BIO 204 Principles of Ecology 3 hours

An introduction to the relationships existing between organisms and their environment. Lectures focus on the structural and functional aspects of populations, communities, and ecosystems in the context of the major North American biomes. Two hours lecture and two hours laboratory per week. Does not normally satisfy biology general education requirement; see the department head for more specific information.

BIO 231 Environment and Man 4 hours
Introduction to ecological principles and the impact of man on his environment. Issues studied include population dynamics, resource status, pollution problems, and environmental ethics. Labo-
ratory time will be divided among field experience in ecology, environmental education and small group discussions of current environmental issues. Three hours lecture and two hours laboratory per week. This course fulfills the biology general education requirement.

BIO 241, 242 Human Anatomy and Physiology 4 hours
A two-course sequence systematically covering the structure and functions of the human body. Three-four hours lecture and two hours laboratory per week. BIO 241 fulfills the biology general education requirement.

BIO 244 Human Anatomy and Physiology 3 hours
A survey study of the structure and function of human organism as studied in Biology 241. Offered Summer Session I only. BIO 244 plus either B1O 245 or 242 fulfills the biology general education requirement.

BlO 245 Human Anatomy and Physiology 3 hours
A survey of the structure and function of the human organism as studied in Biology 242. Offered Summer Session I only.

B1O 301 Taxonomy of Vascular Plants 4 hours
ldentification, classification, and systematics of vascular plants. Laboratory emphasis on local flora and plant family characteristics. Two hours lecture and four hours laboratory per week. Prerequisite: BIO 103 (203 recommended). Offered 1986-87 and alternate years.

B1O 304 Field Studies in Natural History 4 hours
Introduction to basic field and lab methods used in field natural history. Includes basic nomenclature of spring flora and fauna in terrestrial as well as aquatic systems. Provides an overview of the history and philosophy of natural history through the writings of naturalists such as Aldo Leopold, Conrad Lorenz, John Muir, and N. Tinbergen. Prerequisites: BIO 103, 104, 204 or permission of the instructor. Offered Summer Session I only. This course fulfills the biology general education requirement.

## B1O 312 Cellular and Molecular Biology 4 hours

Analysis of the living cell with regard to its physiological and biochemical characteristics including: enzyme function, bioenergetics, nucleic acid replication, and biosynthesis as related to the cell cycle. Three lectures, one three-hour laboratory per week. Prerequisites: BlO 101 and 203. Two courses in chemistry (Organic recommended). Offered 1986-87 and alternate years.

B1O 313 Entomology 3 hours
Insects are collected in the field and classified. Taxonomic skills are developed. Life historys, economic importance, and principles of ecology are illustrated. Prerequisites: BIO 101, 104. Offered at AuSable Trails summers only.

B1O 322 Ornithology 3 hours
ldentification, classification, anatomy, life history, and migration of birds. Biological principles are illustrated. Consists of one hour lecture and two 2 -hour field or laboratory sessions per week. Does not normally satisfy biology general education requirement; see the department head for more specific information. Offered 1987-88 and alternate years.

B1O 323 Aquatic Biology 3 hours
Collection, identification, and ecological position of fresh-water organisms. Taxonomic skills are developed. Prerequisites: B1O 103, 104, and 204. Offered at AuSable Trails summers only.

## BIO 331 Comparative Anatomy 4 hours

Classification, characteristics, and comparison of typical chordate animals, with emphasis on the vertebrates. Two hours lecture and four hours laboratory per week. Prerequisite: BIO 104 or permission of instructor. Offered 1986-87 and alternate years.

BIO 332 Embryology 4 hours
A study of the development of the chordate embryo, the principal basis being frog, chick, and pig. Both prepared slides and living embryos are used. Two hours lecture and four hours laboratory per week. Prerequisites: BIO 101 and 104. Offered 1986-87 and alternate years.

BIO 341 Plant Physiology 4 hours
An introduction to the interrelationships between physiological processes and plant growth and morphogenesis. Plant metabolism, water relations, mineral nutrition, photosynthesis, and hor-

A study of the physiological nature of living organisms with special consideration of the functions of vertebrate organ systems. Practical experience in working with live animals and instrumentation used to examine the functional processes of various systems. Three hours lecture and three hours laboratory per week. Prerequisites: BIO 104 and CHE 201, 202. Offered 1987-88 and alternate years.

BIO 360 Independent Study 1-4 hours
BIO 362 Advanced Genetics 4 hours
A study of current concepts of genes and their activity, emphasizing the molecular biology of bacteriophages and bacteria. Cytogenetics and somatic cell genetics in eukaryotes will also be explored. Three lectures and one three-hour laboratory per week. Prerequisites: BIO 101 and 203; two courses in chemistry. (BIO 371 recommended.) Offered 1987-88 and alternate years.

BIO 370 Selected Topics 1-4 hours
BIO 371 Microbiology and Immunology 4 hours
A study of micro-organisms. Major emphasis is placed on the fundamental principles underlying the activities of bacteria and on the preparation of slides and cultures. Some emphasis will be placed on the study of virology as well as cellular and humoral immunology. Two hours lecture and four hours laboratory per week. Prerequisites: BIO 101. (BIO 203 and two courses in chemistry recommended.)

BIO 380 Systems Ecology 4 hours
The principles of systems theory will be introduced in an integrated study of the development, dynamics and disruption of natural ecosystems. Theoretical, analytical and experimental aspects of ecosystems will be explored. Students will be introduced to the use of microcomputers as a tool in ecosystem modeling. Prerequisites: BIO 204 and one course in college level mathematics or computer science.

BIO 393 Practicum 1-4 hours
BIO 411 Biochemistry 4 hours See CHE 411
BIO 450 Directed Research 1-4 hours
BIO 490 Honors 1-2 hours

IAS 493 Senior Seminar 4 hours

The mission of the Business, Accounting and Economics Department is to prepare wellrounded, ethical, competent Christian people for a variety of careers in the competitive world of business and/or for graduate studies leading to an MBA degree.

As a segment of Taylor's "whole person" educational program, the Business, Accounting and Economics Department offers opportunities to earn a BS degree in systems, (see p. 96) coupled with a major in accounting, business administration, or economics; or a BA degree in one of these three majors. Candidates for the BA degree are encouraged to study a modern language beyond the required level to attain fluency in a second language in combination with skills in accounting, business or economics. An associates degree in business is also offered, as are minors in accounting and economics.

All business, accounting, and economics courses combine theory, principles, techniques, and practical applications to enhance graduates' employment opportunities or serve as a solid groundwork for graduate studies. Relevancy to current, real-world situations is emphasized and, toward that end, students are asked to subscribe to The Wall Street Journal during their sophomore, junior, and senior years. Field trips and expert guest lecturers are used as appropriate. A Free Enterprise Laboratory provides students an opportunity to manage a small business in retailing, manufacturing or management

## Business, Accounting, and Economics

Head, Associate Professor<br>Gortner; Associate<br>Professors Benjamin, Rotruck; Assistant<br>Professors, Coe, Erickson, Wheeler

consulting. Graduation requirements in the three majors include passing all core courses with grades of C - or better. A passing grade must also be achieved on a senior comprehensive examination.
The bachelor's degree with a major in business administration consists of 45 hours of accounting, business, and economics courses. A core of 9 courses is required, including the following: ACC 241 and 242; BUA 231, 311, 352, and 361; ECO 210, 211, and 212. In addition to the core, 15 hours of concentration courses are required from among the following fields as selected by the student and faculty advisor for each individual student: accounting, economics, finance, management, marketing, or other selected campus courses which will supplement the student's program. At least one 300 or 400 level ECO course must be included. A final capstone course, IAS 493 (Senior Seminar), is required for all majors. The following cognate subjects, outside of the accounting, business, and economics areas, are also required of candidates for the BA degree: MAT 110 (or a higher level math), COS 210, and NAS 240. Required cognate courses for BS degree candidates are MAT 151, COS 220, and NAS 240.

The accounting major is designed to prepare students for accounting and financial careers in business, government, education, and non-profit organizations. The program presents accounting theory and practice, current developments and ethical considerations discussed in a Christian context. Students are taught how to develop, analyze, and interpret financial plans and results and to provide management information in the most useful manners. Guided by faculty advisors, students may pursue programs leading toward certification in public accounting or management accounting, based on a combination of training, experience, and individual capabilities.
Either bachelor's degree with a major in accounting consists of 48 hours of accounting, business, and economics courses. A core of 14 courses ( 41 hours) is required, including: ACC 241, 242, 301, 341, 342, 405, 416, and 442; BUA 311, 352, and 361; and ECO 210, 211, and 212. Three additional hours of accounting courses are required from the following courses: ACC 302, 360, 370, 393, and 458. The senior seminar course, IAS 493, is required for all majors. The following IAS cognate subjects, outside of the accounting, business, and economics areas, also are required of candidates for the BA degree: MAT 110 (or a higher level math), COS 210, and NAS 240. Required cognate courses for BS degree candidates are MAT 151; COS 220, and NAS 240.
The accounting minor recognizes attainment of a sound, working knowledge of accounting in addition to another major field of study. Required are: ACC 241, 242, 301 or 302, 341, 342, 442, and COS 220 (cognate course).
An economics major requires at least 30 hours of economics courses including ECO 210, $211,212,331,332$, and IAS 493 (Senior Seminar), and 12 additional hours of 300 or 400 level economics courses. The following cognate courses are also required: calculus (MAT 151 or MAT 110 and 140); two statistics courses (NAS 240 and MAT 382); COS 220 or 210; and one business, accounting or political science course. Most economics majors also have a second major in one of the cognate areas.
The minor in economics may be earned by students majoring in other disciplines who wish to better understand the economic environment in which they live. 17 hours of Economics courses plus four cognate hours are required, as follows: ECO 210, 211, 212, 331 or 332, two additional 300/400 level Economics courses, and NAS 240 (cognate course).

## Associate of Arts Degree in Business Administration

An Associate of Arts degree in business administration is offered for students who want post-secondary training in business administration to prepare themselves for entry level positions in business. This program also allows students to proceed on to a bachelor's degree in Business Administration in a normal sequence. This degree includes a minimum of 68 hours as follows: (Some variations in scheduling general education courses are permissable.)

Fall Term
ECO 211 Prin of Macroecon ..... 3
ACC 241 Fund of Acctg I ..... 3
BUA 352 Prin of Management ..... 3
NAS 240 Intro to Stats ..... 4
XXX xxx Elective ..... 3
Interterm
HUM230 Fine Arts ..... 4
Spring Term
ECO 212 Prin of Microecon ..... 3
ACC 242 Fund of Acctg II ..... 3
BUA 311 Business Law ..... 3
COS 210 Bus Data Proc or ..... 3
COS 220 Intro Comp Sci ..... 4
XXX xxx Elective ..... 3

ACC 241 Fundamentals of Accounting I 3 hours
An introduction to the language of business. Financial transactions are analyzed, recorded, sum-
Accounting marized, and reported in a meaningful manner to management. Also studied are basic financial statements and the various accounting and internal control procedures for recording and protecting assets. Offered fall semester only.

ACC 242 Fundamentals of Accounting II 3 hours
A continuation of Accounting 241. Accounting problems and procedures pertaining to partnerships and corporations are studied. Also studied are various accounting procedures and reports used by management in acquiring fixed assets, budgeting and controlling manufacturing and departmental operations, reporting financial conditions, and analyzing the results of operations. Prerequisite: ACC 241. Offered spring semester only.

## ACC 301 Cost Accounting I 3 hours

A study of the nature of costs and their importance in all types of organizations: manufacturing, service, and non-profit. Topics include collection and allocation of costs to products and processes; planning, budgeting and control reports; responsibility accounting; and other management analyses and reports. Prerequisite: ACC 242

ACC 302 Cost Accounting II 3 hours
A continuation of Accounting 301. This course covers budgeting and control of operations, capital expenditures and cash flow; standard costs and variance analysis; direct costing; and profitability analysis. ACC 302 may be taken by business administration majors as a stand-alone cost accounting course. Prerequisite: ACC 301 or 242 and permission of the instructor.

## ACC 321 EDP Accounting Controls 2 hours

Accounting systems and controls in a computer environment are studied. Emphasis is placed on controls for use in and around computers. Specific areas studied include completeness and accuracy of inputs, processing, file maintenance, controls over use of and changes in programs, confidentiality, abuse, security, and advanced systems. Prerequisites: ACC 242, COS 210 or 220. Offered fall semester only.

ACC 341 Intermediate Accounting I 3 hours
A detailed study of the theory and procedures used by accountants in recording and valuing assets, and the resulting effect on profits. Emphasis is placed on current issues in accounting theory and practice in both Intermediate Accounting Courses. Prerequisite: ACC 242. Offered fall semester only.

ACC 342 Intermediate Accounting II 3 hours
A continuation of Accounting 341. A study of the theory and procedures used by accountants in
recording and valuing liabilities and capital accounts. Special emphasis is placed on the preparation and interpretation of balance sheets, income statements, and statements of changes in financial position. Prerequisite: ACC 341 or permission of the instructor. Offered spring semester only.

## ACC 360 Independent Study 1-4 hours

## ACC 370 Selected Topics 1-4 hours

## ACC 393 Practicum 4 hours

Prerequisites: 15 accounting hours (and SYS 200 for majors pursuing a systems concentration).

## ACC 405 Auditing 3 hours

A study of how professional auditors serve the public, stockholders, and management by impartially examining the accounting records and financial statements of enterprises. Topics studied include standards, ethics of the profession, internal control procedures, and the nature of the audit evidence. Prerequisite: ACC 342 or permission of the instructor. Offered fall semester only.

## ACC 416 Advanced Accounting 3 hours

A study of the more complex issues in accounting for partnerships, consolidated financial statements, and multi-national and not-for-profit enterprises. This course includes interim and financial reporting and coverage of current regulations and pronouncements pertaining to the profession. Prerequisite: ACC 342 or permission of the instructor. Offered spring semester only.

ACC 442 Federal Income Taxes 3 hours
A study of the effect of federal income tax laws and regulations on individuals, businesses, and other taxable entities. This course includes discussion of current issues and various legal methods of tax reduction and savings. Prerequisite: ACC 242. Offered fall semester only.

## ACC 458 CPA Problems 3 hours

A rigorous review of the topics covered by the Uniform CPA Examination, supplemented with practice in answering previous examination problems and questions. Prerquisites: BUA 311 and 21 hours of accounting, or permission of the instructor. Offered spring semester only.

IAS 493 Senior Seminar 4 hours. Offered interterm only.


BUA 231 Principles of Marketing 3 hours A study of the different fields involved in understanding the modern marketing system in today's business environment. Topics include: the nature of the market itself, types of products and services, product planning, life cycles, branding/labeling, pricing, and promotion. Special emphasis is given to distribution.

## BUA 311 Business Law 3 hours

A course designed to assist the student in acquiring knowledge of business law. It includes discussion of the nature, origin, and kinds of laws as they have evolved into the area of commercial transactions concerning personal property (Uniform Commercial Code). This knowledge is then integrated with training in the discernment of important legal points involved in various business situations and application of pertinent principles of the law thereto. Topics include contracts, agencies, commercial paper, partnerships, corporations, and real property. Junior status preferred.

## BUA 312 Sales 3 hours

A study of the psychological steps involved in making a sale in both industrial and consumer markets, the techniques and philosophies of personal selling, and the social and economic impact of the salesperson's role in the dynamic field of business enterprise. The course concludes with the student presenting an actual sales demonstration in class. Prerequisite: BUA 231. Offered spring semester only.

## BUA 313 Retailing 3 hours

To interest the student in the creative and challenging area of retailing as a profession either as the owner of a business or as a potential manager for large retailing concerns. Subject matters to be covered are kinds of stores, franchising, consumer behavior, selecting the proper building, merchandise planning and buying, pricing, physical handling of goods, and retail promotion. Prerequisite: BUA 231. Offered fall semester only.

## BUA 352 Principles of Management 3 hours

A course designed to thoroughly acquaint students with the theories, principles, and practical applications of management (planning, organizing, staffing, leading, and controlling). Most principles are universally applicable to all types of business and other organizations. Relevancy of course material to current, real-life situations is emphasized. Prerequisite: BUA 231. Offered fall semester only.

## BUA 360 Independent Study 1-4 hours

BUA 361 Corporate Finance 3 hours
A study of methods used in the evaluation of financing and investment alternatives and funds management. The course integrates basic accounting with financial analytical techniques. Areas of emphasis include sources of financing, cash flow analysis, working capital management, capital budgeting, net present value, cost of capital and long-term debt and capital structures. Prerequisites: ACC 241, 242. Offered fall semester only.

## BUA 362 Personnel Administration 3 hours

A study of the role and functions of the personnel department of an organizaton, with an up-to-date examination of the principles, policies, and problems of modern human resources management. Topics include employee relations, job analysis, compensation structures, recruitment practices, training/promotion/transfer/release, performance evaluation, discipline and management-union relationships. Prerequisite: BUA 352. Offered spring semester only.

## BUA 370 Selected Topics 1-4 hours

BUA 375 International Business 3 hours
An in-depth examination of business practices in other countries, leading to a better understanding of how to treat people in other cultural areas as trading partners, investors, and host countries. Prerequisite: BUA 231. Offered fall semester only.

## BUA 380 International Marketing 3 hours

A study of the factors involved in marketing products and services to other nations. Includes concentration on finance, transportation, distribution, organization, and advertising. Class projects are assigned. Prerequisite: BUA 231. Offered spring semester only.
BUA 393 Practicum 4 hours
Prerequisites: lower division business core requirements (and SYS 200 for majors pursuing a systems concentration), and BUA 352.

## BUA 412 Advertising 3 hours

A study of the role of advertising in today's business environment. Course covers how advertising affects our lives as potential buyers, pre-advertising research, advertising agencies, selection of proper media and communication systems, and the creation of an over-all advertising campaign. Instruction includes in-class group presentations of each of the six major media forms used by most organizations. Prerequisite: BUA 231. Offered spring semester only.

## BUA 420 Production and Operations Management 3 hours

A study of operations management related to production of goods and services. Topics include: product design, capital investment, facilities and equipment, maintenance, work methods and measurement, safety and health, production planning and control, materials management, project management, and quality assurance. Current issues such as energy and productivity are discussed. Basic quantitative methods are introduced. Prerequisite: BUA 352

BUA 428 Money and Banking 3 hours
A variety of practical banking topics are covered including: a review of the development of the banking system and the corresponding evolution of money and the demand deposit system; and an overview of non-bank financial intermediaries and their role in the present economy. Prerequisites: BUA 361, ECO 211, 212. Offered spring semester only.

## BUA 430 Investments 3 hours

A course designed to give the student a basic familiarity with practical investment strategies and terminology from both an institutional and individual perspective. Discussion includes stock, bond, commodity, and option markets, as well as other investment alternatives. Heavy emphasis is given to current developments. Prerequisite: BUA 361. Offered spring semester only.

BUA 452 Strategic Management 3 hours
An advanced course dealing with integrative issues in management, encompassing long range and short term objectives, planned and pursued in breadth and depth in an ever-changing environment. Prerequisites: ECO 212, ACC 242, BUA 352. Offered spring semester only.

## BUA 453 Free Enterprise Laboratory 4 hours

A "living laboratory in management", in which students manage a real business (retailing, manufacturing or consulting). Classroom training is applied and students experience the challenges, problems, frustrations and satisfactions of being entrepreneurs in our free enterprise society. Prerequisites: ECO 212, ACC 242, BUA 352 and junior or senior standing.

## IAS 493 Senior Seminar 4 hours

Economics
ECO 210 Basic Economics 2 hours
The basics of economics including scarcity and choice, opportunity, costs, specialization and trade, supply and demand, inflation and unemployment, macroeconomic policy and comparative economic systems. Offered spring semester and interterm only.

ECO 211 Principles of Macroeconomics 3 hours
Introduction to economics emphasizing an understanding of how the U.S. economy works. Topics studied include: how private markets work, how banks create money, determination of gross national product and income, economic indicators, and federal monetary and fiscal policies for influencing employment and price levels. Prerequisite: ECO 210. Offered fall semester only.

## ECO 212 Principles of Microeconomics 3 hours

A continuation of the introduction to economics started in ECO 210 and 211 emphasizing decisionmaking by individual consumers and producers. Prerquisite: ECO 211 or permission of instructor. Offered spring semester only.

## ECO 302 Labor Economics 3 hours

An in-depth look at the theory of wages and employment under various market conditions; factors affecting the demand for and supply of labor; human capital, discrimination, and other causes of wage differentials among people and locations; history, impact and future of the collective bargaining process; labor problems and legislation. Prerequisites: ECO 211, 212. Offered alternate years based on demand.

ECO 321 Government Finance 3 hours
An analysis of public expenditure and taxation at the federal, state, and local levels with emphasis

on the U.S. government. The course includes benefit-cost analysis and its application to current and/or proposed public programs; tax incidence and equity in theory and practice; study of specific taxes emphasizing the Federal personal income tax; economic analysis of the political process. Prerequisites: ECO 211, 212. Offered spring semester only.

## ECO 331 Managerial Economics 3 hours

Applications of microeconomics to business decision-making; intermediate level treatment of microeconomic theory; and approaches to empirical estimation of demand and cost curves. Optimal business decision strategies in production, pricing and purchasing. Prerequisites: ECO 211, 212; MAT 151 or 140; NAS 240. Offered alternate years based on demand.

ECO 332 Business Cycles and Forecasting 3 hours
Applications of macroeconomics to understanding and predicting business conditions; intermediate level analysis of factors determining GNP, unemployment, and inflation in the U.S.; study of business cycles and factors causing them; approaches to forecasting macroeconomic activity. Prerequisites: ECO 211, 212; COS 220 or 210; NAS 240 . Offered alternate years based on demand.

ECO 360 Independent Study 1-4 hours
ECO 370 Selected Topics 1-4 hours
ECO 393 Practicum 4 hours
ECO 411 International Economics 3 hours
A study of the nature, rationale, and economic effects pertaining to international trade restrictions. Causes and effects of changes in foreign exchange rates and balance of payments situations will be analyzed. The history, current workings, and possible future directions of the international monetary system will be discussed. Prerequisites: ECO 211, 212. Offered fall semester only.

ECO 442 Economic Development 3 hours
A study of the economic growth and growth potential of less-developed countries (LDCs). Historical development patterns of more developed countries and various theories of economic growth are studied. Policies for encouraging growth are discussed in the context of social and political factors. Prerequisites: ECO 211, 212. Offered fall semester only.

ECO 452 Private Enterprise \& Public Policy 3 hours
Emphasis on imperfectly competitive product markets and government policies toward them. Use of anti-trust laws, direct government regulations of public utilities, and public enterprise alternatives to improve resource allocation are studied. Implications of the trend toward deregulation in the communications and transportation industries are considered. Other government regulations affecting business such as health, safety, and environmental rules are included as time permits. Prerequisites: ECO 211, 212. Offered alternate interterms only.

IAS 493 Senior Seminar 4 hours

## Chemistry

Head, Professor Burden; Associate Professor Kroll; Assistant Professor Hammond

The Chemistry Department at Taylor University provides students with high quality training in chemistry while providing opportunities for meaningful spiritual and interpersonal experiences which will enable them to move successfully into the next phase of their professional training or the career of their choice.
A chemistry student can follow any one of the following tracks within the chemistry program:

## Bachelor of Arts in Chemistry

A regular 44 -hour chemistry major including a foreign language and a broad range of electives. This track is suitable for students wishing to enter either graduate school or the chemical industry.

## Bachelor of Arts in Chemistry/Pre-medicine

A chemistry pre-medical major with 36 hours of chemistry, a foreign language and an appropriate number of courses in biology to prepare for medical school. See "PreMedical Program" (pp. 130-131) for a typical schedule.

## Bachelor of Science in Chemistry/Education

A program designed for students wishing to achieve certification to teach chemistry at the secondary level.

## Bachelor of Science in Chemistry/Systems

A chemistry major with 44 hours of chemistry accompanied by a core of systems and computer science courses especially attractive to students planning to enter either graduate school or the chemical industry.

## Bachelor of Science in Chemistry/Pre-medicine/Systems

A chemistry program with 44 hours of chemistry suitable for entry either into medical school, graduate school, or the chemical industry. This track requires some summer courses in addition to full loads during the academic year.

## Bachelor of Science in Chemistry/Environmental Science

A chemistry major with 44 hours of chemistry accompanied by a core of environmental science courses and appropriate for students planning to enter graduate school or pursue careers in environmental monitoring, planning, or policy making.
A chemistry major (except chemistry/pre-medicine) consists of 44 hours of chemistry and must include CHE 201, 202, 301, 302, 311, 312, 422, 431, 431L, 432, 432L, and IAS 493. Required related courses are MAT 151 and 230; PHY 211, 212. It is strongly recommended that chemistry majors have MAT 240, 261, and 431, and at least one course in computer science. A reading knowledge of German or French (usually interpreted as two years of college instruction) is also recommended for a chemistry major. PHY 331 and COS 330 are strongly recommended for all chemistry majors and required for the chemistry/systems track.

A chemistry/pre-medical major consists of 36 hours of chemistry and must include CHE 201, 202, 301, 302, 311, 312, 431, and 493. See the Pre-Professional course section for a suggested schedule of courses (page 129).
NAS 480 is recommended for all majors in their junior or senior year.

## CHE 100 Chemistry for Living 4 hours

A course designed for students who have little or no background in chemistry. Particularly suited for general education students. An effort is made to make students aware of the chemistry within themselves and in their natural and man-made environment. A framework is presented in which personal, social and political decisions that involve scientific matters can be made. Basic concepts of chemistry are presented and serve as a foundation for this framework. Three hours lecture and one three-hour laboratory per week. Recommended to meet general education laboratory physical science requirement.
CHE 201, 202 General Inorganic Chemistry 5 hours ( 4 hours in some formats)
A course designed to meet the needs of both the non-science major and the student planning a science-oriented career. Two sections are taught.
Section A presents an introduction to the modern concepts of atomic structure, chemical bonding, and the structure and properties of matter. Elementary treatments of thermochemistry, thermodynamics, and chemical kinetics are included. Introductory experiences in qualitative and quantitative analysis are provided in the second term. A satisfactory score on a placement examination is recommended for admission to this section. Information concerning this examination, which is given during the first class meeting, should be obtained from the chemistry department.
Section B presents chemical vocabulary, skills and key concepts to students with little or no background in chemistry. This course may be used by students with weak backgrounds in chemistry to prepare them for CHE 202 A or it may be used as a terminal introduction to Chemistry, thus fulfilling a general education laboratory science requirement. Section B is not offered at the 202 level.
Section A is strongly recommended for all chemistry majors and for majors in any of the natural sciences. Each section meets for four hours lecture and three hours laboratory per week.

## CHE 301 Analytical Chemistry I 4 hours

An introduction to modern theories and methods used in chemical separations and quantitative determinations. The laboratory includes gravimetric and volumetric (acid-base, precipitation, redox, complex forming) titrations. Lecture three hours per week and three hours laboratory per week. Prerequisite: CHE 202. Offered alternate years beginning fall 1987.

CHE 302 Analytical Chemistry II 4 hours
A continuation of Chemistry 301 in which instrumental methods of analysis are emphasized. Topics include the general principles underlying instrumental methods and laboratory experiences in spectrophotometry (u.v.-visible, atomic absorption, flame photometry), electrochemistry and chromatography. Lecture three hours per week and three hours laboratory per week. Prerequisite: CHE 301 or permission of instructor. Offered alternate years beginning spring 1988.

CHE 311, 312 Organic Chemistry 5 hours
A study of the chemistry of carbon compounds. The methods of preparation, the distinctive characteristics and reactions of the various types of aliphatic and carbonyl compounds are studied the first term. In the second term a similar study is made of the aromatic compounds with an introduction to special classes of compounds, such as the proteins, terpenes, alkaloids, and dyes. The laboratory work consists of preparation of various types of organic compounds, a study of their distinctive reactions, an introduction to qualitative organic analysis and involvement in a small group research project. Four hours lecture and three hours laboratory per week. Prerequisites: CHE 201, 202.

CHE 360 Independent Study 1-4 hours

CHE 411 Biochemistry 4 hours
An introduction to the principles of biochemistry. This course is designed for chemistry and biology majors with a background in organic chemistry. Conformation and biosynthesis of macromolecules, bioenergetics, molecular genetics, and techniques of separation and analysis are studied. Three hours lecture and three hours laboratory per week. Prerequisite: CHE 312 or consent of instructor with a biology course being strongly recommended. Offered alternate years during fall term beginning 1987-88.

CHE 422 Advanced Laboratory 4 hours
This course emphasizes advanced laboratory techniques in analytical, inorganic and biochemistry. Experiences are chosen to supplement the previous background and interests of the students enrolled. Concepts emphasized typically are chosen from among the following: Statistical design of experiments, advanced chromatographic techniques, techniques in synthesizing and characterizing organo-metallic and inorganic compounds, techniques involved in recombinant DNA studies and other advanced biochemical techniques. One hour lecture and six hours of laboratory per week. Pre/Co-requisites: CHE 302, 312, 431, or permission of the instructor.

## CHE 431 Physical Chemistry 3 hours

An introduction to the kinetic-molecular theory of gases, the principles of thermodynamics, solutions, electrochemistry, and chemical kinetics. The course is designed for chemistry and physics majors. Prerequisites: CHE 201, 202; PHY 211, 212; and MAT 151, 230. Offered alternate years beginning fall 1986.

CHE 431L Physical Chemistry 1 or 2 hours
A laboratory course which includes vacuum techniques, thermometry and thermoregulation, calorimetry, physical characterization of solutions and optical techniques. Students opting for two hours apply these techniques to a project. Students taking only one hour of credit do not do the project. Three to six hours of laboratory per week. Offered alternate years beginning fall 1986.

## CHE 432 Physical Chemistry 3 hours

Emphasis on elementary principles of quantum mechanics, molecular structure, spectroscopy and photochemistry. The course is designed for chemistry and physics majors. Three hours lecture per week. Prerequisites: CHE 201, 202; PHY 211, 212, and MAT 151, 230 with MAT 240, 261, and 431 strongly recommended. Offered alternate years beginning fall 1987.

CHE 432L Physical Chemistry 1 or 2 hours
Same content as CHE 431L. Students who have taken CHE 431L for one hour credit do a project in CHE 432L. No student may have more than two hours total credit from CHE 431L and CHE 432L. Three to six hours laboratory per week. Offered alternate years beginning fall 1986.

## CHE 450 Directed Research 1-4 hours

IAS 493 Senior Seminar 4 hours

## Communication Arts

Head, Professor D. Jackson; Professor Rousselow; Associate<br>Professors Hubbard, Walker, C. Kirkpatrick

Requirements for the four majors offered by the Communication Arts Department are designed to help students acquire the communication knowledge and skills needed for a variety of Christian ministries as well as careers in television, radio, print media, business, public relations, theatre, teaching, government and law. Media-related courses develop technical skills, but give equal emphasis to message content, audience analysis, and the ethical use of media in society. Participation in theatre is seen as an opportunity to increase understanding of the human condition, expand awareness of human need, offer creative activity for the development of expressive gifts, and provide a means of articulating a Christian world and life view.
Students may select one of four majors. Each of the first three majors may be combined with a minor from within the department, a second major or minor from a different department, a concentration in Environmental Science or each may be used to earn a Bachelor of Science (BS) degree when combined with Systems or Environmental Science.

This major emphasizes communication theory and skills (interpersonal, public speaking, discussion, debate, persuasion), and may be used to prepare for careers which have communication knowledge and skills as major requirements. A total of 44-47 hours is required, including CAC $126,226,326,493$; CAS $110,120,393$ (or CAS 360), a combined total of three courses selected from Theatre Arts and Mass Communication, five additional Communication Studies courses (CAS), a minimum of one recommended support elective course, and the foreign language requirements.

## II. Bachelor of Arts Degree in Mass Communication (CAM)

Core courses in radio, television, and print media are used in this major to prepare students for media-related careers, Christian ministries, and public relations. A total of 50 credit hours is required, including CAC $126,226,326,493 ;$ CAS 110,120 ; CAM 241, 250, 320, 393, a combined total of three courses selected from Theatre Arts and Communication Studies, four additional CAM elective courses and the foreign language requirements. Students are required to work with campus media and are encouraged to choose additional electives in psychology, political science, art, business, sociology, and history.

## III. Bachelor of Arts Degree in Theatre Arts (CAT)

Course sequences for theatre majors offer training in all basic phases of theatre production. A total of $44-46$ credit hours is required, including CAC 126, 226, 326, 493; CAS 110, 120; CAT 200, 212, 393 (or CAT 360), 402, 432, two of the following (CAT $301,362,341$ ), a combined total of three courses selected from Communication Studies and Mass Communication, and the foreign language requirements. Recommended electives include ENG 230, 361, 362; PHl 201, 262, 342; and REL 262.

## IV. Bachelor of Science Degree in Communication Arts Education

The curriculum for the Communication Arts Bachelor of Science in Education degree is designed for students who want to be certified to teach Communication Arts (speech, theatre, radio, and television) in secondary schools. A total of 47 credit hours is required, including CAC 126, 226, 326, 493; CAS 110, 120, 231, 331, 342, 372; CAT 200, three of the following (CAT 212, 341, 362, or 432), CAM 250, 382, and 392. Suggested electives include ENG 312, 361, and 362. All education majors are encouraged to select a second teaching area (minor).

CAC 126 Communication Arts Seminar I: Communication Theory 2 hours
Explores definitions and models of communication from the point of view of the various dimensions of the discipline: communication theory, theatre, and mass communication.

CAC 226 Communication Arts Seminar II: Careers 2 hours
Focuses upon the question "What can 1 do with this major?" by increasing students" awareness of careers which require the skills and knowledge developed by the communicative arts.

CAC 326 Communication Arts Seminar III: Artistic Applications 2 hours
Explores historic, traditional, and contemporary aesthetic theory in the fields of theatre, mass communication and communication theory.

IAS 493 Senior Seminar 4 hours
Explores historic, traditional and contemporary approaches to critical methodology in theatre, mass communication, and communication theory.

CAS 110 Public Speaking 2 hours
Concentrates on the development of public speaking skills, including audience analysis, library research, organization, the use of evidence to support a point of view, delivery, and listening.

## Comnnunication Arts Core Courses

## Mass Communication Courses

The study of self-esteem, empathic listening, emotion, language, nonverbal behavior, judgment, power, conflict, and ethics in interpersonal relationships.

CAS 201 Corporate Communication 3 hours
The acquisition and application of communication skills used in business and industry. Offered fall semesters.

## CAS 231 Voice and Articulation 3 hours

A study of functional speech problems with emphasis on diagnostic and remedial methods for improvement. The International Phonetic Alphabet is taught as an aid to improving speech skills. Offered alternate fall semesters. Next offered fall 1986.

## CAS 331 Communication for Decision-Making 3 hours

A study of discussion and debate as tools for rational decision-making. Includes practical instruction in discussion leadership and educational debate. Offered alternate fall semesters. Next offered fall 1987.

## CAS 340 Intercultural Communication 3 hours

The study of the complex process of intercultural communication. The course seeks to create an awareness of culture-bound assumptions and ways to communicate more effectively with persons from other cultures. Offered alternate spring semesters. Next offered spring 1988.

CAS 342 Speech Pathology for the Classroom 2 hours
The causes and treatment of pathological and functional speech and hearing disorders. Course content and structure are designed to equip elementary, special education, and secondary teachers to help students correct speech problems and to provide classroom support for speech therapists.

CAS 360 Independent Study 1-4 hours
CAS 370 Selected Topics 1-4 hours
Courses offered on topics of special interest.
CAS 372 Communication for Change 3 hours
A study of communication as an agent for change in intrapersonal, interpersonal, group and larger social contexts. Includes a focus upon the skills, methods, and ethics of persuasion.

CAS 380 Advanced Interpersonal Communication 3 hours
Advanced Interpersonal Communication theory and skill development, with special focus on empathic listening. Prerequisite: CAS 120.

CAS 393 Practicum 1-4 hours
CAS 490 Honors 1-2 hours
CAS 492 Internship 8-16 hours
Professional semester of supervised internship in a work setting related to the major field of study.
Prerequisites: Completion of departmental core and major courses and approval of the department faculty.

## CAM 150 Basic Reporting for the Media 2 hours

A beginning course in covering beats, reporting and writing news through the use of an electronic journalism laboratory. Prerequisite: ENG 110 or ENG 111.

CAM 241 Introduction to Radio and Television 3 hours
A survey of broadcasting including social aspects, growth of American radio and television, networks and stations, advertisers and agencies, and other broadcasting areas. Exposure to live radio microphone and television camera situations and basic studio equipment and production techniques are incorporated. Offered fall semesters only.

CAM 250 Mass Media 4 hours
Examines the role of mass media in society today and their impact upon such areas as education, religion, business, and politics. This course includes print media, radio, television, and film. Prerequisite: ENG 110 or 111.

Emphasis on reporting and coverage of meetings, speeches, government, religion, and sports. Practice in the interview technique and in interpretative reporting is provided. Prerequisites: ENG 110 or 111; and CAM 250. Offered fall semesters only.

CAM 332 Editing and Design 3 hours
Basic news editing of wire services and local copy, pictures, and headlines. Practice in news makeup and in the editing and design of special magazine sections is provided. Prerequisite: CAM 320. Offered alternate spring semesters. Next offered spring 1988.

CAM 343 Feature Writing 3 hours
The writing of news, background, human interest, and historical features for the print media. Prerequisite: CAM 320. Offered alternate spring semesters. Next offered spring 1987.

CAM 350 Writing for Advertising 4 hours
A writing course for the preparation of newspaper, magazine, and television advertising copy and commercials. Designed for Communication Arts majors but open to others as enrollment permits. Not open to freshmen.

CAM 352 History and Criticism of Film 3 hours
A survey of film history, artistic growth, and early influences and techniques of film-making. Critical principles for viewing films are emphasized. Offered alternate spring semesters. Next offered spring 1987.

## CAM 360 Independent Study 1-4 hours

CAM 370 Selected Topics 1-4 hours
Courses offered on topics of special interest.
CAM 382 Television Production 3 hours
Theory and production aspects of television, including application of production principles in actual directing situations. Prerequisite: CAM 241 or permission of instructor. Offered spring semesters only.

CAM 392 Radio Production 3 hours
Theory and production aspects of radio, including radio personality development and the application of production principles in a variety of radio programming situations. Prerequisite: CAM 241 or permission of instructor.


CAM 395 Broadcast Scriptwriting 3 hours
Offers training and practice in writing scripts for radio and television; including scripting forms, approaches, and techniques required for the writing of effective scripted material. Offered alternate spring semesters. Next offered spring 1987.

CAM 431 Advanced Television Production 3 hours
Advanced study and practice of television production and directing, including electronic editing and remote production techniques. Prerequiste: CAM 382. Offered fall semesters only.

CAM 442 Applied Telecommunication Strategies 3 hours
The integration of television production skills as applied to client-centered projects, industrial and educational television, cablecasting, and computerized editing. Prerequisite: CAM 431. Offered spring semesters only.

CAM 490 Honors 1-2 hours

CAM 492 Internship 8-16 hours
Professional semester of supervised internship in a work setting related to the major field of study. Prerequisites: Completion of departmental core and major core courses and approval of the department faculty.

## Theatre Arts Courses

CAT 200 Oral Interpretation of Literature 3 hours
Study and practice of personal-spiritual involvement with literature through the application of basic techniques of literary analysis and oral reading.

CAT 212 Acting 3 hours
Study of the theories and principles of acting as an art, approached through a Christian perspective of life and the human situation. Practical application of performance techniques and character development are provided through laboratory theatre experiences. Corequisite: HPR 200 for Actors. Offered spring semesters only.

CAT 301 Advanced Oral Interpretation of Literature 3 hours
Advanced study and application of the techniques of literary analysis and oral reading. Readers' theatre is emphasized with laboratory experience provided. Prerequisite: CAT 200 or permission of instructor. Offered alternate fall semesters. Next offered fall 1987.

CAT 341 Stagecraft and Scene Design 3 hours
Emphasis given to the technical phases of play production including design theory and practice with projects in set construction, lighting, and makeup. Work on theatre productions provides practical experience. Offered alternate fall semesters. Next offered fall 1988.

CAT 360 lndependent Study 1-4 hours
CAT 362 Religion and Theatre 3 hours
A study of the distinctions and correlations among secular, religious and "Christian" drama, with particular emphasis placed on religious-literary criticism. Offered alternate fall semesters. Next offered fall 1987.

CAT 370 Selected Topics 1-4 hours
CAT 393 Practicum 1-4 hours
CAT 402 Contemporary American Theatre 3 hours
A study of selected twentieth-century American theatre movements, people, and dramatic literature from 1950 to the present. Offered alternate spring sentesters. Next offered spring 1988.

CAT 432 Play Directing 3 hours
Study of the theories and principles of directing as an art, approached through a Christian perspective of life and the human situation. Emphasis is given to play analysis with practical application provided through laboratory theatre experience. Prerequisite: CAT 212 or permission of instructor. Offered spring semesters only.

CAT 492 Internship 8-16 hours
Professional semester of supervised internship in a work setting related to the major field of study. Prerequisites: Completion of departmental core and major courses and approval of the department faculty.

IAS 493 Senior Seminar 4 hours

See Information Sciences

## Computer Science

## Economics

## Introduction

The Division of Education cooperates with other departments to prepare teachers for positions in private and public schools. The division is in a unique position to educate persons for leadership positions in Christian schools, public and private nursery schools, and public elementary, junior high/middle, and secondary schools and for leadership positions related to youth work. Admission to, retention in, and completion of an approved teacher education program at Taylor University is coordinated by the Director of Teacher Education. Students seeking teaching certification may fulfill the requirements while earning either a Bachelor of Arts or Bachelor of Science degree.

## Field Experiences

Field experiences with children and youth with strong emphasis on multicultural education are considered a vital part of the preparation of the teacher. Beginning with the first professional education course and continuing through the senior year, such experiences are required for each prospective teacher. The culmination of these professional experiences occurs during the fall term of the senior year with full-time student teaching. During this final experience a student is expected to assume as much as possible the total responsibilities of a teacher.

## Advisement

Students wishing to explore or prepare for the teaching profession should become involved in the teacher education program as early as possible in their college careers. It is advised that initial steps be taken as an entering freshman or as soon as possible after entering Taylor. Upon declaring a major area of study (elementary education or secondary education), the student will be assigned an academic advisor. This academic advisor will continue to advise the student throughout the entire program.

Much of the student's planning may be self-directed, however, by use of the curriculum guide for the chosen area of study. Curriculum guides containing course requirements for all teacher education programs offered at the University may be obtained from the teacher education office.

## Transfer of Credit from Other Institutions

Students seeking admission to the Taylor teacher education program through transfer from another institution must meet the standards required of regularly enrolled stu-
dents. Credits are assessed by the Director of Records. The Director of Teacher Education, after consultation with the appropriate department head, will accept transfer credit when the courses taken are equivalent to requirements on a designated major curriculum guide.

## Admission to the Teacher Education Program: Step One

There is a formal admission procedure to the teacher education program. A student is admitted to the program upon completion of an official application form (available in the teacher education office) and favorable action by the Teacher Education Committee. The application should be completed immediately following the first term of a student's sophomore year. Students are formally admitted to the teacher education program after completing three terms of college work, one of which must have been at Taylor. The Teacher Education Committee has established standards which students must meet in order to be admitted to and remain in the program. Factors encompassed by these standards are scholastic performance, communication skills, and departmental recommendation. Detailed explanations of these standards may be obtained from the teacher education office.

## Admission to Supervised Internship (Student Teaching): Step Two

Subsequent to admission to the program, there is a formal admission procedure to student teaching. The application is initiated and facilitated through the office of the Director of Field Experiences and should be prepared and ready for consideration (by the Teacher Education Committee) by the beginning of the sixth term. The factors considered by the Teacher Education committee include: (1) successful completion of prerequisite courses;(2) departmental recommendation;(3) competency in communication skills (oral, listening, reading and writing); and (4) scholastic performance. Detailed explanations of these standards may be obtained from the teacher education office. Student teaching is a fall term activity; however, student teaching during the spring term of the senior year is available to selected students by special permission of the academic department and the Teacher Education Committee.

## Teacher Education <br> Programs

## Fields of Study

Curricula which meet the licensing standards of the Indiana Department of Education are listed on the curriculum guides available to each student. Preparation for standard teaching licenses in the following fields is provided at Taylor:

## All Grade Education (K-12)

## Art

Music (instrumental, choral and general)
Physical Education

## Elementary Education (first through sixth grades)

The following minors and endorsements may be added to the elementary license:

## Computer endorsement

Kindergarten endorsement
Coaching endorsement
Physical Education minor
Music minor
Special Education minor (educable mentally retarded)
Certificate in Religious Studies (not certified by the state)


Elementary education majors may add this license in the following areas:
Language Arts
Science
Social Studies
Mathematics
Secondary education majors may add this license in their major field along with areas listed above.

Secondary Education (majors and minors)
Art
Communication Arts
English
French
Mathematics
Physical Education
Science
Biology
Chemistry
General Science
Mathematics
Physics
Social Studies
Economics
Geography
Government

Psychology<br>Sociology<br>U.S. History<br>World Civilization<br>Spanish

Additional Minors \& Endorsements
Coaching Endorsement
Computer Endorsement
Special Education-EMR Minor
Health and Safety Minor
Certificate in Religious Studies (not certified by the state)

## Elementary Education Major

(See Teacher Education Programs) Thirty-six specified hours constitute the elementary education major. Also included on the elementary education curriculum guide are selected general education courses, directed electives, and professional education courses.

## Secondary Education Major

(See Teacher Education Programs) Curriculum guides are available in the areas listed. The student preparing to teach in the secondary schools will select a teaching major. A student is urged to select a second teaching area (minor or endorsement). Included on the secondary education curriculum guides are selected general education, subject matter, and professional education courses.

## Associate of Arts Degree

In addition to the baccalaureate degree programs maintained by the division, a two-year curriculum in early childhood education is offered for people who wish to qualify for leadership positions in day care centers, day care homes, Headstart and nursery schools. This program blends together a series of liberal arts courses with practical experiences in field centers and professional content to prepare early childhood workers. The program includes four curriculum workshops which integrate the early childhood curriculum in the liberal arts with a multicultural/multiethnic emphasis, experience at field-based centers, and a core curriculum. The student will spend at least three hours weekly in a fieldbased center (selected day care and nursery school facilities).

## Special Education Minor

Elementary and secondary education majors may add the special education minor to their certification program. This minor prepares teachers to teach the educable mentally retarded (mildly mentally handicapped). In addition to courses on the major program, the following courses are required:

| Elementary | Secondary |
| :--- | :--- |
| EDU 141 | EDU 141 |
| EDU 333 | EDU 352 |
| EDU 232 | EDU 333 |
| EDU 242 | EDU 232 |
| EDU 341 | EDU 242 |
|  | EDU 341 |
|  | MAT 201 |

Students adding the special education minor will complete a part of their student teaching experience in an EMR classroom. The holder of this minor will be eligible to teach the EMR at the basic preparation level of the license.

## Education Religious Studies Certificate

An elementary or secondary education student who wishes to be prepared to teach in a Christian school should consider completing the 25 -hour Education Religious Studies Certificate. In addition to the 12 hours of general education requirements in this area, students electing this option will complete a minimum of 13 term hours, including a specialized course "Teaching in a Christian School." Application forms are available in the teacher education office.

## Certification

All teacher education programs have been designed to meet Indiana certification requirements and have been approved by the State Department of Education. Students who meet graduation requirements and complete an approved teacher education program will be eligible for Indiana certification (license to teach). The Teacher Certification Office is responsible for verifying to the State Department that all requirements for certification have been met, and for processing all applications for certification.

## Accreditation

The teacher education programs are approved by the National Council for Accreditation of Teacher Education. The only exceptions are the Spanish major and the special education minor which have not yet been submitted for NCATE approval. All certification curricula are fully accredited by the Indiana Department of Education.

## Practicum

A practicum is supervised learning involving first-hand field experience or a project. It is offered primarily during interterm and summer with the consent of a supervising professor and the approval of the division chair. Under certain conditions a practicum may be required to demonstrate readiness for student teaching.

EDU 141 The Exceptional Child 3 hour
An introduction to the field of special education. The course includes studies in history, trends, and current issues. Activities and reading which will lead to a greater sensitivity to all handicapped people will be pursued. Offered fall semester only.

EDU 150 Education in America 3 hours
A study of the historical, philosophical, and sociological foundations of education. The organization and role of the public school, K-12, in a multicultural society is studied. An analytical study of teaching is made, including concepts of teaching and leadership roles. The course includes a study of multicultural and ethnic differences among students and the resulting effect on the teacher's role. Includes field experience lab.

EDU 223 Supervised Field Experience in Early Childhood Education 4 hours
A full-time, four-week participation experience in a nursery school, day care center/home, or Headstart. The student will assume a position of leadership with children under the supervision of qualified early childhood teachers. Students pursuing the AA degree complete this interterm course two times, once in a day care center/Headstart and once in a nursery school. Prerequisite: EDU 281 or 291.

EDU 232 The Mildly Mentally Handicapped: A Psycho-social and Educational Study 3 hours A course which deals exclusively with the mildly mentally handicapped. Emphases are on the social, psychological, and educational considerations. The students are encouraged to develop their own philosophies of teaching in special education. Prerequisite: EDU 141. Offered alternate spring semesters beginning 1986 .

EDU 242 Curriculum and Methods for Teaching the Mildly Mentally Handicapped 3 hours A course which discusses and practices educational programs for optimum growth and development of mildly mentally handicapped. Curriculum content and organization of special schools and classes as well as teaching methods and materials are included. Prerequisite: EDU 141. Offered alternate spring semesters beginning 1987.

The study and application of learning theories and psychological concepts and principles to the teaching-learning process. The teacher's responsibility to handicapped students is explored. Cognitive, affective, and psychomotor aspects of the teaching-learning process are considered. With field experience lab. Prerequisite: EDU 150.

## EDU 281, 282, 291, 292 Curricular Workshops in Early Childhood Education

Section A is designed for the elementary education major adding a kindergarten endorsement to the certification pattern. The course projects, directed learning activities, supervised field experiences, observations, and grouping for instruction will focus on pattern requirements.

Section B is designed for the early childhood education major. The course projects, directed learning activities, supervised field experiences, observations, and grouping for instruction will focus on pattern requirements.

EDU 281 Curriculum Workshop in Communication and Environment in the Preschool and Kindergarten 3 hours
This course deals with the many areas involved in developing positive forms of communication in an early childhood and kindergarten program. Different methods and teaching strategies will be presented dealing with verbal, non-verbal, listening skills, discipline procedures, classroom environment, written forms of communication including evaluation forms, parent conferences, and observing and participating with young children. Special emphasis will be given to bilingual, multicultural/multiethnic and handicapped. Offered alternate fall semesters beginning 1987.

EDU 282 Curriculum Workshop in Language Arts including Reading Readiness and Children's Literature in the Preschool and Kindergarten 3 hours
Developing a curriculum in language arts for the early childhood and kindergarten programs in public and private elementary and preschools. A variety of teaching strategies will be explored to deal with the areas of language development (including ethnic, cultural and disability awareness), literature of many cultures, and various types of preschool and kindergarten reading programs. Observation of and participation with young children will help the students become aware of the wide range of abilities within the preschool and kindergarten classroom. Offered alternate spring semesters beginning 1988.

## EDU 291 Curriculum Workshop in Social Studies and Religious Education in the Preschool and Kindergarten 3 hours

Approaches and aspects of a social studies curriculum for an early childhood and kindergarten program. Different facets and modes of teaching about self-concept, disability awareness, home and changing lifestyles, the various types of communities, the world (including the varied ethnic and cultural aspects), and the spiritual needs of the preschool and kindergarten child. Students will observe and participate with young children in the preschool and kindergarten classroom. Offered alternate fall semesters beginning 1986.

EDU 292 Curriculum Workshops in Mathematics and Science in the Preschool and Kindergarten 3 hours
Developing a curriculum in science and mathematics for a preschool or kindergarten program. A variety of different methods of teaching "sciencing" including the past, present and future areas of the child's immediate and world environment, meaningful and appropriate mathematics skills, including number readiness. Students will observe and participate with preschool and kindergarten children. Offered altemate spring semesters beginning 1987.

EDU 312 Teaching in Secondary Schools - Special Methods 2-4 hours
A special methods course taught by specialists in the student's major department. All aspects of planning, teaching and evaluating within a specific subject area are discussed. Prerequisites: EDU 150 and 260.

EDU 322 Reading for Junior High/Middle School and Secondary Teachers 3 hours
Practical procedures for developing effective reading skills at the junior high/middle and secondary school levels. Attention will center on understanding the relationships between the processes of reading and learning of content, planning to meet the total range of student reading needs, methods and materials to enhance advanced comprehension, and study skills in a multicultural society. With tutoring. Students are urged to complete this course before student teaching.

## EDU 360 Independent Study 1-4 hours

EDU 362 Teaching Science and Social Studies in Elementary Schools 4 hours (SP)
An exploration of the methods and materials of teaching science and the social studies. Development of units for teaching, construction of devices to be utilized in teaching, demonstration teaching, and work in the Learning Resource Center are emphasized. A specialist in audio-visual aids works with the students in creatively developing teaching media. Public school and college personnel cooperate in providing, supervising, and evaluating teaching experiences used with elementary school children in outdoor environmental education. Prerequisites: EDU 150, 260. Taught concurrently with EDU 352 . Offered spring semester only.

## EDU 370 Selected Topics 1-4 hours

EDU 371 Organization and Operation of Preschools and Kindergartens 3 hours Organizational and administrative skills needed to develop and teach in the preschool or public/ private kindergarten. The class will include methods and techniques for screening and evaluating young children, disability awareness and parent education and involvement. Observation and evaluation of actual preschool or kindergarten are obtained through on-site visitation and interviewing teachers of preschools or kindergartens. National, state and local provisions of the Education of all Handicapped Children Act - P.L. 94-142 are discussed. Offered fall semesters only.

Section $A$ is designed for the elementary education major adding a kindergarten endorsement to the certification pattern.

Section B is designed for the early childhood education major.
EDU 372 Teaching the Young Child 3 hours
Study of the physical, emotional, mental, social, and spiritual development of the preschool or kindergarten child. Curriculum development will include music and creative movement, health, nutrition, the special child's needs, and child abuse. Techniques of evaluation and testing will be emphasized using the services of Taylor University's testing office. Resource persons, media and research assignments will aid in developing skills and materials needed in teaching the preschool or kindergarten child. Offered spring semesters only.

Section A is designed for the elementary education major adding a kindergarten endorsement to the certification pattern.

Section $B$ is designed for the early childhood education major.
EDU 382 Teaching in a Christian School 3 hours
Examines through readings, seminars, field experiences, guest lectures and classroom investigations the theological, historical, philosophical, organizational, curricular, and instructional principles for teaching in a Christian school.

EDU 383 The Junior High/Middle School 3 hours
A study of the development, philosophy, and organization of middle schools and junior high schools. Offered fall semester only.

## EDU 392 Teaching in Junior High/Middle Schools 3 hours

Examines through readings, seminars, field experiences, and classroom investigations the purpose, curriculum, and instructional strategies for effective teaching in junior high/middle schools. This course provides prospective teachers with knowledge and understanding of the child, the school, and practical teaching activities. Prerequisites: EDU 150, 260. Offered spring semester only.

## EDU 393 Practicum 1-4 hours

## EDU 401 Supervised Internship in Early Childhood Education 14 hours

Full-time teaching experiences for the intern at two different nursery schools during the fall term under directed supervision. The student completing the early childhood major and the kindergarten endorsement or the special education minor will spend approximately 8 weeks student teaching in a nursery school and approximately 6 weeks with children at the endorsement or minor level. Prerequisites: (a) approval by the Teacher Education Committee; (b) EDU 150, 260, 281, 282, 291, 292, 371, 372. Corequisite: EDU 441.

EDU 411 The Teacher in the Secondary Schools 2 hours
A seminar/general methods course taught in public schools. Topics investigated are general teaching methods, individual and group processes of teaching, professional relations, measurement, media, curriculum development, interdisciplinary learning, values clarification, legal implications, classroom management, and technical skills of teaching. How all of these factors are promoted within the school structure, K-12, is considered. Corequisite: EDU 431.

## EDU 421 Supervised Internship in Elementary Schools 14 hours

Full-time teaching experiences for the intern at two grade levels during the fall term under the supervision of public and private school and college personnel. Multicultural/multiethnic education placement is required in one of the experiences. Prerequisites: (a) Approval by the Teacher Education Committee; (b) EDU 150, 260, 352, 362. Corequisite: EDU 441.

EDU 431 Supervised Internship in Secondary Schools 14 hours
Full-time teaching experiences for the intern at two grade levels or in two subject areas during the fall term under the supervision of public school and college personnel. Prerequisites: (a) Approval of the Teacher Education Committee; (b) EDU 150, 260, 312. Corequisite: EDU 411.

## EDU 441 The Child and the Teacher 2 hours

A seminar course - taught in student teaching centers - which investigates such topics as professional relations, strategies for remedial reading, legal implications, classroom management, career planning, pupil testing and evaluation, and multicultural/multiethnic differences. This course may be repeated once for those students wishing to complete majors in both early childhood and elementary education. Corequisite: EDU 421 or 401.

## EDU 480 Seminar 1-4 hours

IAS 493 Senior Seminar in Early Childhood Education 4 hours
The students utilize their general education, subject matter concentration and professional educational background to formulate a culminating concept of an effective and functional early childhood center of learning. Included are: methods and instruments of various types and techniques, resource persons, on-site visitation and working one-to-one with young children. These activities will aid the students' awareness of diagnosing and evaluating the various readiness problems and learning styles of the nursery school or kindergarten child. Offered interterm only. with students, parents, fellow teachers and administrators in the educational setting. The student's preparation in general education, subject matter concentration and professional education becomes a basis for a critical analysis of elementary education curriculum. Corrective and/or diagnostic reading will be the vehicle used to see how well teachers understand pupils and how they learn. Included in the coursework will be seminars and diagnostic work with students to assess reading difficulties. Future teachers will develop corrective plans of action to remediate the problems of students. A laboratory experience with public school children will be a portion of the course. Offered interterm only.

Experience in writing and reading makes one "exact" and "full," as Francis Bacon observed. The English Department offers courses intended to help students write clearly and effectively, met through ENG 110 or 111, and to read literature with critical appreciation, met through ENG 230,240 , or 250 . All students take courses in expository writing and selected literary masterworks.
The major in English prepares men and women to enter a wide range of careers. Opportunities presently abound in education, law, business, Christian ministry, writing, editing, research, library science, public relations, travel, civil service and administration. The major also prepares those who wish to study English at the graduate level. Additional features of the English program include several attractive opportunities. Creative writers will find a vehicle for their imaginative efforts in Parnassus, a literary magazine published each spring semester. The January interterm offers a three-week tour to London, England, in which the study of British literature is combined with visits to important literary and historical sites.
For the Bachelor of Arts degree the English major consists of at least 40 hours in addition to ENG 110 or 111. Required courses are ENG 212, 230, 240, 362; IAS 493; two literature courses before 1900 (ENG 340, 361, 371, 412, 422, 426, 431, 441); and one literature course after 1900 (ENG 363, 364, 444).
For the Bachelor of Science degree leading toward certification to teach English in the secondary school, the major consists of at least 44 hours in addition to ENG 110 or 111. The required courses are ENG 212, 230, 240, CAM 250, ENG 302, 312, 362, 493; two literature courses before 1900 (ENG 340, 361, 371, 412, 422, 426, 431, 441); and one literature course after 1900 (ENG 363, 364, 444).

Students who major in English are urged to take courses in British and American history. They are also encouraged to elect courses in communications, philosophy, and foreign language.

ENG 100 Basic English 2 hours
Intensive review of basic grammar and mechanics. Practice in writing clear sentences, paragraphs, and short prose compositions. Enrollment by assignment. Offered fall semester.

ENG 110 Expository Writing 4 hours
Practice in writing clear and effective prose through several expository modes, including a formal research paper. Brief review of grammar and mechanics. To be taken during the frestman year.

ENG 111 Honors Writing Seminar 4 hours
A subject-oriented approach to expository writing. Enrollment by invitation to selected freshmen. Offered fall semester.
ENG 110 or 111 are prerequisites to all other English courses, except for ENG 230, 233, 240, and 250.
ENG 210 Writing for Teachers 3 hours
Communications skills for prospective educators. Designed for elementary and secondary majors seeking certification. Not required of English majors or minors. Not open to freshmen.

ENG 212 Critical Approaches to Literature 4 hours
Introduction to basic literary analysis with emphasis on informed reading and critical, written response to selections from poetry, fiction, drama, and film. Includes minorities literature. Primarily intended for English majors, but recommended for all students who desire greater reading and writing skills. Offered spring semester.

CAM 250 Mass Media 4 hours
ENG 302 Linguistics and Grammar 4 hours
Analysis of the English language with attention to its history, nature, and structure. Prerequisite to student teaching, except with departmental approval. Offered every third semester.

ENG 312 Imaginative Writing 3 hours
Workshop experience in the writing of poetry and fiction. Prerequisitie: ENG 110 or 111 . Offered every third semester.

CAM 320 Newswriting 4 hours
CAM 332 Editing and Design 3 hours
ENG 333 Business and Technical Writing 3 hours
Practice in the forms of writing required in business and industry. Prerequisite: ENG 110 or 111. Offered during interterm.

## CAM 343 Feature Writing 3 hours

ENG 410 Advanced Writing Workshop 4 hours
Intensive practice in selected creative genres. Enrollment with permission of instructor. Prerequisite: ENG 312. Offered every fifth semester.

ENG 230, 233, 240 or 250 are prerequisites to all other literature courses.
ENG 230 World Masterpieces 4 hours
A selective survey of the literary achievement of western civilization from antiquity to the present.
ENG 233 Literary London 4 hours
A study-tour conducted each January in London, England, combining study of selected major British authors with extensive sight-seeing in London and surrounding counties. Enrollment with instructor's permission. Offered during interterm.

ENG 240 American Literature 4 hours
A survey of important works from colonial times to the present.
ENG 250 British Literature 4 hours
A selective survey of masterworks from Beowulf to the present.
ENG 270 Children's Literature 2 hours
A study of the reading interests of children, pre-school through adolescence, in a multicultural society. Story telling and criteria for evaluating and selecting various types of children's books are stressed. With story lab.

ENG 340 American Romanticism and Realism 4 hours
A special topics approach to the literature of nineteenth-century and early twentieth-century America. Offered spring semester.

ENG 360 Independent Study 1-4 hours
ENG 361 Western Drama 4 hours
A selective survey of continental, British, and American drama to about 1900. Emphasis on historical development of the theater. Offered every fifth semester.

ENG 362 Shakespeare 3 hours
Intensive analysis of selected plays and sonnets. Attention is given to the conventions of the Elizabethan and Jacobean theater. Offered every third semester.

ENG 363 Modern Poetry and Drama 4 hours
A critical study of major poetry and drama, mainly British and American, from 1900 to 1960. Offered every fifth semester.

ENG 364 Modern Fiction 3 hours
A critical study of major novels and short fiction, mainly British and American, from 1900 to 1960.
Offered every fifth semester.
ENG 370 Selected Topics: Themes and Genres 1-4 hours
Examples of courses: Lewis and Tolkien: Christian Mythic Writers; Literary Visions and Nightmares: Utopia and Fantasy; The Theme of Faith in Modern Literature; Innocence and Experience: The Human Fall in Literature; Literary Scenes of American Life: A Multicultural View; The Literature of the Bible; Women in Literature; John Milton: The Christian Humanist Tradition. Offered primarily during interterm.

ENG 371 The Novel 4 hours
Critical study of major novels through the nineteenth century, with primary emphasis on British and American selections. Offered every fifth semester.

ENG 393 Practicum 1-4 hours

ENG 412 Early English Literature 4 hours
A selective study of English literature from Beowulf through Chaucer and Malory's Le Morte d'Arthur. Offered every fifth semester.

ENG 422 Renaissance Authors 4 hours
A study of representative prose writers and non-dramatic poets of the English Renaissance, such as More, Spenser, Donne, Herbert, and Milton. Offered every fifth semester.

ENG 426 Restoration and Eighteenth-century Authors 4 hours
A selective study of poets and prose writers from 1660 to 1798 , such as Dryden, Pope, Swift, Boswell, and Johnson. Offered every fifth semester.


## Environmental Science

Program Director, Associate Professor Squiers

ENG 431 Romantic Authors 4 hours
A study of writers from 1798 to 1832, such as Blake, Wordsworth, Coleridge, Byron, Shelley, Keats, and Lamb. Some attention given to representative novelists. Offered every fifth semester.

ENG 441 Victorian Authors 4 hours
English authors from 1832 to 1901, such as Tennyson, Browning, Arnold, Carlyle, Newman, and Ruskin. Some attention given to representative novelists. Offered every fifth semester.

ENG 444 Contemporary Literature 4 hours
A study of selected poetry, fiction, and drama - primarily British, American, and continental since 1960. Offered every fifth semester.

ENG 450 Directed Research 1-4 hours

ENG 480 Seminar 1-4 hours
ENG 490 Honors 1-2 hours
IAS 493 Senior Seminar 4 hours

The Environmental Science Program is not a major, but a cognate selected with any major in the University. It offers students the opportunity to augment their liberal arts program with a cluster of interdisciplinary courses designed to provide the knowledge, skills, and conscience necessary for decision making in a complex and rapidly changing world. Courses focusing on global issues and problem solving methodology add depth, utility, and perspective to any major field of study. Students should register for a Bachelor of Arts (with foreign language requirement) or a Bachelor of Science (without foreign language requirement) in the environmental science curriculum as well as in their liberal arts major. Social science majors in Political Science, Sociology, History, and Business/ Economics; science majors in Biology, Chemistry, and Computer Science; and students interested in technical missions work are especially encouraged to consider adding Environmental Science to their major.

The following courses are required for completion of the Environmental Science Program:
BIO 231 Environment and Man
SYS 200 Basic Systems
COS 220 Introduction to Computer Science
ECO 210 Basic Economics
GEO 220 Regional Geography
POS 331 Development of Public Policy
PHI 371 Principles of Ethics
ENS Electives - two courses at the 300 level
ENS 383 Environmental Ethics
ENS 402 Problem Solving in Environmental Science
In addition, a practicum in the major field of study is required and ENG 333 Business and Technical Writing is strongly recommended. It should be noted that a number of these courses fulfill general education requirements.
Appropriate course substitutions may be made to the above list depending on the student's major and career goals. Permission to make substitutions should be obtained from the program director.

ENS 340 Global Ecology 4 hours
An introduction to the analysis of complex global issues. Global actors, their values and policies, and the potential futures they create are investigated in the context of issues such as economic development, energy, food, and population. Global interdependence is stressed. The academic perspective is interdisciplanary and the geographic focus is non-North American. Prerequisite: BIO 231 or GEO 220 or permission of the instructor.

An integrated study of the principles of energy, environment, and economics using a systems approach. Topics include: energy patterns in natural ecosystems, alternate energy systems, the role of energy in national and international economics, and the relationships between energy use and life style patterns.

## ENS 351 EnvironmentaI Survey Techniques 4 hours

Basic environmental survey techniques discussed and applied in field situations. Topics include: mapping and surveying, remote sensing, and the analysis of climate, soils, hydrology and vegetation for land use planning. Fulfills general education requirement in science.

## ENS 360 Independent Study 1-4 hours

ENS 361 Environmental Impact Assessment 4 hours
A basic introduction to the history, methodology, and application of environmental impact assessment. Lecture material is heavily oriented toward case studies and the laboratory will consist of an integrated class project designed to provide practical experience. Prerequisites: BIO 231, SYS 200.

## ENS 370 Selected Topics 1-4 hours

ENS 383 Environmental Ethics 4 hours
An in-depth discussion of the ethical implications of major environmental problems such as world population and food supply, inequities in land and resource distribution, materialism and personal


86 Health, Phys. Ed., and Recreation
life styles, and exploitation vs. stewardship of the environment. Prerequisite: BIO 231. Offered interterm only.

ENS 402 Problem Solving in Environmental Science 4 hours
A study of environmental problem-solving methodology integrating ecological concepts in a social-physical-biological context. Prerequisites: BIO 231, SYS 200, COS 220.

ENS 450 Directed Research 1-4 hours
ENS 490 Honors 1-2 hours

IAS 493 Senior Seminar 1-2 hours

Geography is a service department with no major offered; ă minor is available.
GEO 210 Physical Geography 4 hours
The study of the basic physical characteristics of the earth, and the effect of the natural environment upon the activities of mankind.

GEO 220 Regional Geography 3 hours
Assists students in acquiring certain basic ideas and supporting facts about contemporary world geography. The eight world regions are studied. They are Europe, the Soviet Union, Latin America, Anglo-America, the Middle East, the Orient, the Pacific World, and Africa.

GEO 230 Political Geography 3 hours
The geographic interpretation of world relations. The relationships of geographic elements to the development of nations both past and present are examined. Offered in alternate years.

GEO 240 Introduction to Geology 4 hours
A basic course dealing with the fundamental concepts of physical and historical geology.
GEO 310 History and Geography of Africa 4 hours See HIS 310
GEO 311 History and Geography of Latin America 4 hours See HIS 311
GEO 312 History and Geography of Asia 4 hours See HIS 312
GEO 360 Independent Study 1-4 hours
GEO 393 Practicum 1-4 hours
IAS 493 Senior Seminar 4 hours

The Department of Health, Physical Education and Recreation provides broad programs for all students. Offerings include activity courses to meet general education requirements; courses leading to a Bachelor of Science with teacher certification, courses leading to a Bachelor of Science degree in recreational leadership, courses leading to a Bachelor of Arts degree; and intramural and intercollegiate athletics for men and women.

Students expecting to complete a teaching major in physical education leading to a Bachelor of Science degree must have 38 hours in physical education including the following courses: HPR 101, 102, 111, 202, 221, 222, 241-242, 300, 310, 331, 342, 381, 382, 402, 432, and IAS 493.

A minor teaching area in physical education includes 25 hours of physical education credit: HPR 101, 102, 111, 202, 221, 222, 300, 310, 331, 342, 382, 402, and 432.
Men and women may complete a 52 -hour teaching major in physical education leading to a Bachelor of Science degree. This major will qualify the student to teach in kindergarten through twelfth grade. In addition to the 38 -hour major required courses, the student needs HPR 252, and enough physical education elective hours to meet the requirement of 52 hours.

Students of other academic disciplines contemplating a teaching major leading to a Bachelor of Science degree may complete the following requirements for a coaching endorsement: HPR 232, 310, 381, 382, 402 and 4 hours from 231, 261, 281, 312, 361, 372. A teaching minor is available in the health and safety area.
Men and women may complete a 50 hour major in Recreational Leadership leading to a Bachelor of Science degree. This training will prepare a student for professional leadership positions in organizations such as Y.M.C.A., Y.W.C.A., Boy Scouts of America, Girl Scouts of America, Christian Service Brigade, Pioneer Girls, Nautilus Centers, Municipal Recreation Departments, Industrial Recreation and Camping Leadership.
Required courses for this major include: HPR 101, 102, 121, 201, 202, 212, 213, 301, 310, $311,322,323,331,332,342,422,492,494$, IAS 493, POS 342; ART 370. A group of courses selected from available cognates is also required.

HPR 100 Fitness for Life 1 hour
This course provides each student with an opportunity to assess his/her well being through a battery of physical fitness tests. Class content includes basic principles which support a physically active lifestyle. Each student is challenged to consider the personal, spiritual, and social responsibilities of maintaining an optimal level of physical capacity. Emphasis is placed upon practical implementation of physical activity patterns.

HPR 200 General Physical Education 1 hour
Seeks to provide the appreciation, understanding and skill development enabling the student to enjoy a variety of activities that should improve one physically, mentally, socially, emotionally and spiritually. Will not apply toward a major in physical education. Prerequisite: HPR 100

## HPR 101 Skills and Teaching Methods of Racquet Sports 2 hours

This course will include the various skills used to play racquet sports, such as tennis, racquetball, and badminton. Also included will be the unique methods of teaching various racquet sports. Offered fall semester only.

HPR 102 Skills and Teaching Methods of Individual Sports 2 hours
Within the structure of this course, the student will learn various skills and teaching methods of such individual activities as tumbling, folk dance, aerobic exercise and wrestling. Offered spring semester only.

HPR 111 Foundations of Physical Education and Health 2 hours
Designed to give the student an understanding of the scope and purpose of physical education in the world today. Included is the study of the history, philosophy and contemporary issues of physical education. Offered fall semester only.

HPR 121 Foundations of Recreation and Camping 2 hours
Provides the student with a broad based understanding of the various opportunities available in the fields of Recreation and Camping. Also included is a study of history, philosophy and contemporary issues. Offered fall semester only.

HPR 201 Skills and Teaching Methods of Recreational Activities (Elective) 2 hours
The focus of this course will be on recreational activities such as golf, archery, and bowling. The student will participate in these activities as well as learn the appropriate methods necessary to teach them. Offered fall semester only.

HPR 202 Skills and Teaching Methods of Individual Sports 2 hours
This course will cover information concerning the skills and teaching methods needed for the individual activities of fitness, wellness, weight training and track and field. Offered spring semester only.

HPR 212 Program Development-Recreation and Camping 3 hours
Study of philosophy, objectives, organization, program and methods in Recreation and Camping. Emphasis on recruiting, training, guiding and inspiring leaders. Offered spring semester only.

HPR 213 Campcraft Skills 1 hour
Hands-on learning experience in: knots, map reading, orienteering, use of knife and axe, firebuilding, outdoor cooking. Offered summer only.

HPR 221 Beginning Gymnastics 1 hour
An introductory course with emphasis on the basic fundamentals and movements of gymnastics. Students are expected to develop skill at the beginning level. Time is spent on spotting techniques and various teaching methods. Does not meet the general education requirement. Open to physical education najors and minors only. Offered fall semester only.

HPR 222 Intermediate Gymnastics 2 hours
A continued course in gymnastics with emphasis on intermediate skills, movements, and spotting. Competitive gymnastics is introduced and explored. Emphasis is on lesson plans, warm-up exercises, teaching methods and teaching experiences. Prerequisite: HPR 221. Does not meet the general education requirement. Open to physical education majors and minors only. Offered spring semester only.

HPR 231 Officiating of Men's and Women's Sports 2 hours
A study of the officiating skills and techniques needed for various men's and women's sports. Opportunity to earn official's rating is provided. Offered fall semester only.

HPR 232 Psychology of Coaching 2 hours
A study of the nature of the coaching profession. The course emphasizes philosophy of sport, sports psychology and coaching methods. Offered spring semester only.

## HPR 240 Elementary Games and Rhythmics 2 hours

A study of various games and rhythmic activities that can be taught in the elementary school. This course contains knowledge of the physical education program and the role of the elementary teacher to it. Also included are various teaching methods. Open to early childhood and elementary education majors only.

HPR 241, 242 Human Anatomy and Physiology 4 hours each See BIO 241, 242

## HPR 252 Physical Education in Elementary Schools 4 hours

A study of the elementary physical education program and its value to a child's education. Included are various games, sports and rhythmical activities which can be used in such a program. Basic training for the physical education specialist is provided. Offered spring semester only.

## HPR 261 Coaching of Basketball 2 hours

Offensive and defensive play studied, with emphasis on modern trends in basketball. Rules, fundamentals, schedule making, scouting, care and choice of equipment and techniques of team selection are included. Offered fall 1987 and in alternate fall semesters only.

HPR 262 Elementary School Health, Safety, and First Aid 3 hours
Provides the elementary education student with a basic understanding of what should be taught to the students concerning health and safety. This course deals with basic health, safety and first aid content and teaching methods. Open to elementary education majors only.

HPR 281 Coaching of Wrestling 2 hours
A study of the rules, skills, principles, and strategy of the sport of wrestling. Special attention is given to the problems of training, diet, and weight control. Coaching techniques are also considered. Offered fall 1987 and in alternate fall semesters only.

HPR 300 Basic Swimming Skills 1 hour
Stresses the development of personal swimming skills and knowledge of water safety. Red Cross Basic Rescue and Water Safety Certification. Offered fall semester only.

## HPR 301 School Health Education and Safety 4 hours

Proper health and safety practices studied, with emphasis on the materials that should be taught in a high school health class. Methods for teaching are stressed in addition to content. Offered fall semester only.

HPR 302 Advanced Life Saving 1 hour
Stresses the development of skills for personal and water safety and life saving situations. Red Cross and Advanced Life Saving Certification can be earned. Current Advanced Life Saving Certification or Water Safety Instructor may test out for credit. Offered spring semester only.

A study of the principles and teachings of a first aid program. In the area of athletic injuries, em-

HPR 311 Church and Community Recreation 3 hours
Planning, implementing, and supervising recreation programs in the church and community.
Guest lectures by area pastors, Wandering Wheels leaders, etc. Offered fall semester only.
HPR 312 Coaching of Baseball 2 hours
A course aimed at providing the student with an understanding of the general fundamentals of the game and a position breakdown of the important coaching points. The strategy of complete offensive and defensive performance is covered, as are problems and challenges common to the baseball coach. Offered spring 1987 and in alternate spring semesters only.

HPR 322 Overview of National Voluntary Youth Membership Organizations 2 hours History, philosophy, organization, policies, programs, and practices of various youth organizations. Offered spring semester only.

HPR 323 Living and Playing in the out-of-doors 4 hours
Living in the out-of-doors: purchase and use of equipment, menu planning, cooking, backpacking, canoe trip; identification of trees, birds, wildlife; utilizing skills learned in HPR 213. Offered summer only.

HPR 331 Skills and Teaching Methods of Team Sports I 2 hours
The focus of this course will be on participating and learning the various skills and methods needed to teach team sports such as soccer, field hockey and volleyball. Offered fall semester only.

HPR 332 Water Safety Instructor 1 hour
Stresses the skill development involved in teaching certified Red Cross courses. Included are both teaching methods and experiences. Red Cross Water Safety Instructors Certification can be earned.
Prerequisite: HPR 302. Offered spring semester only.

## HPR 342 Skills and Teaching Methods of Team Sports 112 hours

The focus of this course will be on participating and learning the various skills and methods needed to teach team sports such as basketball, softball and flag football. Offered spring semester only.

## HPR 360 Independent Study 1-4 hours

HPR 361 Coaching of Football 2 hours
A presentation of the different offensive and defensive theories of modern football including the strengths and weaknesses of each. Includes brief review of fundamentals and also purchase and care of equipment, practice and program organization, and problems and challenges of the overall football program. Offered fall 1986 and in alternate fall semesters only.

## HPR 370 Selected Topics 1-4 hours

HPR 372 Coaching of Track and Field 2 hours
Discusses all track and field events with emphasis on teaching/coaching techniques for each. Includes demonstrations, form study, track and field meet management, scheduling advantages and use and care of various equipment. Offered spring 1988 and in alternate spring semesters only.

## HPR 381 Kinesiology 2 hours

An analysis of human movement based on anatomic and mechanical principles. Emphasis is given to the application of these principles to the understanding of athletic performance. Prerequisites: HPR 241, 242. Offered fall semester only.

## HPR 382 Physiology of Exercise 3 hours

A study of the adjustment of the systems of the body to exercise. Attention is given to conditioning of athletes as well as to understanding the physiological responses to recreation exercise. Offered spring semester only.

HPR 392 Adapted Physical Education 2 hours
A study of various handicapping conditions, appropriate games and activities, and the adapted

physical education program. Included are teaching methods and experiences and observations of the adapted physical education program. Offered spring 1988 and in alternate spring semesters only.

HPR 393 Practicum 1-4 hours

HPR 402 Organization and Administration of Physical Education 3 hours
An examination of the methods of organizing and administering a physical education, intramural and athletic program. Considerable time is spent studying budgeting, purchasing and care of athletic equipment. Offered spring semester only.

HPR 422 Organization and Administration of Recreation and Camping 3 hours
Exploration of methods for organizing and administering a variety of programs in the areas of recreation and camping. Includes the study of staffing, budgeting and the puchase and care of equipment. Offered spring semester only.

HPR 432 Evaluation of Physical Education 2 hours
A thorough study of how to properly analyze test results. Attention is given to the construction of and proper administration of written and performance tests. Correct evaluation of existing tests and laboratory experience in testing and measuring techniques in physical education are included. Offered spring semester only.

HPR 490 Honors 1-2 hours
HPR 492 Internship-Recreational Leadership 4 hours
Work as an intern in a recreational program (municipal, Nautilus, YMCA, Church, etc.). Serve as an administrative assistant to the director, assisting in various aspects of the program.

## IAS 493 Senior Seminar 4 hours

## HPR 494 Internship-Camping Leadership 4 hours

Work as an intern in an organized camp. Serve as administrative assistant to the camp director in various phases of administration and programming.

The History Department believes that a study of our ancestors and their cultures provides the necessary perspective for living meaningfully in contemporary society. If God's purposes for mankind are timeless, and if the results of obedience and disobedience to His will are the same in the past as in the present, then we must learn from the past in order to live in the present with meaning and ponder the future with confidence.
Many history majors teach; many do not. Of those who do not, a few may enter directly history-related vocations (e.g., museum directors and curators, archivists, government and industrial historians). More non-teaching majors enter vocations where history is useful as general background rather than specific vocational training. For example, they become ministers, lawyers, librarians, or accept government or business positions. Most of these professions either require graduate study or provide for greater career advancement because of graduate study beyond the history, undergraduate major.
Most seminaries, law schools, and graduate schools of library science and business look upon history as an excellent undergraduate major. Many graduate school leaders consider the combination of an undergraduate major in a liberal arts subject such as history with the directly vocational graduate curriculum to be the best possible professional training.
Students majoring in the department are advised to plan a program with a proper balance between American and world history courses. All students expecting to major in the department who do not have a strong history background on the secondary level should take HIS 100 and 220 as early in their program as possible. At least 34 hours are required for a major in the Bachelor of Arts degree program. Students majoring in another department may add a History minor of at least 17 hours, with 12 of these hours being concentrated in either American or World History.
Students interested in obtaining the Bachelor of Science in Education degree to teach history and other social sciences in the secondary schools are requested to consult the department head. This social science education degree requires a minimum of 52 hours divided among economics, geography, government, psychology, sociology, United States history, and world history. The student will select one of the above as a primary area ( 18 hours), two others as support areas ( 12 hours each), and three of the remaining four areas for a single course each. A social studies minor includes 24 hours, with 15 of these hours devoted to study in one of the seven social science areas identified above.

## HIS 100 World History 5 hours

Survey of the civilizations of Europe, Asia, Africa, and the Western Hemisphere from the earliest times to the present.

## HIS 103 Studies in History 2-4 hours

The investigation of various special topics, including travel courses. May be numbered HIS 170

## HIS 220 History of the United States 5 hours

Treats the progressive social, political, and cultural development of the people of the United States from the colonization period to the present.

HIS 230 American Religious History 3 hours
A study of the historical development in the United States of such movements as Puritanism, revivalism, the Social Gospel, Judaism, Catholicism, and variant forms of Protestantism.

HIS 310 History and Geography of Africa 4 hours
A course designed to enable the student to acquire a systematic body of knowledge concerning the physical and cultural environments of Africa, both past and present, and to study the significant role which Africa plays in the modern world. Offered in alternate years.

HIS 311 History and Geography of Latin America 4 hours
An historical and geographical study of the nations between the Rio Grande River and Cape Horn. Attention is given to the development of each Latin American area and its relationship to the United States. Offered in alternate years.

History

Head, Professor Ringenberg; Professors

Heath, Jenkinson, Mikkelson, Winquist

HIS 312 History and Geography of Asia 4 hours
A study of the Far East with emphasis on China, Japan, and cultural, political, and international relations in modern times. Offered in alternate years.

HIS 321 Middle East History 3 hours
Ethnic and geographical problems of the ancient Middle East are examined as background of the medieval and modern cultures. Offered in alternate years.

HIS 322 Greek and Roman History 4 hours
An examination of the Greeks from their beginnings through the Hellenistic period as well as the Romans to the death of Justinian. Much attention is given to the influence of both on modern civilization. Offered in alternate years.

HIS 331 Europe 1517-1789 4 hours
Historical study of Europe from Luther to the Bastille including the Ages of the reformation, Absolutism, and the Enlightenment. Offered in alternate years.

HIS 332 Modern Europe 1789-Present 4 hours
A study of Europe from the French Revolution to the Common market. Emphasis is placed on the political, social, economic, and intellectual aspects of this period. Offered spring semester.

HIS 341 Colonial History 3 hours
An investigation of the colonization of North America by the Spanish, French, Dutch, and English, as well as European rivalries, colonial society, and the Revolutionary War.

HIS 342 History of England 4 hours
A course in which, along with the history of England itself, a study is made of the growth of the empire, international problems, and British achievements in cultural and intellectual areas.

HIS 351 American Diplomatic History 4 hours
A survey of the diplomatic relations of the United States from the period of the American Revolution to the present. Offered in alternate years.

HIS 352 History of the Middle Ages, 300-1500 4 hours
A study of the development of western civilization from the fall of the Roman Empire in the West to the Reformation. Offered in alternate years.

HIS 360 Independent Study 1-4 hours
HIS 361 Russian Civilization 4 hours
A study of the development of the Russian nation, its people and culture from Varangian beginnings through czarist rule, and into the Soviet Union of the twentieth century. Emphasis is placed on certain periods and personalities including the Kievan era, Peter the Great, Catherine the Great, tsars of the nineteenth century, the 1917 Revolution, Lenin, and Stalin.

## HIS 370 Selected Topics 1-4 hours

HIS 371 American Frontier History 3 hours
A study of the settlement and development of this nation from the Appalachians to the Pacific, and the effect of the frontier upon national and international affairs.

HIS 372 American Constitutional Development 5 hours
Stresses the origin, adoption, and interpretations of the United States Constitution. Cases and readings on the powers of the federal government, judicial review, states rights, state police powers, federal commerce powers, and due process are analyzed. Prerequisites: HIS 220 and POS 100, or consent of the instructor.

## HIS 381 History of Early Christian Thought 4 hours See REL 381

HIS 382 Renaissance and Reformation, 1300-1560 4 hours
A study of the movements and leaders as vital factors in the transformation from medieval to modern times. Offered in alternate years.

A study of the political, military, economic, and cultural development of the nation during its rise to world prominence. Offered spring semesters.

HIS 393 Practicum 1-4 hours
HIS 490 Honors 1-2 hours
IAS 493 Senior Seminar 4 hours

The department offers both the Computer Science major and the Systems curriculum. In addition, a two-year associate degree in Management Information Systems is available.

COS 200 Computing in the Modern World 3 hours
An introduction to the computation tools and skills needed to be computer literate in today's world with an emphasis on social concerns. Students will develop and use programs which are designed to give an understanding of the role of the computer in our society, along with a discussion of the social problems and concerns brought on by this technology. An extended BASIC is used as the programming language along with work on spread sheets, data base processing, and word processing. Some sections emphasize educational applications. (Not for computer science majors or systems students.)

## COS 210 Business Computer Systems 3 hours

A study of the use of computers as they are employed in the modern business organization. An overview of the hardware, programming languages, databases, teleprocessing and the supporting industry is stressed. Some programming problems in business applications are solved using an extended BASIC and/or COBOL as the programming language. The course also deals with the social impacts of computers and the microcomputer impact on business. (Business and accounting majors not in Systems only.)

## COS 220 Introduction to Computer Science 4 hours

Computer programming is stressed. Algorithms for text processing, information retrieval, mathematical manipulating, sorting, file handling, and introductory data structures are presented. Good algorithm design, style, program structure, documentation, code reading, and effective debugging and testing are emphasized. Three hours lecture and two laboratory hours per week.

## COS 240 File Processing with COBOL 3 hours

This course introduces concepts and techniques of structuring data files, bulk storage media, and a variety of applications of files, records, and other related data structures using one or more COBOL dialects. Prerequisite: COS 220

## COS 250 Data Structures 4 hours

The internal and external representation of data used with digital computers. An emphasis on algorithms and applications of data structures including sorting and searching methods, arrays, linked lists, sets, trees, and graphs. Group projects may be used to teach a highly structured programming language, team concepts, and development of systems tools such as editors, command languages, and utility programs. Prerequisite: COS 220.

## COS 280 Introduction to Artificial Intelligence 8 hours

A survey of the entire field of AI. An historical review is followed by an assessment of current research locations, personnel, needs, and social impact. Seven major areas of technical development are explored: learning, knowledge, representation, problem solving, natural language processing, image processing, robotics, and expert systems. An introduction to LISP is included. Prerequisite: COS 250.

## COS 322 Microcomputer Business Systems 3 hours

An evaluation of hardware, software, and systems for business use with microcomputers. A survey of existing hardware and future trends, evaluation of literature and documentation, plus group projects emphasizing systems design and documentation. Prerequisites: COS 240 or 250 and SYS 200.

## COS 330 Microcomputer Interfacing 4 hours

Software and hardware considerations involved in interfacing and using minicomputers and microcomputers for on-line applications and as a part of larger systems are studied. Prerequisite: PHY 331 or permission of instructor.

## COS 331 Data Communications 3 hours

A study of the nature and applications of data communications in use today. Fundamental concepts of types, modes, and media of transmission are studied. The type of equipment used in data communications is discussed. Network configurations, transmission correction procedures, and data communications software are examined. Prerequisite: COS 322 or 330.

COS 341 Database Concepts 3 hours
A study of the nature and application of database processing. The physical representation of databases, the primary structured models used in organizing a database, commercially available database management systems, and the factors involved in implementing and using a database are

COS 350 Computer Graphics 3 hours
A programming course dealing with the current technology in interactive computer graphics. Softcopy, raster-scan, and color technologies are used. In addition, matrix transformations, clipping and perspective algorithms, and hidden line solutions are discussed and programmed. Business, scientific, and artistic uses of graphics are covered. Group projects are developed. Prerequisites: Two courses in computer science and MAT 151.

COS 360 Independent Study 1-4 hours
COS 370 Selected Topics $1-4$ hours
Prerequisites: Two courses in Computer Science
COS 380 Natural Language Processing 3 hours
A study of the automation of human communication abilities, covering both textual and vocal aspects. Major topics include language understanding, representation, enhancement, generation, translation, and speaker/author recognition. LISP is reviewed. Prerequisite: COS 280. Offered fall semester, 1987.

## COS 383 Robotics 3 hours

A study of the development of robots, their current capabilities and impact on our society. Major emphasis is on the technology underlying sensors, effectors and control systems. A survey of applications is provided. Practical experience in controlling and/or building robots is included. Prerequisites: COS 280 and PHY 331.

COS 393 Practicum 3-4 hours PASS-FAIL only.

COS 400 Computer Organization 3 hours
The evaluation and comparison of current and proposed computer architecture designs including an introduction to distributed processing and networking. A heavy emphasis is placed on learning, understanding and building of assembling language programs. DEC MACRO-11 and other assembly languages are used to teach an understanding of the concepts. Prerequisite: $\operatorname{COS} 330$ or $\operatorname{COS} 322$.

COS 410 Language Structures 3 hours
A survey of the significant features of both widely used and experimental programming languages with particular emphasis on grammars, syntax, semantics, notation, parsing, and storage arrangements. Selected examples of general purpose and special purpose languages are studied. Prerequisite: $\operatorname{COS} 400$ or permission of instructor.

COS 421 Operating Systems 3 hours
A study of the major design considerations for implementing new operating systems as well as evaluation criteria for the assessment of existing ones. Such topics as resource allocation, scheduling algorithms, l/O processing, and protection mechanisms will be discussed. Management considerations will be stressed, along with the impact of different systems architectures on operating systems design. The design of an actual operating system may be included, along with actual management experience of an operating systems environment. Prerequisite: Senior level standing in Comtputer Science.

## COS 431 Image Processing 3 hours

The fundamental concepts of digital image acquisition, enhancement, representation, analysis, and understanding. Covers hardware components, software design, current systems and applications. Prerequisites: COS 280 and MAT 151. Suggested: PHY 331 or COS 350. Offered fall semester, 1986.

COS 450 Directed Research 1-4 hours
Prerequisite: Senior level standing in Computer Science.
COS 490 Honors 1-2 hours
IAS 493 Senior Seminar 4 hours

## Bachelor of Arts and Bachelor of Science Degrees in any major with Systems

Students may choose to augment any liberal arts program with a career thrust in systems analysis. To do so, students should register for the BA or the BS degree in the systems curriculum and continue to pursue the liberal arts major. The systems curriculum requirements are SYS 200, 392, 401, 402; COS $220^{*}$, and COS 240 , or 250, CAS $201^{*}$, SOC $320^{*}, 151^{*}, 382$, NAS 240, a major $393^{* *}$ (a practicum course in the student's major), and 3 hours of electives in a systems or computer science course.

Depending on the student's major and other areas of interest, other courses may be substituted for those listed above. For example, mathematics, physics, chemistry, and preengineering majors will take a different sequence of mathematics courses, and may elect to take a computer science course other than COS 240 or 250, subject to Information Sciences Departmental approval. Business majors are not required to take SOC 320.
*May count as a general education requirement.
${ }^{* *}$ May count as part of departmental major.

## Associate Degree in Systems

An Associate of Arts degree in Management Information Systems has been developed for people who wish to become information systems specialists. Students enrolled in this two-year program are preparing for vocations in the fields of computer programming and information systems. The sequence includes a combination of business and Information Sciences courses built around a core of liberal arts studies. In the threecourse sequence of SYS 200,390, and COS 393 the student approaches systems in general, analyses management information systems in particular, and completes a practicum in a systems environment outside of Taylor University.

The course requirements are:
ENG 110; MAT 110 or 151; IAS 101; HPR 100; REL 110, 210; ECO 210; ACC 241, 242; BUA 352; CAS 201; NAS 240; SOC 320; COS 220, 240, 250, 322, 393; SYS 200, 390, 392 (to be taken twice); and an elective from Literature or Fine Arts.

SYS 200 Basic Systems 4 hours
An introduction to systems concepts and the basic tools of systems analysis. Topics include human decision-making, project planning and control, philosophical foundations, and selected applications of systems techniques in the student's general field.

SYS 294 Survey of Management Information Systems 4 hours
An examination of the conceptual foundations, structure, development, and control of management information systems. Various components of a computer system and their use in an information system are discussed. Particular attention is paid to information-oriented, database applications. After an investigation of the textual material, the class observes many operative management information systems in educational, financial, business, and government settings in various metropolitan centers. Offered at the discretion of the department when warranted by the anticipated enrollment. Summer Session I only.

SYS 360 Independent Study 1-4 hours
SYS 370 Selected Topics 1-4 hours
SYS 390 Information Systems Analysis 3 hours
Analysis of information gathering and processing systems intended to facilitate management in decision making, planning and control of an organization. The course includes presentation and utilization of the tools of structured systems analysis and design. Prerequisites: SYS 200, COS 220.

SYS 392 Systems Seminar 1 hour
The integration of systems topics with an emphasis on current development in many disciplines. Guests, faculty, and student presentations plus occasional group discussions provide the format. May be taken twice.

Mathematical techniques used in systems analysis including mathematical programming, probability models, game theory, optimization and statistical techniques with an emphasis on applications. Prerequisites: The following courses (or their approved substitutes) must have been completed with a grade of $C$ or better: SYS 200; COS 220, 240 or 250; NAS 240; MAT 352, and 382. The following courses (or their approved substitutes) must have been completed with a grade of C- or better: MAT 151 and 382.

SYS 402 Modeling \& Simulation 4 hours
A study of mathematical modeling and simulation methods. Focus is on modeling discrete systems. A variety of simulation languages are reviewed, but SIMSCRIPT is used extensively. Many applications are surveyed and group term projects are carried out. Prerequisites: The following courses (or their approved substitutes) must have been completed with a grade of C or better: SYS 200; COS 220, 240, or 250; and NAS 240. The following courses (or their approved substitutes) must have been completed with a grade of C-or better: MAT 151 and 382.

SYS 432 Expert Systems 3 hours
The integration of current concepts of knowledge representation, deduction, and inference making in advanced consulting systems. A survey is made of currently available systems, with special focus on financial packages. Enhancements are made to an existing expert system. Programming is in LISP and in one or more expert system languages. Prerequisites: COS 280 and SYS 200. Suggested: $\operatorname{COS} 410$.

See Final Entry of Departmental Listings

See Communication Arts

## Inter Area Studies

## Mass Communications

## Mathematics

Head, Associate Professor
Harms; Professor
Neuhouser; Associate
Professors Ewbank,
Wenger

A Bachelor of Science degree in mathematics leading to teacher certification consists of at least 43 hours, including courses MAT 250, 312, 340, 352, IAS 493, one course in applied mathematics and MAT 361, or 412.
A Bachelor of Science degree in mathematics/systems includes 43 hours of mathematics, including courses MAT 250,340,352,393, either 361 or 412 and IAS 493. See the systems requirements also.
One course in chemistry or physics is required for all majors.
MAT 100 Mathematics Fundamentals 1 hour
A study of the basic arithmetic operations, exponents, ratios, linear and quadratic equations, graphs, and story problems. This course is specifically designed to help those students who need help in passing the mathematics proficiency examination. May be taken PASS-FAIL only. Does not count toward a mathematics major.

MAT 110 Finite Mathematics 3 hours
A study of logic, set theory, functions, matrices, systems of linear equations and inequations, linear programming, sequences and series. Prerequisite: A good understanding of algebra. Does not count toward a mathematics major.

MAT 130 Algebra and Trigonometry 4 hours
Topics from algebra and trigonometry including equations, algebraic, exponential, logarithmic, and trigonometric functions, identities, and graphs. Does not count toward a mathematics major. Offered fall semester only.

MAT 140 Fundamental Calculus for Applications 3 hours
An introductory study of derivatives, series, and integrals with a wide range of applications including maximum and minimum problems. Prerequisite: MAT 110 or permission of instructor. Does not count toward a major in mathematics.

## MAT 151 Calculus with Analytic Geometry I 4 hours

Advanced topics in algebra, selected topics in trigonometry and analytic geometry, and an introduction to calculus including limits, continuity, derivatives, and integrals. Offered fall semester only.

## MAT 201 Mathematics for Elementary Teachers I 5 hours

First of a two-course integrated content-methods sequence for elementary teacher preparation. This course is a study of the number system through the real numbers, with special reference to teaching aids, laboratory methods, and pedagogy, including classroom use of hand calculators and microcomputers. Each student is encouraged to team up with a student of MAT 202 in a teaching team in the Taylor-Eastbrook Mathematics Project (TEMP). Does not count toward a mathematics major. Open to majors in early childhood, elementary education, and special education only.

## MAT 202 Mathematics for Elementary Teachers II 5 hours

Second of a two-course integrated content-methods sequence for elementary teacher preparation with emphasis on geometry, problem-solving, and small-group work. Each student is responsible each week for a mathematics class in local schools, grades 1-6 (TEMP). Does not count toward a mathematics major. Open to majors in early childhood, elementary education; and special education only.

## MAT 230 Calculus with Analytic Geometry II 4 hours

A study of analytic geometry, functions, limits and derivatives, differentiation and integration of algebraic functions and elementary transcendental functions, applications of the derivative, differentials, the definite integral, and special techniques of integration. Offered spring semester only.

## MAT 240 Calculus with Analytic Geometry III 4 hours

Analytic geometry, polar coordinates, Taylor's formula, infinite series, improper integrals, further applications of calculus, and an introduction to calculus of several variables are studied. Offered fall semester only.

## MAT 250 Algebraic Structures 3 hours

A study of the mathematical structure and applications of matrices, symbolic logic, Boolean algebra, groups, rings, integral domains, and fields. Specific examples of the various algebras are studied rather than an extensive theoretical development. An introduction to abstract and linear algebra. Offered fall semester only.

Selected topics in mathematics. Prerequisite: Consent of the department head.

## MAT 312 College Geometry 4 hours

Advanced Euclidean plane geometry, with a brief survey of some of the non-Euclidean geometries and vector and transformational geometry. Prerequisite: MAT 230. Offered spring semester only in alternate years.

## MAT 340 Advanced Calculus 4 hours

Emphasis on three dimensional analytic geometry, matrices, vectors, partial differentiation, multiple integration, and a more rigorous development of the fundamental concepts of calculus. Offered spring semester only in alternate years.

## MAT 352 Mathematical Statistics 4 hours

A theoretical, as well as applied, study of counting outcomes, probabilitiy, probability distributions, sampling distributions, confidence intervals, tests of hypotheses, linear regression, and correlation. Corequisite: MAT 240. Offered fall semester only.

## MAT 360 Independent Study 1-4 hours

MAT 361 Abstract Algebra 4 hours
Emphasis on set theory; development of the postulates of group theory, rings, integral domains, and fields. Prerequisite: MAT 250. Offered spring semester only in alternate years.

MAT 370 Selected Topics 1-4 hours


MAT 372 Numerical Analysis 4 hours
Iterative and other algorithmic processes, propagation of error, solution of transcendental and polynomial equations, numerical integration and differentiation, linear algebra, curve-fitting and numerical solution of differential equations are studied. Prerequisites: COS 220, MAT 240. Offered fall semester only in alternate years.

MAT 382 Advanced Statistics 3 hours
A study of regression analysis, including multiple and non-linear regression; correlation analysis, including multiple and partial correlation; analysis of variance; and non-parametric statistics. This course also includes selected topics from calculus and matrix theory required for the study of these topics. Prerequisite: MAT 352 or NAS 240.

MAT 393 Practicum 1-4 hours
MAT 412 Linear Algebra 4 hours
A course on matrix theory, determinants, linear equations and linear dependence, vector spaces and linear transformations, characteristic equation, and quadratic forms. Prerequisite: MAT 250. Offered spring semester only in alternate years.

MAT 431 Differential Equations 4 hours
A course on the solution of differential equations of the first order and first degree, orthogonal trajectories, linear differential equations with constant coefficients, nonhomogeneous equations by undetermined coefficients and variation of parameters, applications to vibration problems and electrical circuits, and an introduction to series solutions. Prerequisite: MAT 240. Offered spring semester only.

## MAT 461 Real Analysis 4 hours

Real number system, topology, functions, sequences, limits, continuity, theory of differentiation and integration are included in this course. Prerequisite: MAT 340. Offered spring semester in alternate years.

IAS 493 Senior Seminar 4 hours

## Modern <br> Languages

Head, Assistant Professor
J. Loy; Associate

Professor Gongwer;
Assistant Professor Dixon

The knowledge of foreign languages is an integral part of educating students to assume responsible roles as citizens of an increasingly interdependent world. The department provides a variety of courses and programs to meet this challenge.
The department offers

1. Courses in French, German and Spanish to meet the two year language requirement.
2. A minor in French or Spanish for teacher certification.
3. The Bachelor of Arts degree in French or Spanish.
4. The Bachelor of Science degree for teacher certification in French or Spanish.

For the minor in French or Spanish, 24 hours above the elementary level are required. The Bachelor of Science degree requires 40 hours of courses above the elementary level. Curriculum guides for the minor and the BS degree are available from the offices of modern languages or teacher education.
The major leading to a Bachelor of Arts degree consists of 30 hours of courses above elementary. This major is often combined with a second major, expanding the student's personal and career options. In Spanish SPA 211 and SPA 212 are required.
Majors in modern languages and teacher candidates may be required to take courses abroad in order to complete the departmental requirements. Other language students may choose to study abroad for their own benefit or to complete the language requirement. In all cases the study abroad courses must be approved in advance by the department.

FRE 101, 102 Elementary French 4 hours
Stresses the use of spoken language, including the essentials of grammar, and reading with an introduction to French culture. Coordinated laboratory activities. FRE 101 is prerequisite to FRE 102.

FRE 201, 202 Intermediate French 3 hours
Continues the above through reading and studying various themes of general interest. FRE 201 is prerequisite to FRE 202.

## FRE 221 French Conversation 4 hours

Emphasizes the development of facility in oral and written communication in French. Laboratory activities. Prerequisite: FRE 202 or equivalent. Offered fall 1986.

FRE 222 Contemporary France 4 hours
Study of contemporary French culture. Prerequisite: FRE 202 or equivalent. Offered fall 1987.
FRE 221, FRE 222 or instructor's permission is prerequisite to upper division courses.
FRE 312, FRE 322, FRE 332, and FRE 342
Offered in rotation dependent upon student need and demand.
FRE 312 Classicism 4 hours
A survey of French classical literature, with emphasis on the dramas of Corneille, Racine, and Moliere.

FRE 322 Rationalism and Romanticism 4 hours
Selected works from these periods in French literature are studied.
FRE 332 Realism, Symbolism, and Existentialism 4 hours
Representative works from each of these periods in the literature of France are studied.
FRE 342 French Phonology, Morphology, and Syntax 4 hours
Examines the phonology of the French language, its word and sentence structure. Contrasts between French and English are stressed.

FRE 360 Independent Study 1-4 hours
FRE 370 Selected Topics 1-4 hours
FRE 393 Practicum 1-4 hours
IAS 493 Senior Seminar 4 hours

GER 101, 102 Elementary German 4 hours
Pronounciation and the essentials of grammar. Oral expression is developed through language laboratory activities. GER 101 is prerequisite to GER 102.

GER 201, 202 Intermediate German 3 hours
Intensive reading and grammar review. Laboratory activities and independent prose reading involved each term. GER 201 is prerequisite to GER 202.

SPA 101, 102 Elementary Spanish 4 hours
The four skills of hearing, speaking, reading, and writing are taught in this prescribed sequence. The essentials of grammar are studied. Laboratory activities. SPA 101 is prerequisite to SPA 102.

SPA 201, 202 Intermediate Spanish 3 hours
Emphasis placed on the conversational approach with more reading and writing. SPA 201 is prerequisite to SPA 202.

SPA 211 Communication in Spanish 2 hours
A promotion of oral proficiency and communicative competence. Class emphasizes daily happenings in the Spanish-speaking world. Prerequisite: SPA 202 or equivalent.

SPA 212 Conversational Perspectives in Spanish 2 hours
An exploration of the diverse contemporary usages of spoken Spanish within the twenty republics of hispanic culture. Class conducted in everyday Spanish. Prerequisite: SPA 202 or equivalent. SPA 211, SPA 212 or instructor's permission is prerequisite to upper division courses.

SPA 331, SPA 332, SPA 421 and SPA 422
Offered in rotation dependent upon student need and demand.
SPA 331 Introductory Spanish American Literature 4 hours
A study of representative new world Spanish literature to 1880 . Selections from pre-Columbian, conquest, colonial and romantic periods are discussed.

SPA 332 Contemporary Spanish American Literature 4 hours
Post-romantic readings of Spanish America dating from 1880 to the present day are studied. Selections are for critical analysis as well as enjoyment.

SPA 360 Independent Study 1-4 hours
SPA 370 Selected Topics 1-4 hours
SPA 393 Practicum 1-4 hours
SPA 421 Spanish Medieval and Renaissance Literature 4 hours
A study of peninsular Spanish literature from its origin to 1700 includes selections from El Cid to Calderon. The historical perspective is considered.

SPA 422 Spanish Literature from 1700 to present 4 hours
Selected readings from the neoclassic, regional, romantic and other periods of Spanish literature to the present.

IAS 493 Senior Seminar 4 hours

## Spanish Abroad

Taylor University and Greenville College together provide intercollegiate language workshops in the Dominican Republic and Puerto Rico for intermediate and advanced students of Spanish. The courses are for five weeks of study in the summer. Applicants at or above the intermediate level may participate with permission of the coordinator.

SPA 203s Applied Aural-Oral Spanish 6 hours
Intensive conversation dialogue sessions with introduction to reading and grammar review. Prerequisites: SPA 102 and permission of instructor.

SPA 303s Advanced Composition and Conversation II 2 hours
Theme writing in conversational style, letter writing, and use of idiomatic Spanish are stressed.
SPA 313s Latin American Literature Survey I 2 hours
Selections of the New World Spanish Literature before 1880 are read and studied.
SPA 323s Latin American Literature Survey II 2 hours
The most outstanding Hispanic American authors since 1880 and selections of their works are studied in a survey manner.

SPA 333s Sintesis de cultura - dominicana I 2 hours
Scheduled over-night stays, visits, tours, lectures and weekend field trips required, in addition to textbook guidance, actual "immersion" in modern day Dominican "lifeways."

SPA 403s Advanced Composition and Conversation III 2 hours
Special advanced guidance is given in oral and written compositions for students completing Spanish 303s.

SPA 433s Sintesis de cultura dominicana II 2 hours
Intensive study is made of the past and present political evolution in Dominican society and its impact on the republic's cultural welfare, nationally and internationally.

Taylor University makes music an integral part of the overall program, serving the needs of the liberal arts student within the context of Christian higher education. The Department of Music is accredited by the North Central Association of colleges and Secondary Schools, the State Department of Public Instruction of Indiana, the National Association of Schools of Music (NASM), and the National Council for Accreditation of Teacher Education (NCATE).
The music department provides

1. Numerous ensemble opportunities open to both music majors and non-majors
2. Private lessons on all instruments
3. Concerts, faculty recitals, student recitals, and other cultural opportunities
4. A music minor for elementary education majors
5. A certificate in church music
6. A certificate in piano pedagogy

For the music major, the department provides Bachelor of Arts degree programs in Performance and Music Theory/Composition, Bachelor of Science degree programs which lead to certification in the field of public school teaching, and the Bachelor of Music degree in Church Music. A Music Handbook, outlining five areas of concentration, is available from the Music Department.

## Bachelor of Arts Degree

Students may select the Bachelor of Arts degree, majoring in either Performance (applied music) or in Music Theory/Composition. To achieve its vocational purposes, the Bachelor of Arts degree provides, at conservatory level, the courses necessary for certain careers in music. This pre-professional degree is designed for students who plan to continue in graduate school.
The Applied Major is offered to students in organ, piano, voice, brass, percussion, strings, and woodwinds. Required courses are: MUS 100-400 (applied major), MUS 100-200 (applied minor), ensembles, MUS 131-132, 141-142, 241-242, 321-322, 341-342, 361-362, 371-372, 472 and IAS 493, plus pedagogy in major/minor instrument and electives. This program prepares students for careers as solo performers, accompanists, private teachers, professional ensemble members or conductors, or as college teachers.
The Music Theory/Composition major consists of MUS 100-400 (major and minor instruments), ensembles, MUS 131-132, 141-142, 241-242, 321-322, 341-342, 351-352, 361-362, 371-372, 421-422, 472 and IAS 493, plus electives. This major prepares students for teaching theory/composition in high school or college, for composing and/or arranging sacred or secular music, as well as numerous opportunities in radio, television, and other related fields.

## Bachelor of Science Degree

The Bachelor of Science degree, with a major in music, consists of 62 hours of music course work. This degree, leading to teacher certification, prepares the student to teach in the public schools on the elementary, junior high, and senior high school levels. Areas of specialization are provided, depending on the interests and background of the student.

## Choral Area

The choral area, designed for voice, piano, and organ majors, prepares students to teach choral music at the elementary and secondary levels (K-12). Courses include MUS 100-400 (applied major), MUS 100-200 (applied minor), ensembles, MUS 131-132, 141142, 241-242, 311-312, 341-342, 351, 361-362, 371-372, 472, and IAS 493, plus electives.

## Instrumental Area

The instrumental area, designed for brass, percussion, string, and woodwind majors,

prepares students to teach instrumental music at the elementary and secondary levels. Courses include MUS 100-400 (applied major), MUS 100-200 (applied minor), ensembles, MUS 131-132, 141-142, 231-232, 241-242, 311-312, 331-332, 341-342, 352, 361-362, 472 and IAS 493, plus electives.

## General Area

The general area certifies the student to teach music on the elementary and junior high school levels. Students with a concentration in voice, keyboard, or other instrument may elect this program. Courses include MUS 100-400 (applied major), MUS 100-200 (applied minor), ensembles, MUS 131-132, 141-142, 241-242, 311-312, 341-342, 361, 371372,472 and IAS 493, plus electives.

## Bachelor of Music Degree (Four years)

This is a sacred music major which prepares the student for a professional career in a church music ministry. Areas of speciality include the administration and direction of a graded choral program with elective courses in Christian Education. Courses include MUS 100-400 (applied major), MUS 100-200 (applied minor), ensembles, MUS 131-132, 141-142, 231, 241-242, 311, 341-342, 351-352, 361-362, 371-372, 440, 472, and IAS 493. Church music courses include MUS 301-302, 320, 393, 401-402, plus six hours electives in Christian Education.

The major in scared music with Teacher Certification prepares the student for both the church music ministry and public school teaching. Areas of specialty in teacher education are provided, depending on the interests and background of the student. (See Bachelor of Science Degree: Choral Area/Instrumental Area.)
Courses include MUS 100-400 (applied major), MUS 100-200 (applied minor), ensembles, MUS 131-132, 141-142, 241-242, 311-312, 341-342, 351-352, 361-362, 371-372, 472, and IAS 493. Church music courses include MUS 301-302, 320, 401-402, plus 11-12 hours electives in Christian Education. (Instrumental majors must also take MUS 231-232 and 331-332.)

## Certificate in Church Music

The Certificate in Church Music, consisting of 25 hours of music course work, is designed to prepare students to assist in church music programs. Courses include MUS 100-200 (applied major and minor instruments), MUS 131-132, 141-142, 241, 361, 301, 302 and either 401 or 402.

## Certificate in Piano Pedagogy

The Certificate in Piano Pedagogy, consisting of 25 hours, is designed to prepare students to teach private piano. Courses include MUS 100-300 (Applied Piano), 131-132, 141-142, 241, 381-382, and 470.

## Music Minor

The Music Minor program, designed for Art, Elementary Education and Physical Educations Majors in Elementary Education, leads to certification for teaching music K-6. Courses include MUS 100-200 (applied major and minor instruments), MUS 131-132, 141-142, 241, 311, 361, and 2 hours of music electives. The student is encouraged to participate in ensembles and other elective courses.

## Admission Information

All prospective music majors should make application well in advance of the term in which they plan to enroll. Both freshmen and transfer students majoring in music must audition either in person or via tape recording. The student should present standard representative works of the major composers in his major applied area. A personal interview with the head of the department is highly advisable, especially for students desiring to apply for music scholarships. Prospective students should contact the music department for audition dates and other pertinent information.

## Academic Information

All music majors are required to attend student and faculty recitals, concerts, and artist series. Bachelor of Science music majors attend a minimum of 70 concerts during their academic tenure; Bachelor of Arts and Bachelor of Music majors attend 80 concerts.

At the end of each term, an examining committee hears each music major on his/her major instrument.

Each music major gives a Junior Proficiency Recital - 20 minutes in length for BA and BM candidates and 15 minutes in length for BS candidates. This recital is presented at the end of a student's sophomore year, or fourth term, in his applied area before the music faculty only, and determines whether a student is to be admitted to the upper division level.

All music majors perform in recitals twice per term. Public recital performance is determined by the instructor. Bachelor of Arts and Bachelor of Music students are required to give a full graduation recital in their senior year. Bachelor of Science majors are required
to give at least a half recital (public) in their junior or senior year. In a few instances, the Bachelor of Science major may pursue a project, to be decided upon by the music faculty, in lieu of the half recital requirement.
Music majors are required to participate in one of the major ensembles each term while on campus. Instrumental majors normally enroll in instrumental ensembles and voice majors normally enroll in choral ensembles. Keyboard and theory majors are placed in the ensemble program in accordance with their abilities, interests, and the ensemble needs.

## General Information

Non-music majors are encouraged to elect music courses and to join choral and instrumental ensembles. Those interested in music may become members of the Fellowship of Christian Musicians.

## Ensembles for Non-Music Majors

All college students are invited to participate in the various musical organizations. Students are encouraged to structure their schedules so that ensembles may be taken for credit. By special permission of the conductor, a student may participate in a musical organization for non-credit. Small ensembles are formed according to demand, either with or without academic credit.

Major Ensembles<br>Concert Chorale<br>Oratorio Chorus<br>Women's Chorus<br>Men's Chorus<br>Taylor Singers<br>Symphonic Band<br>Chamber Orchestra<br>Marion Philharmonic Orchestra

Minor Ensembles*<br>Collegium Musicum<br>Brass Ensemble<br>Flute Choir<br>Taylor Ringers (Bells)<br>Taylor Sounds<br>Jazz Ensemble<br>Pep Band<br>Opera Workshop

*For these enroll in Chamber Class Ensemble, (MUS 210/310).
Music majors may receive instructional experience through the Center for Musical Development (C.M.D.), practicums in the public schools, and student teaching experiences in two public school settings.
The utilization of modern technology is incorporated in some music courses through computer-assisted instruction (using an APPLE computer), the electronic TAPmaster, electronic piano laboratory, and music synthesizer.

Applied Music (Performance)

Private lessons are required of all music majors, but are available for non-majors. All students taking applied music for the first time register for the 100 level. (Exceptions for transfer students are determined by examination.) Advancement from one level to another will be on the basis of proficiency, examination, or consent of the instructor. Abbreviations: $b$ - brass; o-organ; $p$-piano; $c$ - percussion; s-string; $v$-voice; $w$-woodwind.
MUS 100 (b.o.p.c.s.v.w.) 1, 2, 3, or 4 hours. May be taken a maximum of four terms, a minimum of one term.
MUS 200 (b.o.p.c.s.v.w.) 1, 2, 3, or 4 hours. Same as 100.
MUS 300 (b.o.p.c.s.v.w.) 1, 2, 3 , or 4 hours. Same as 100 .
MUS 400 (b.o.p.c.s.v.w.) 1, 2, 3, or 4 hours. Same as 100 .
Applied instruction includes the learning of proper practice methods, building good technique, acquiring sufficient repertoire, and gaining a broad knowledge of literature
and the composers. Students not majoring in music may enroll for applied lessons suited to their backgrounds and needs. No previous training is required. Music majors should consult the Handbook for Music Majors for specific requirements for each level.

The two numbers represent lower and upper division credits. Normally freshmen and sophomores register for the 200 level and juniors and seniors register for the 300 level.

MUS 210, 310 Chamber Class Ensembles 1 hour
A choice of various instrumental and vocal groups. (See musical organizations.) Opportunity is offered for instrumentalists and vocalists to develop their skills. These meet separately under the direction of specialists in these fields. Weekly rehearsal times are arranged according to individual membership needs. Chamber Class Ensembles do not satisfy the ensemble requirement for music majors.

MUS 230, 330 Women's Chorus 1 hour
An ensemble open to all women singers, which performs idiomatic treble literature. The organization balances contemporary popular choral literature with larger master works.

MUS 240, 340 Chorale 1 hour
A group for approximately 45 students, chosen by audition. The repertoire includes a varied program of literature selected from early centuries through contemporary periods, including hymns and spirituals. The chorale tours annually.

MUS 250, 350 Men's Chorus 1 hour
An ensemble open to all men singers with no audition required. The repertoire includes hymn and gospel song arrangements, spirituals, popular selections, as well as sacred and secular classics.

MUS 260 Taylor Singers 1 hour
A select group of 16 singers, chosen by audition. The repertoire includes unique chamber vocal writing from all musical periods. The Taylor Singers are utilized for special projects and programs.

MUS 270 Oratorio Chorus 1 hour
An organization which presents master choral works. It is open to all students enrolled in the University.

MUS 280, 380 Symphonic Band 1 hour
An organization open to all wind and percussion performers of high school level competence and above. Two concerts are scheduled each semester. A broad range of repertoire is performed.

MUS 290, 390 Chamber Orchestra 1 hour
A Chamber Orchestra open to all string players of high school level competence and above. Wind players participating in this ensemble are usually principal players from the Symphonic Band. Chamber concerts and performers with choral groups highlight each season.

MUS 391, 392 Marion Philharmonic Orchestra 1 hour
An organization operated separately from Taylor University, but open to Taylor students by audition. Major ensemble credit may be earned by participating in the Marion Philharmonic Orchestra.

MUS 111, 112 Voice, Piano, String Class (including guitar) 1 hour
Applied class instruction for students with little or no previous training. Development of techniques with repertory appropriate to the elementary level. Admission to any applied class requires the approval of the instructor.

MUS 231 Instrumental Methods I - Brass Instruments 1 hour
Class instruction in various brass instruments. Designed to acquaint music education specialists and church musicians with basic problems and teaching techniques of the brasses. Offered fall 1986-87 and in alternate years.

MUS 232 Instrumental Methods 11 - Woodwind Instruments 1 hour
Class instruction in various woodwind instruments. This course is designed to acquaint music edu-
cation specialists and church musicians with basic techniques for teaching and playing woodwind instruments. Offered spring 1986-87 and in alternate years.

MUS 300 Music in the Elementary Classroom 4 hours
The Early Childhood section of Music 300 is open only to students obtaining a kindergarten endorsement, an associate degree in early childhood education, or a Bachelors Degree in early childhood education. Offered fall semester. All other elementary education majors take the second semester offering of Music 300. Two sections are offered. Music $300-\mathrm{A}$ is for individuals with a music background. Music 300-B is for individuals with no music background. Offered spring semester.

MUS 311 Elementary School Music 3 hours
A study of the role of the music specialist in planning musical experiences for children with emphasis on child development, music literature for children, teaching aids, and appropriate teaching practices. Curriculum development and organization of the elementary school are included. Special consideration is given to the materials and techniques associated with the Orff, Kodaly, E.T.M., and Dalcroze methods of instruction. Offered fall 1986-87 and in alternate years.

MUS 312 Secondary School Music 2 hours
An investigation of secondary music curricula, organizational structures, and materials. Emphasis is on both non-performance areas (general music, theory, appreciation, and related art courses) and performance-oriented areas (band, orchestra, and choir development). Offered spring 1986-87 and in alternate years.

MUS 331 Instrumental Methods III - Percussion Instruments 1 hour
Class instruction in string and percussion instruments. This course is designed to acquaint music education specialists and church musicians with basic techniques for performing and teaching percussion instruments. Offered fall 1987-88 and in alternate years.

MUS 332 Instrumental Methods IV - String Instruments 1 hour
Class instruction in string instruments. This course is designed to acquaint music education specialists and church musicians with basic techniques for performing and teaching string instruments. Offered spring 1987-88 and in alternate years.

MUS 361 Conducting I 2 hours
An introduction to the psychological, technical, and musical elements of conducting. Score study (choral, band and orchestra) is also stressed.

MUS 362 Conducting II 2 hours
Advanced score studies, conducting, and rehearsal techniques of choral and instrumental works. Laboratory experience with various ensembles is included. Prerequisite: MUS 361 or the equivalent.

MUS 381 Piano Pedagogy I 2 hours
A study of the methods and materials of teaching beginning piano students. Supervised teaching experience is included.

MUS 382 Piano Pedagogy II 2 hours
A study of the methods and materials of teaching intermediate and advanced keyboard students. Supervised teaching experience is included. Offered spring 1986-87 and in alternate years.

MUS 440 Vocal Pedagogy 1 hour
Techniques, practices, and materials related to teaching voice. Offered 1986-87 and in alternate years.

## MUS 462 Instrumental Pedagogy 1 hour

A study of advanced band and orchestra techniques and materials for junior and senior high school. Instrumental pedagogy, organization, and recruitment are studied.

## Church Music

MUS 202 Fundamentals of Conducting 1 hour
Fundamental conducting techniques and training in song leadership for church and school groups are studied as well as basic procedures in choir leading. Practical conducting experience provided. In most cases, song leaders will be required to enroll in this course before being permitted to direct church music off-campus. Credit does not count toward graduation if student is majoring in music.

Techniques, sight reading, keyboard harmony, transposition, and modulation adapted to the needs of church services, formal and informal, with emphasis on hymn playing and accompaniments for choir and congregational singing. Included in this course is the evaluation of sacred transcriptions of various types and ranges of difficulty. The course is basically designed for non-music majors. Prerequisites: Ability to play hymns as written, and permission of instructor.

MUS 301 Music Ministry to Children (K-9) 2 hours
A study of the organization and function of a multiple church choir program (pre-school - grade 9). A study of handbells, Orff instruments, choral literature, and vocal pedagogy for children is included. Offered fall 1987-88 and in alternate years.

MUS 302 Music Ministry to Youth and Adults 2 hours
A study of the organization and administration of the overall church music program. Youth and adult literature selection and rehearsal techniques are presented. Offered spring 1987-88 and in alternate years.

MUS 320 Internship 2 hours $(1+1)$
Opportunities provided for students to observe and participate in musical organization of area churches.

MUS 401 Choral Literature 2 hours
A survey of anthem literature suitable for use with youth and adult choirs in the church. Offered fall 1986-87 and in alternate years.

MUS 402 Hymnology and Church Liturgy 2 hours
A survey of hymnody from earliest Old Testament references to the present. The Christian Year is examined as well as worship organization. Offered spring 1986-87 and in alternate years.

## MUS 131 Introduction to Music I 1 hour

An introductory course exploring careers in music, the elements of music, basic music forms, styles, and an overview of the history of Western music. The course is designed for the music major, music minor and other students. Offered fall semester.

> Music Theory, History, and Literature

MUS 132 Introduction to Music II 2 hours
A continuation of MUS 131. Prerequisite: MUS 131. Offered spring semester.
MUS 141 Basic Music Theory 3 hours
A study of basic fundamentals and structural elements of tonal music. Principles of part-writing, elemental forms, melodic, harmonic and rhythmic concepts are learned through written, analytic and keyboard experience. Offered first semester and interterm.

MUS 142 Advanced Music Theory 3 hours
A continuation of MUS 141. Includes non-harmonic tones, chromatic harmonies including secondary dominants; diminished and half-diminished seventh chords; Neapolitan Sixth; Italian, German and French Augmented Sixths and the doubly Augmented Sixth. The Art Song and nineteenth century Character Pieces are studied with original compositions of each. Prerequisite: MUS 141 or equivalent.

MUS 241 Sight Singing and Ear Training I 2 hours
Skill development stressed in the areas of sight-singing (the ability to read/interpret musical symbols), ear-training (both written and aural skills), and rhythmic responsiveness accomplished through class performance, the use of the electronic TAPmaster, and an APPLE computer.

MUS 242 Sight Singing and Ear Training II 2 hours
Continuation of MUS 241. Intermediate and advanced level work is in the areas of sight-singing, dictation (intervallic, melodic, and harmonic), rhythm (irregular meter), and analysis (small forms). Prerequisite: MUS 241.

MUS 283 Contemporary Christian Music 1 or 2 hours
This course involves individual projects in literature, analysis, arranging or performing of Contem-

## MUS 293 Introduction to Electronic Music 3 hours

An introduction to the aesthetics, materials, and techniques of the several types of electronic music. Emphasis is placed on working with the synthesizer, tape recorders, and splicers with a view to actually creating an electronic composition as a final project. Outside reading on the subject is required as an adjunct part of the course. Offered interterm.

## MUS 321, 322 Composition I and II 2 hours each

Original composition in advanced forms. Emphasis is on development of individual style of expression.

## MUS 341 Counterpoint 2 hours

Theoretical approach to the fundamental principles of eighteenth century polyphonic composition; a study of the formal designs and methods of structual treatment with written and analytical experience in this harmonic-contrapuntal concept of music.

MUS 342 Form and Analysis 2 hours
Analysis of representative works of the eighteenth and nineteenth centuries, with emphasis on the structure and stylistic aspects of music.

## MUS 351 Choral Arranging 2 hours

A course on the ranges, tonal possibilities, and technical limitations of the different voices; the analysis of scores of standard choral compositions. Arranging and adapting scores for various vocal combinations is included.

MUS 352 Instrumental Arranging 2 hours
Band and orchestral instruments studied with a view to practical and effective writing. Arranging of compositions for various instrumental combinations is included.

## MUS 371 History-Literature I 2 hours

A study of the development of music from the pre-Christian through the Baroque eras. Stylistic cognizance is acquired through aural experience.

## MUS 372 History-Literature II 2 hours

A study of the development of music during the eighteenth and nineteenth centuries and concomitant phases of social and cultural practices of the times. Stylistic perception is gained through audio-visual and aural experience.

MUS 421, 422 Composition III and IV 2 hours each
Continuation of the projects begun in 32I-322 in preparation for the senior recital (for music theory/ composition majors), and the scoring of at least one original composition for full orchestra or band. There is an introduction to the techniques of electronic music and the composition of several pieces in this medium using the music synthesizer and related equipment.

## MUS 442 Vocal Literature 2 hours

A study of English, Italian, German, French, and American vocal literature since the late Renaissance. Emphasis is on stylistic interpretation and vocal appropriateness. Music is performed by class participants. Recordings are also utilized. Offered 1986-87 and in alternate years.

## MUS 470 Piano Literature 2 hours

A study of piano works chosen from a given era or composer. Lecture, performance, and recorded examples are used. Open to piano majors, Certificate in Piano Pedagogy, and others by permission of the instructor. Offered 1987-88 and in alternate years.

MUS 472 History-Literature III 4 hours
A study of the development of music from the year 1900 to the present. Representative music and concomitant phases of political history and art are correlated with aural and analytical techniques of this period of history.

## MUS 393 Practicum 1-4 hours

MUS 450 Directed Research 1-4 hours
MUS 480 Seminar 1-4 hours
MUS 490 Honors 1-2 hours
IAS 493 Senior Seminar 4 hours
See Religion, Philosophy, and Biblical Languages

## Philosophy

See Health, Physical Education, and Recreation

## Physical <br> Education

The physics department offers instruction in physics, astronomy, and physical science. A student in the department may select any of the following degree programs:

## Bachelor of Arts in Physics

A 35-hour physics major including 25 hours of upper division physics courses and a foreign language. MAT 431, PHY 330 (2 hours), PHY 431, and NAS 480 are required.

## Bachelor of Science in Physics/Education

A program designed to prepare students for certification to teach at the secondary school level.

## Bachelor of Science in Physics/Systems

A 35-hour physics major with an additional core of systems and information science courses.

## Bachelor of Science in Physics/Environmental Science

A 35-hour physics major with an additional core of environmental science and information science courses.

PHY 120 Experiences in Physical Science 4 hours
Intended for non-science majors. Selected topics from physical science are studied to afford insight into man's current understanding of natural phenomena, the models used to represent nature, and methods used in the quest to fathom the physical universe. Three lecture periods and one recitation period each week. One two-hour laboratory session bi-weekly.

PHY 121 Survey of Physical Science for Elementary Teachers 5 hours
Intended for elementary education majors as a content course, not a methods course. Selected topics from astronomy, physics, chemistry, meteorology, and geology are studied with special em-

## Physics

Acting Head Associate Professor R. Roth; Professor in Residence Nussbaum; Professor

Burden; Associate
Professor Wolfe
phasis on their application in the elementary classroom. Student projects include an actual teaching experience in the elementary school. Four lecture periods and one 2-hour laboratory session each week. Offered in fall term only.

## PHY 201 Introductory Astronomy 3 hours

A descriptive course about the solar system, stars and stellar evolution, galaxies and the universe. Recent findings of space exploration and radio astronomy are included. Telescopes are provided for viewing sessions.

PHY 211, 212 General College Physics 5 hours each
A study of mechanics, heat, and sound in the first term; magnetism, electricity, and light in the second term. Offered annually for physical science majors and separately, during alternate years (1985-86) for life science majors.

PHY 311 Modern Physics 4 hours, fall term, alternate years
An introduction to modern physics including special relativity, quantum effects of radiation and particles, atomic structure and elementary particles. Three lectures and two hours of laboratory per week.

PHY 312 Nuclear Radiation Physics 4 hours, spring term, alternate years
A study of natural and induced radioactivity, nuclear radiation detection, charged particle interactions and neutron physics. Three lectures and two hours of laboratory per week.

PHY 321 Electricity and Magnetism 3 hours, no lab, alternate years, fall term Vector field approach to electromagnetic theory. Includes electrostatics, magnetostatics, induction, dielectric and magnetic materials, and Maxwell's equations. Corequisite: PHY 341.

PHY 322 Waves and Physical Optics 3 hours, no lab, alternate years, spring term
Applications of Maxwell's equations including electromagnetic waves, wave guides, diffraction, and Fourier optics. Prerequisite: PHY 322.

PHY 330 Advanced Physics Laboratory 1 hour, offered as needed for junior or senior physics majors. Majors must have 2 credit hours of PHY 330 to graduate. The experiments to be performed will be selected from the areas of electrical measurements, optics, modern physics, solid state physics or nuclear physics. The actual experiments selected will depend on the student's interests and background.

## PHY 331 Introduction to Electronics 4 hours

Introductory concepts and experiments designed to acquaint students with the operation and application of modern electronic devices and components. The implications of this rapidly changing technology on society are discussed. Experiments dealing with elementary concepts of electricity, electrical measurements, diodes, transistors, integrated circuits, and a variety of solid state devices as well as digital electronics are provided. Separate instruction modules are available for science and non-science students. Three hours lecture and one three-hour laboratory per week. No prerequisites.

PHY 341 Math Methods in Physics and Engineering 3 hours, fall term
An applied approach to various mathematical topics including linear algebra and matrices, vector field theory, partial differential equations, Fourier series and transforms and complex analysis. Prerequisite: MAT 431.

PHY 342 Analytical Mechanics 3 hours, alternate years, spring term
An intermediate treatment of mechanics emphasizing dynamics. Includes central forces, many particle systems, rigid bodies, and small oscillations. The Lagrangian and Hamiltonian formulations are introduced and used for much of the term. Prerequisite: $P H Y 341$.

## PHY 370 Selected Topics 1-4 hours

PHY 393 Practicum 1-4 hours
PHY 412 Quantum Mechanics 3 hours, alternate years, spring term
A quantum mechanical treatment of the free particle, the harmonic oscillator and the hydrogen atom. Includes approximation methods, creation and annihilation operators, and an introduction to angular momentum. Prerequisites: PHY 311, 341.

IAS 493 Senior Seminar 4 hours

Political science studies the structure and the processes of government, contrasting philosophies about how government should be ordered as well as various opinions about what policies government should pursue and by what means.

A Bachelor of Arts degree with a major in political science consists of 32 hours. All majors must include POS 211, 232, 312, 361, 362 and one of the following, POS 301, 402 or 412. Political science majors are encouraged to take NAS 240. Students wishing to pursue a Bachelor of Science in political science/systems must meet the political science requirements and the systems requirements identified under information sciences in an earlier section of this catalog.

## Political Science

Head, Associate
Professor, P. Loy;
Associate Professor,
Hoffmann

## POS 100 American Politics 3 hours

Primary emphasis is given to the democratic character of American government. The course will consider the constitutional system and economic policy as well as the institutions of American government.

POS 211 World Politics 4 hours
A study of political and economic relations among nation-states. Special attention is given to the problems of war, poverty and the possibilities for transnational cooperation.

POS 232 Methods of Political Analysis 3 hours
Designed for political science majors, the course explores the nature of political science and introduces the student to the major theoretical approaches to the discipline.


POS 301 Western Europe and Japan 4 hours
An examination of major western European governments and Japan with an emphasis on political culture, institutions and public policy. Offered 1986-1987.

POS 312 Foundations of Public Policy 4 hours
Describes and examines the voting behavior of the American people and the functions and interactions of political parties, interest groups and public opinion in a democratic polity.

POS 331 Development of Public Policy 4 hours
An extensive examination of the interaction between Congress and the Presidency in making public policy. The course focuses on major theories of public policy and examines governmental policymaking from these perspectives.

POS 342 Public Administration 4 hours
An examination of structure, function, organization and personnel of public administration. Emphasis is on American bureaucracy and the problems of public control and bureaucratic responsibility. Offered 1987-88.

POS 351 Political Sociology 3 hours See SOC 351
POS 352 American Foreign Policy 4 hours
A study of contemporary American foreign policy processes, focusing on the chief policy-making institutions. Special attention is given to how domestic and international factors influence them and to current issues in American foreign policy. Offered 1986-87.

POS 360 Independent Study 1-4 hours
POS 361 Foundations of Political Philosophy 4 hours
An examination of Western political thought from classical Greece through the 18th century. It includes a study of fundamental political concepts and perennial issues in political philosophy.

POS 362 Modern Political Philosophy 4 hours
A study of the philosophical basis of contemporary political thought and political ideologies.
POS 372 American Constitutional Development 5 hours See HIS 372
POS 402 Comparative Communism 4 hours
The course focuses on the Soviet political system (including foreign policy) and uses this as a basis for a comparative treatment in which a wide variety of communist states and movements are studied in the context of their national cultures. Offered 1987-88.

POS 412 Middle East Politics 4 hours
A study of the political systems located in the area extending from Morocco to Pakistan from an historical and cultural perspective. Special attention is given to political development, the influence of Islam, U.S. and Soviet involvement in the area and the Palestine problem. Offered 1987-88.

IAS 493 Senior Seminar 4 hours

## Psychology

Head, Professor Cosgrove; Associate Professors Lund and Meyer; Assistant Professors Maloney and Snyder

Psychology involves the study of human and animal behavior. Each course seeks to integrate psychological data with major biblical beliefs. The aim of the department is to train Christian students in the field of psychology who, upon graduation, are prepared for further academic studies and/or professional responsibilities. The BA in psychology and the BS in psychology/systems are offered. A BS degree may be taken with a major in education and a teaching area in the social sciences. Psychology could be selected as a second teaching area.

A major in psychology consists of 38 semester hours. In order to insure a breadth of exposure to the discipline of psychology, the following courses must be taken: PSY 200, $230,251,310,352$ and IAS 493. A student may minor in psychology by taking PSY 200 and 15 additional hours in psychology.

PSY 240 and 340, when taken by a non-major in psychology, may be counted toward the developmental requirement if a psychology major is declared at a later date.

Students anticipating graduate study are encouraged to take BIO 241, COS 200, PSY $300,372,400,411,422$, and 441.

## PSY 125 Intrapersonal Psychology

The study of how to process the emotional dynamics of anger, guilt, anxiety, and grief, to become mature, emotionally integrated social beings.

## PSY 170 Selected Topics 1-4 hours

PSY 200 Introduction to Psychology 3 hours
An introduction to the subject matter and methods of psychology. Topics on human development, personality, learning, sensation, perception, motivation, emotion, mental health, and social psychology are considered.

PSY 230 Statistics and Design in Psychological Research 4 hours
An introductory course which surveys common statistical concepts in psychological research. It also examines and critiques the major research designs used in psychology today.

## PSY 240 Child Psychology 3 hours

This course not only deals with the subject matter of developmental psychology (such as cognitive development, physical development and socio-emotional development) but attempts to apply the subject matter to those actively working with children, such as parents, teachers, coaches, etc. Much of the in-class content deals with practical topics such as developing self-esteem in children, stimulating intellectual development and disciplining the child. Further, currently relevant topics such as child abuse, abortion, broken homes, single parenting and adoption are examined. The course lays a strong biblical foundation upon which to build an interaction with the child. For nonmajors; majors take PSY 251.

## PSY 251 Life Span I: Childhood and Adolescence 3 hours

A survey course which examines the development of humans: beginning at conception and ending with an introduction to adolescence. It is designed for majors in the behavioral sciences and nursing. Applications drawn are relevant for these service professions. Topics include: genetics; prenatal development; motor, perceptual, cognitive, language, emotional, personality and moral development. Both normative and exceptional behaviors are included. (Students may not take both PSY 240 and 251 for credit.)

PSY 300 Psychology and Mental Health 3 hours
A study of the nature, causes and treatment of maladaptive behavior, with special consideration being given to the symptoms and dynamics of psychological disorders. Prerequisite: 3 hours in PSY.

## PSY 310 Integration of Psychology and Christianity 3 hours

An examination of the relationship between psychology and Christian beliefs about human nature. Topic areas include the presuppositions of modern psychology, the Christian view of man, and tension areas between psychology and theology.

PSY 321 Social Psychology 3 hours
A study of how the thought, feeling, or behavior of individuals is influenced by the actual, imagined, or implied presence of others. Topics include attitudes and their change, affiliation, and conformity, along with others. Prerequisite: 9 hours in PSY.

PSY 331 Biblical Psychology 3 hours
A survey of Biblical teaching on the nature of man and its relationship to emotional problems and solutions to emotional problems.

PSY 340 Adolescent Psychology 3 hours
This course deals with the "problems" of adolescence including peer pressure and conformity, adult-adolescent conflicts, problems growing out of cognitive changes, adjustments to physical changes, struggles with identity, etc. Current issues such as drug and alcohol use and teen sexuality are discussed. The focus is on a practical application of the research literature with an integration of biblical principles and is designed for the non-major. Majors take PSY 352.


PSY 352 Life Span II: Adolescence, Adulthood and Aging 3 hours
A survey of human development, ranging from adolescence through the dying process and death. Over half of the course deals with developments following adolescence. Topics include: physiological, cognitive, and social development; changes in self-concept; parenting and past-parenting influences; career choices and changes; myths about the elderly; dying process and death. Prerequisite: PSY 251 or instructor's permission. (Students may not take both PSY 340 and 352 for credit.)

## PSY 360 Independent Study 1-4 hours

PSY 370 Selected Topics 1-4 hours
PSY 372 Research in Psychology 3 hours
Research methods in psychology are studied and critiqued. Students are involved in laboratory research projects and the writing of research reports. Prerequisite: PSY 230.

## PSY 390 Christian Marriage 3 hours

A practical and applied course which integrates the psychological literature and biblical teaching in the subject areas of the marriage relationship. These areas include marriage foundations, dating and engagement, pre-marital sexual behavior, singleness, mate selection, marriage success and satisfaction, love and infatuation, marriage roles, communication and conflict and divorce.

PSY 393 Practicum 1-4 hours
PSY 400 Theories of Personality 3 hours
A study of the major current systematic psychological theories of personality. Consideration is given to their underlying assumptions, usefulness for research, and therapeutic practice.

The study of major learning theories and their application to advertising, education, counseling, and daily problems of life.

## PSY 420 Cognition 3 hours

The scientific study of the cognitive functions of memory, attention, pattern recognition, imagery, decision making, problem solving, and creativity, with application for implementing this information.

PSY 422 Psychological Testing 3 hours
A study of the principles of psychological testing, considering both the theoretical and practical foundations underlying the construction, use, and interpretation of various psychometric instruments. The student is given opportunity to administer, score, and interpret selected instruments. Prerequisite: PSY 230

PSY 441 Physiological Psychology 3 hours
A study of the neurophysiology underlying human behavior. Emphasis is given to central nervous system mechanisms which mediate sensation, consciousness, learning, motivation, and emotional behavior.

## PSY 450 Directed Research 1-4 hours

PSY 461 Fundamentals of Counseling 3 hours
This course will provide an analysis of the major theories and approaches to counseling, correlating them with counterpart theories of personality and learning. Each major theory will be dealt with in light of biblical revelation. As a result, the student is encouraged to formulate a tentative personality theory of counseling consistent with biblical truth. Prerequisite: 6 hours in psychology inchuding PSY 300.

PSY 480 Seminar 1-4 hours
IAS 490 Honors 1-2 hours
IAS 493 Senior Seminar 4 hours

The Department of Religion, Philosophy and Ancient Languages offers four areas of concentration toward the completion of a major: Biblical literature, religious studies, Christian education, and philosophy of religion. Upon declaring a major in the department, the student will be given a guide. This will help prepare a program of study leading to the satisfactory completion of a comprehensive examination covering the major requirements listed below, the student's personal interests and professional needs. The senior seminar course (lAS 493) is required of all students. REL 342 is required of all student pastors regardless of their major fields of study. Credit toward a major will not be given for cross referenced courses meeting general education requirements in other departments.

## Bachelor of Arts

With a concentration in Biblical literature, religious studies, Christian education, or philosophy of religion requires a minimum of 40-43 hours with specified requirements within the concentration. Specific cognate requirements are listed below.

## Bachelor of Science

May be taken with a systems analysis or environmental science cognate. Other requirements for the major are identical.

## Certificate of Religious Studies

A "Certificate in Religious Studies" is available to students in any major program who complete courses totaling at least 15 credit hours beyond the general education require-

> Religion, Philosophy and Biblical Languages

Head, Professor Nygren; Professors Heath, Pitts; Associate Professors Corduan, Helyer, Luthy; Assistant Professor Hafenamn; Instructor

Newton
ments. Specific details and approval for the program may be secured in conference with the head of the department. A special schedule is provided for education majors who wish to complete the certificate in preparation to teach in Christian schools.

## Certificate in Missions

A "Certificate in Missions" is available to students in any major program as well as to students majoring in religion and philosophy. The student must complete the following courses: REL 232, 311, 321, 391, and 432. In addition, the student must complete a "cross cultural experience" which may or may not be for credit. Suggestions include: Taylor World Outreach, semester abroad, Wesleyan Urban Studies, "Lighthouse", REL 393 Practicum. Approval is to be secured in advance from the department coordinator of missions studies. Further, students must complete two additional courses which will enhance the purpose for selecting the certificate program. Courses in mass communication, environmental science, Biblical literature, linguistics, history and geography of a particular region, would be appropriate. Approval must be secured from departmental coordinator.

## Minor Field of Study

Minors are designed to serve the needs of students who wish to study in greater depth in one of the areas in the department. Minors are helpful to students in all majors but especially pre-seminary students majoring in other departments.

## Wesleyan Urban Coalition

This co-operative venture provides opportunities for students to live and learn in the city of Chicago. The Coalition focuses both on the study of urban life and systems and on practical education in ministry.

Biblical Languages

Primarily, the courses enable one to read and study the New Testament in the original language. Enrichment of historical concepts of communication, depth and breadth of Christian perspective, and cultural appreciation of the Biblical world are secondary concerns of ancient language studies. In addition, the courses meet the Taylor language requirements for graduation, and satisfy or exceed language entrance requirements of most seminaries.

ANL 201,202 Elementary New Testament Greek 4 hours
Emphasis on fundamental principles of Greek grammar, with mastery of forms and vocabulary. Some readings in the Greek New Testament are included.

ANL 301 Selected Readings from the Greek New Testament 4 hours
A grammatical and syntactical study in the Greek New Testament with an emphasis on gaining a reading proficiency.

ANL 302 Exegesis of the Greek New Testament Text 4 hours
An in depth analysis of selected passages from the Greek New Testament.
ANL 321, 322 Greco-Roman Literature 3 hours
Selected portions translated from Greek or Latin literature after systematic review of classical grammar. Choice of readings is based on the interests and background of the class. Summer terms only on demand.

ANL 401, 402 Advanced Exegesis of the Greek New Testament Text 4 hours
An extension of skills developed in ANL 301, 302.
ANL 450 Guided Research in Hellenistic Language 1-4 hours
Investigation of a project area selected individually by each student in consultation with the depart-
ment. Work is carried on by the student in some adequate library of ancient literature, or in a manuscript museum. Results of the study are formalized in a paper of the student's own planning.

A major in Biblical literature consists of 43 hours of credit, at least 33 must be in that area of concentration, including required courses REL 372, 480, and lAS 493. Either PHI 262 or PHI 371 is also required as part of the 43 hour major.

A minor in Biblical literature consists of 24 hours of credit. In addition to REL 110 and 210, two courses in Old Testament and two courses in New Testament are required plus one other course from the department except general education requirements.

REL 103 Introduction to Holy Land Studies 3 hours
A study of the Biblical background and contemporary significance of Israel. Taught in Israel during January.

## REL 110/310 Biblical Literature I 3 hours

A course which has as its primary content the Old Testament, with special attention given to the law, the prophets, and the history of Israel. Lower/upper division credit, with additional requirements for upper division credit, designed primarily for transfer students.

## REL 210 Biblical Literature II 3 hours

A course which includes a foundation in New Testament study with focus on Jesus Christ as portrayed in the Gospels and Epistles. Also included is a series of explorations into the relevancy of Christ to modern life. Prerequisite: REL 110/310

## REL 301 Selected Readings from the Greek New Testament 4 hours See ANL 301

REL 302 Exegesis of New Testament Greek Text 4 hours See ANL 302
REL 320 Pentateuch 3 hours
Emphasizes the historical narrative and the content of the Law of God. Special attention is given to the Genesis account of the origin of the cosmos, man, sin, and salvation. The authorship of the Pentateuch is considered.

REL 330 Acts and the Early Church 3 hours
A historical study with particular attention given to the missionary expansion of the early church, the work of the Holy Spirit, and the place of the church in the world.

## REL 331 Pauline Epistles 3 hours

Attention given to the life, ministry, and writings of Paul. The doctrinal, pastoral, and personal epistles of Paul are studied with reference to their geographical and historical settings, the organization of the Apostolic Church, and the development of Christian doctrine. Careful exegesis is made of selected portions of each epistle.

## REL 332 Hebrews, General Epistles, Revelation 3 hours

Attention given to the problems of the authorship of Hebrews and its relation to the ceremonies of the Old Testament. The authorship, time, and background of each of the General Epistles are studied. The contribution of each book to the New Testament doctrine is evaluated. A study is made of the place of Revelation in the New Testament canon and relation to the Bible as a whole.

REL 340 Hebrew Prophets 3 hours
Selected major and minor prophetic works of the Old Testament with special emphasis given to the historical background, Messianic message and content, together with specific theological concepts and teachings which are pertinent to modern times.

REL 341 The Gospels 3 hours
A course in which the life and teaching of Jesus as set forth in the Synoptic Gospels are examined. Special attention will be given to the synoptic problem and the literary and theological characteristics of each individual gospel.

REL 350 Poetic and Wisdom Literature 3 hours
Hebrew poetry and wisdom as presented in the books of Job, Psalms, Proverbs, Ecclesiastes, Lamentations, and the Song of Solomon.

REL 362 Jewish History, Culture and Geography 4 hours
The development of Mishnaic Judaism traced beginning with the Ezra literature through the Talmudic period.

REL 372 Inductive Study of the Bible (See CE-REL 372)

## REL 451 Old Testament Historical Geography 3 hours

The story of Israel as given in the Old Testament books from the Patriarchal period through the Exile. Special attention is given to relevant archaeological discoveries and geography.

REL 462 Biblical Theology 3 hours
A study of the Bible and its central message and meaning. The Bible records a special kind of history revealing God's will and purpose. This special history gives essential meaning to all human life and destiny.

Religious Studies

A concentration in Religious Studies requires a total of 40 hours, at least 30 of which must be in that area of concentration including REL 480 and IAS 493; REL 262 or PHI 371 is also required.

REL 103 Introduction to Holy Land Studies 3 hours
REL 230 American Religious History 3 hours See HIS 230
REL 252 Cultural Anthropology 3 hours See SOC 252
REL 262 Contemporary Issues 3 hours See PHI 262
REL 311 The Christian World Mission 3 hours
A correlated study of the history of Christian missions in relation to the methods employed in the cultural context of the various periods from the Apostolic inception, through the Middle Ages, the modern era, and the contemporary period of the young churches in the various areas of the world. Offered alternate years.

REL 313 Historic Christian Belief 3 hours
A survey of Christian belief as developed during the history of the church. Such topics as the incarnation, the Trinity, and the atonement will be considered. Required of all students.

REL 321 Religions of the World 4 hours See PHI 321
REL 352 History of the Middle Ages 4 hours See HIS 352
REL 381 History of Early Christian Thought 4 hours
An examination of the changing philosophical, educational, and religious climate of Christian thought during the early centuries of Christianity. Offered alternate years, Fall 1986

REL 382 Renaissance and Reformation 4 hours See HIS 382
REL 391 Philosophy and Methods of Missions 2 hours
The principles and methods of Christian missions from Christ to the present time are studied. The biblical basis and the prime motivating factors, direct evangelistic, educational, medical, industrial, literary, radio, and occupational missionary methods are given special attention. The preparation of the missionary for his task also is considered. Offered alternate years.

REL 402 Hymnology and Church Liturgy 2 hours See MUS 402
REL 432 Mission Area Studies 2 hours
A specialized study of one of the several mission fields, such as Urban America, South Appalachian Region, Latin America, Africa, India, Japan, or China. The geography, people, history, economics, sociology, government, language, religion, and the history and methods of Christian missions are considered.

A concentration in Christian Education requires at least 40 hours. Included must be the following courses: REL 100, 221, 242, 351, 352, 371, 372, 462, 480, and IAS 493. Two courses in Biblical Literature in addition to REL 110 and REL 210. EDU 170 and either PSY 251 or 352 are required as cognate courses.

A minor in Christian Education requires at least 20 hours. Included must be REL 100, $242,262,351,352,371$, and 372.

REL 100 Introduction to Christian Education 3 hours
A course which focuses on the purpose and scope of Christian education and the types of ministries available to majors.

REL 221 Instruction Media, Methods, and Materials 2 hours
A practical course in which students develop skills in creating and using a variety of projected and non-projected media for use in teaching.

REL 242 Theoretical Foundations for Christian Education 3 hours
The salient realities which shape educational ministry are explored from a Biblical-theological perspective. Various theoretical approaches are considered in helping the student form a theory which will hold the test of praxis.

REL 262 Personal Development 3 hours
A course which engages the student with the primary structures, dynamics, and issues of his person in terms of growth and development in Christ. A theological psychology is developed for the purpose of ministry.

## REL 342 Pastoral Care 1 hour

A practical approach to the concerns of an effective pastoral ministry. This is a required course for all student pastors, but it is open to others as well.

## REL 351 Teaching and Learning Strategies 3 hours

A practical course designed to help the student teach the Bible more effectively by the use of an educational strategy. A teaching lab and supervision is included.

## REL 352 Program and Curriculum Development 3 hours

A course which focuses on educational programs and structures within the local church. Emphasis is on the analysis of published curricular and the development of curriculum writing skills.

REL 371 Leadership Development 3 hours
Leadership is defined and explored in the functional terms of field problems. Special attention is given to such subjects as: group structure, dynamics, and processes; authority, patterns of motivation, and leadership styles.

REL 372 Inductive Study of the Bible 2 hours
Specific application will be made to various literary types. A selected book will be analyzed. Detailed analyses of selected portions of both the New and the Old Testaments.

A major in philosophy of religion requires a total of at least 40 hours with a minimum of 24 in appropriate philosophy courses, including PH1 452 and 16 hours in religion courses. (Courses listed under Christian Education are not applicable.)
A minor in Philosophy of Religion requires 201, 202, 413, plus PHl electives totaling 17 hours.

PHI 201 Logic 4 hours
A study of the principles of correct thinking. This course examines the Laws of deductive and inductive reasoning, takes note of their essential interrelationships, and treats them in relation to scientific, symbolic, and other areas of contemporary thought. A treatment of the related discipline of epistemology, which investigates the origin, structure, methods, and validity of knowledge is included. Offered alternate years, Spring 1987.

PHI 262 Contemporary Issues 3 or 4 hours
A systematic analysis of pressing issues such as sexual morality, divorce, abortion, homosexuality, euthanasia, war and peace. Optional fourth hour concentrates on medical issues.

PHI 202 History of Philosophy 4 hours
A survey of philosophical thought beginning with the early Pre-Socratic Greeks, concluding with contemporary movements such as logical positivism and linguistic analysis. Offered alternate years, Spring 1987.

PHI 300 Great Figures 2 hours
A study of one of the significant philosophers in his environment, e.g. Aquinas and middle ages, Marx and 19th century. Course may be repeated as topic changes.

PHI 321 Religions of the World 4 hours
World living religions studied historically and systematically; emphasis on Oriental ethnic philosophies; comparison of structure and world views.

PHI 342 Aesthetics 2 hours
The psychology of the aesthetic experience and an interpretation of the philosophy of aesthetic values studied. This is an excellent course for the philosophy major and is of special cultural value for the general student. Required of all art majors. Offered alternate years, Spring 1987.

PHI 371 Principles of Ethics 3 hours
A survey of the theoretical foundations of ethics, such as the distinction between absolutist and relativistic views, the nature of justice, or the need for rules. Readings from classical and modern authors are included. Offered alternate years, Fall 1988.

PHI 413 Contemporary Christian Belief 3 hours
An analysis of contemporary society and its integration with Christian thought. An introduction to Christian apologetics. Prerequisite: REL 313. Required of all students.

PHI 452 Philosophy of Religion 3 hours
A study of the problems and conceptions of religion together with their implications for Theism and Christianity. Offered alternate years, Spring 1988.

## Practicum, Seminar, and Capstone Courses

REL 360 Independent Study 1-4 hours
REL 370 Selected Topics 1-4 hours
REL 393 Practicum 1-4 hours
REL 480 Seminar 1-4 hours
REL 490 Honors 1-2 hours
IAS 493 Senior Seminar 4 hours

## Social Work

Head, Associate Professor<br>Jackson; Associate<br>Professor McQueen;<br>Assistant Professor<br>Wallace

Social work is the professional application of the knowledge of human behavior/social environment and the use of interventive skills in working with individuals, families, groups, and communities regarding problems of living in modern society.
Social work involves service to all peoples: from young to old, individuals, families, groups, neighborhoods, and especially the disadvantaged in our society, such as people of color, women, the physically and mentally handicapped, and the poor. A variety of practice settings are utilized to reach these people, such as hospitals, child care facilities, public and private social welfare departments, public schools, and industries.
The Social Work Department offers a Bachelor of Science degree in social work (Bachelor of Arts degree if language requirements are met). The social work program, which is ac-
credited by the Council on Social Work Education, is designed to prepare students for beginning professional social work practice at the baccalaureate level and for entry into graduate school in social work.

Entry into Taylor's social work education program begins in the sophomore year when students

1. satisfactorily complete the pre-entry courses SWK 200 and 231;
2. complete a minimum of 30 hours of volunteer experience, preferably at a social welfare agency; and
3. receive the approval of the Social Work Education Committee.

Students in the social work major are expected to complete the following:

1. all general education requirements;
2. 37 hours in required supportive courses of sociology, psychology, political science, and economics (some will also meet general education requirements); and
3. 44 hours of required social work courses.

Students considering work in areas that are bilingual are strongly encouraged to take appropriate language courses.

The social work courses include a junior practicum (which is a month long placement at a social welfare agency) and a professional internship the final semester of the senior year.


SWK 200 Explorations in Social Work 3 hours
An initial exposure to social work as a profession. Field trips, agency evaluations, and guest speakers introduce the student to opportunities in social work. Open to all majors.

## SWK 231 Social Welfare: Historical Perspectives and Development 3 hours

Provides students with a basic understanding of the interrelationships between social needs/ problems and social welfare policy, programs, and service. Students will also look at the historical development of Social Work as well as consider the major programs in which social workers are likely to be involved. Offered spring semester only.

## SWK 260 Introduction to Social Research Principles and Methods 4 hours

A study of the research methods focusing on various explanations of principles and processes inherent in the social system. Emphasis is upon the main social research methods used by modern scholars in social work and sociology. Includes statistics for social work and sociology. Offered fall semester only.

SWK 351 Social Work Process and Practice I 4 hours
A course which introduces the student to the generic base of social work, and a framework for generalist practice. The second phase of the course focuses on the basics of the helping relationship, communication skills and beginning counseling techniques. Prerequisites: CAS 120, SWK 200, SOC 100, PSY 251, and 352. Offered fall semester only.

## SWK 354 Social Work Process and Practice II 4 hours

A course which concentrates on integration of theories, principles, skills, and processes of various modalities of intervention. The generic approach which holds that the type of problem or situation determines mode of intervention will build understanding of work with individuals, families and groups. Prerequisites: SWK 351 and 393. Offered spring semester only.

## SWK 360 Independent Study 1-4 hours

Permission of Head of Social Work Departnent required.

## SWK 362 Social Policy 3 hours

Emphasis on how social workers function, directly or indirectly, under the mandates of social policies on a national, state, or local level. This course helps the student understand and critically analyze how policies are changed, modified, and implemented at the agency level - both public and private. Prerequisites: POS 331 and SWK 231. Offered spring semester only.

## SWK 370 Selected Topics 1-4 hours

Social work with children, the aged, women, minority groups and health care are among possible course topics. Open to all majors.

## SWK 393 Practicum (Field lab) 4 hours

During the interterm of the junior year students spend time in a social work setting learning how the agency functions, how professional social work practice is implemented, and how the professional interacts within the agency. This field lab provides the student the opportunity for observation and practice. Prerequisites: SWK 200, 231, 351 and permission of the Head of Social work Department.

SWK 451 Social Work Process and Practice III 4 hours
Social work problem-solving method is viewed through the planned change process with social and professional communities, task groups, and organizations. This course builds on the integration of policy, practice, and human behavior/social environment courses. A practice skills lab is included. Prerequisite: SWK 354. Offered fall semester only.

SWK 480 Seminar 1-4 hours
SWK 490 Honors 1-2 hours
SWK 492 Field Internship 12 hours
Professional semester of supervised internship in a social work setting. Spring term of senior year.
Prerequisite: Completion of all required courses in the social work major.

Sociology concentrates attention upon the basic processes of social interactions which result in human personality and society. The behavior of humans in groups and organized systems such as the family, work and government are studied. Sociology also looks at the way human behavior is regulated and standardized around major societal values as compared with Biblical standards and values.
The Bachelor of Arts in sociology consists of 30 term hours including SOC 100, 260, 361 and IAS 493. SOC 393 is strongly recommended. Social work courses may not be counted toward the major in sociology. The sociology major is deliberately kept lean to allow for double or parallel majors in career related fields. These combinations are typical: Sociology/Communications, Sociology/Computer Science, Sociology/Environmental Science, Sociology/Systems, Sociology/Religion.
The goal is to prepare graduates to participate as effective Christians in a variety of social settings ranging from the family and peer groups, to churches, to large multinational corporations.

## SOC 100 Introduction to Sociology 3 hours

A study of the principles and concepts of sociology in the context of present day social systems. Attention is given to major contemporary analyses of social events, processes, and institutions.

SOC 210 Contemporary Social Problems 3 hours
An introduction to the study of social problems from several perspectives. Problems in areas such as social engineering, social control, and personal and family relationships are examined in light of basic principles of sociology.

## SOC 222 Community and Urban Affairs 4 hours

Consideration of problems relating to community structure, development and process beginning with a historical overview of the development of cities. Special emphasis is placed upon the interrelationships of various groupings within communities, particularly within the urban scene. A field trip to a major urban center provides "hands on" learning.

## SOC 252 Cultural Anthropology 3 hours

An introduction to some present-day preliterate and literate cultures of the world. Social and cultural origins, primitive social control, the background of modern folkways, mores and community, and institutional life are studied. Designed for sociology majors and as an orientation course for those interested in missions.

SOC 260 Introduction to Social Research Principles and Methods 4 hours
A study of the research methods focusing on various explanations of principles and processes inherent in the social system. Emphasis is upon the main social research methods used by modern scholars in social work and sociology. Includes statistics for social work and sociology.

SOC 312 Ethnic and Minority Issues 3 hours
A study of the impact of ethnic and minority groups on the American culture with some comparison of the problems of ethnic and minority groups in cultures around the world.

SOC 320 Human Relations in Organizations 3 hours
The study of human relationships in organizations as they pertain to management theories, processes, and organizational systems and structures. Vertical, lateral, and diagonal relationships and planning techniques and strategies, as well as techniques of systems intervention and problem solving are studied.

SOC 321 Social Psychology 3 hours See PSY 321
SOC 342 Crime and Juvenile Delinquency 3 hours
An examination of schools of criminology, theories of crime and punishment, causes and costs of juvenile and adult delinquency, police detention, penal institutions, and modern treatment of juvenile and adult delinquents.

SOC 351 Political Sociology 3 hours
An examination of the sociological and social-psychological basis of politics and political behavior. Particular emphasis is given to politics as an expression of class conflict, the relationship of social

## Sociology

Head, Professor Yutzy;
Professor Adkison;
Associate Professors P. Loy, McQueen, A. Jackson; Assistant
Professor Wallace
power to political power, and the role of social norms as limitations on the political power of the state. Offered 1986-87.

SOC 360 Independent Study 1-4 hours
SOC 361 History of Social Thought 3 hours
Main emphasis placed upon the contributions of sociologists since the time of Comte. A study of the writings and concepts of leading sociologists both in Europe and America. Offered fall 1987.

SOC 370 Selected Topics 1-4 hours
SOC 381 Human Sexuality and Family Systems 3 hours
A study of the present state of family systems in America with an examination of the broader topic of human sexuality as a dynamic pattern of relationships both within and outside of the family. Some multicultural and transcultural variations and trends, internal and external sources of strain, and change over the family life cycle are studied. Biblical principles of sexuality are examined.

SOC 393 Practicum 1-4 hours
SOC 490 Honors 1-2 hours
IAS 493 Senior Seminar 4 hours

## See Information Sciences

## Systems

## See Communication Arts

Courses in this section are grouped in two ways. First, those courses which are nondepartmental are identified. In academic schedules and on transcripts they will be identified with the prefix IAS.
Following those non-departmental courses are inter-area courses which are related to more than a single department in an academic area. Such courses, and in some cases majors, frequently deal with subject matter which is not purely assignable to any given department. For the purpose of establishing an identity for these courses, the departments of the University have been grouped along traditional lines, and the inter-area courses related to these areas are listed under these headings in this section of the catalog.
The Humanities Area includes Ancient Language, Art, English, Modern Languages, Music, Religion and Philosophy, and Communication Arts. (HUM)
The Natural Science Area includes Biology, Chemistry, Information Sciences, Mathematics, and Physics. (NAS)
The Social Science Area includes Business and Economics, Geography, History, Political Science, Psychology, Sociology, and Social Work. (SOS)

A student majoring in any department within the humanities and social science areas is
encouraged to consider a special concentration in such groupings as American Studies, Ancient Studies, European Studies, or Fine Arts in conjunction with the major. Any interested student should consult with the head of the major department.

## IAS 101 New Student Orientation 1 hour

An introduction to the Christian higher education philosophy of Taylor by word and practice. This course includes small groups discussing study skills, personal growth and development, and academic advising. Working through practical problems of adjustment to the Taylor community in the areas of behavioral standards, time management, male-female relationships, career planning, and spiritual growth are included. Required of all new students and transfer students with 11 or fewer hours.

## IAS 110 Freshman Seminar 3 hours

An introduction to liberal arts, integration of faith and learning, and basic psychological information about human nature. In addition to large group lectures, the course includes small group discussion sessions led by faculty from a variety of academic areas. The discussion sessions further develop the themes for the course. The primary thrust is to use the central theme of human nature to introduce students to basic areas of understanding which undergird the intellectual growth process at Taylor. Required of all new students and transfer students with 30 or fewer hours.

IAS 180 Applied Learning Techniques 1 hour See IAS 280
IAS 199 Continuing Student Status Used for students maintaining registration while attending another college.

## IAS 200 Library Research 1 hour

Explores different avenues to obtaining information. Emphasis is on information pertinent to student research papers and student majors. Media forms are evaluated including print, telecommunications, computer databases, videotape, videodisc, micro-forms, word-of-mouth, and broadcast. A field trip to a major university library is required. The goal of the course is to acquaint students with information resources and with methods of researching those sources.

## IAS 220 Honors 1-4 hours

Enrollment in this class is restricted to students in the honors program.
IAS 252 DeveJopmental Processes in Leadership 1 hour
Designed to provide theoretical foundations and experimental opportunities structured toward personal growth and organizational effectiveness. This course will educate the student in leadership theories, organizational skills, group dynamics, and problem solving. Strongly recommended for all students interested in on-campus leadership positions.

## IAS 280 Advanced Applied Learning Techniques 1 hour

Emphasizes techniques for the improvement of study skills, listening and note-taking, reading and comprehension, writing and mathematics skills. The course meets three hours per week for seven weeks. Pass-fail basis only. May be repeated one time.

## IAS 290 Speed Reading 1 hour

Emphasis on speed reading techniques and effective comprehension. Meets daily for seven weeks. Prerequisite: 13 grade level reading. Pass-fail basis only.

IAS 300 Career Planning 2 hours
A practical course to aid in the development of lifelong career competencies, Career Planning provides students with the opportunity to explore their value system, understand principles of wise decision making and research a variety of work experiences. Job seeking skills such as resume writing, preparation of credentials, approaches to the job market and interviewing will be integrated into the course. ltems of special consideration will include problems faced by minorities, women, and the handicapped.

IAS 310 Advanced Test Taking 1 hour
Verbal and math skills for testing. Pass-fail basis only.

IAS 320 Cross Cultural Outreach 1-2 hours
An overview of the cross-cultural mission of the church is presented with training in personal evangelism. The class prepares participants for a month of cross-cultural ministry in Nassau, Bahamas during January and meets the General Education cross-cultural requirement. Additional practicums may be selected in philosophy/religion, Christian education, social work, elementary education, and church music during the field experience in the Bahamas.

## IAS 352 Student Development Seminar 1 hour

Designed to provide instruction and study in topics relevant to specific student leadership positions on campus. Prerequisite: IAS 252 and/or permission of instructors.

IAS 360 Honors - Independent Study 1-4 hours
Enrollment in this experience is restricted to students in the honors program.

## IAS 390 Media Laboratory 3 hours

Credit is given to students filling highest leadership positions on the Echo and the Ilium, and the WTUC campus radio station. Total maximum credit six hours. Prerequisite: Permission of the Communication Arts department head.

IAS 492 Integrative Seminar 1-4 hours
An interdepartmental, interdisciplinary seminar of an integrative nature utilizing readings and other media to communicate ideas. Prerequisite: Permission of the instructors.

## IAS 493 Senior Seminar 4 hours

Integrates the central purposes of general education with the major area of study. Seniors will meet together initially to study broad interdisciplinary issues relating to the development of a Christian world view and Christian stewardship ( 1 hour). Students then will meet in departments to integrate Christian philosophical concerns with departmental concerns ( 3 hours).

IAS 499 Special Study 1 hour
Upon recommendation of the major department head, a student may petition for permission to serve as an instructional assistant in his major department. It is to be understood that the petition should be accompanied by a description of the student's duties and that the approved petition is to be presented to the Records Office at the time of registration. Prerequisites: Junior standing; overall GPA of at least 2.6 and major GPA of at least 3.0; and permission of the Associate Vice President for Academic Affairs.

## Area of Humanities (HUM)

## HUM 230 Art as Experience 4 hours

Three one-hour lecture sessions are scheduled per week, with the equivalent of one additional hour per week required for attendance at arts events. Written critiques of selected events are part of the course curriculum. Lecture sessions focus upon Twentieth Century concepts and art forms, with the goal of developing students' perceptual skills. A major focus of this course is experiencing art.

## HUM 330 Arts and Ideas 4 hours

In four hours of lecture/discussion per week the evolution of western art through selected historical periods and places is traced. The emphasis is heavily historical, stressing learning about the artistic heritage and its context rather than experiencing art. The course is open to students of all majors, but is particularly appropriate for literature, fine arts, history and philosophy majors.

HUM 250 Participation in the Arts 1 hour
ART, CAT or MUS participation as partial fulfillment of the Humanities (Fine Arts) requirement. Non-music majors may take an ensemble or private lessons to fulfill this requirement. Credit only.

## Major in Natural Science

This area major is designed for students participating in three-year pre-professional programs. Such programs include pre-engineering, pre-medicine, pre-dentistry, and premedical technology. All Taylor graduation requirements are applicable, excepting PHI 413 , IAS 493, the minimum of 42 hours of upper-division credit and the senior compre-

Area of Natural Science (NAS)
hensive examination. Normally, students will complete all applicable requirements, including a minimum of 96 hours, in the first three pre-professional years. A minimum of 40 hours must be taken in courses offered in the Natural Science Area. These courses must be selected in accordance with the unique requirements of each pre-professional program. Schedules of specific course requirements appear in the catalog under the heading of the Pre-Professional Studies.

Upon the satisfactory completion of one year of professional requirements at an approved accredited school, the student will be granted the baccalaureate degree by Taylor University.

NAS 120 Experiences in Physical Science 4 hours See PHY 120
NAS 240 lntroductory Statistics 4 hours
A study of basic statistical methods for describing data; counting outcomes and probability; probability distributions; sampling distributions; confidence intervals; tests of hypotheses; linear regression; and correlation.

NAS 480 Natural Science Seminar 1 hour
The integration of topics from contemporary science with an emphasis on recent research reports of inter-disciplinary interest. Guest lectures and faculty and student reports serve as the method of instruction.

SOS 300 American Studies Seminar in Washington 2-8 hours
A series of short seminars for students participating in the American Studies Program in Washington, D.C. Credit is variable depending on the duration of residence. Applicability to a major must be determined in advance by a petition submitted to the department. (See p. 11.)

SOS 310 American Studies Internship in Washington 2-8 hours
An internship experience for students participating in the American Studies Program in Washington, D.C. Credit is variable depending on the duration of residence. Applicability to a major must be determined in advance by a petition submitted to the department. (See p. 11.)

SOS 352 Student Development Seminar 3 hours
Designed to provide instruction and study in the area of interpersonal relationships and communication within the context of residence hall living. Individual study and group interaction assist the student in his own development and provide him with the skills-training necessary for helping others through relationships. This course is required of all students who have been selected to be personnel assistants.

Liberal arts education emphasizes the learning which is desirable for all students who would grow into mature persons and citizens of a democratic society. Also, this is basic preparation for the various professions and vocations. Taylor University also offers preprofessional programs in several areas; some of them are affiliation programs with other universities.

A student desiring both an engineering career and a Taylor degree can complete the designated on-campus requirements for the Taylor degree in three years. Engineering requirements may be completed in two-and-one-half years (or less) after transferring to any approved accredited engineering school. (Taylor participates in " $3-2$ affiliation programs" with Purdue University, Lafayette, IN, and with Washington University, St. Louis, MO.) On satisfactory completion of the first year of study at the engineering school, the student who successfully follows the schedule of courses suggested below will be granted a bachelor of science degree with a major in Natural Science/Systems by Taylor University. (Alternatively, a pre-engineering student may elect to earn the Bachelor of Arts degree with a Natural Science major by substituting a foreign language requirement for the core of courses in systems analyses shown below.)

Area of Social Sciences (SOS)

## PreStudies

Pre-Engineering Prograin

## Pre-Law Program

Pre-Medical Program


Sophomore Year

## MAT 240,352, 382, $431 \ldots . . \ldots . .14$


HPR 200 ............................ 1
HIS 103 (cross cultural) .......... 4
SYS 392 ............................. 1

| Interterm |  |
| :---: | :---: |
| REL |  |
| HPR |  |
| 210 |  |$\ldots \ldots \ldots \ldots \ldots \ldots \ldots .3$



The best preparation for graduate training in the field of law is a regular four year college course leading to the bachelor of arts degree. The major, chosen in consultation with the pre-law advisor, should be one which enhances reading, writing and analytical skills. Graduates who have followed this course of study, who have earned above average grades, and who have scored well on the Law School Admissions Test have been admitted to a wide variety of nationally recognized law schools.

Students interested in the Pre-Medical curriculum should ask their advisor for the catalog on Medical School Admissions requirements sometime during their sophomore year. It is important to meet the specific entrance requirements of the medical school(s) chosen. Maintaining a $B+$ average and scoring well on the MCAT test (usually taken in the spring of the junior year) are common prerequisites for acceptance to a medical school. Help is available toward preparing for the MCAT examinations.
Medical College Admissions Committees today are not specific about the choice of undergraduate major (most prefer a major in the arts or sciences) as long as the entrance requirements for their particular medical school have been met. A suggested course schedule follows for the two most common majors chosen by Pre-Medical students at Taylor. The Bachelor of Arts degree is granted upon satisfactory completion of either tract.

Freshman Year

| Biology Major |  |  |
| :---: | :---: | :---: |
| BIO | 101, 103, 104 |  |
| ENG | 110 |  |
| REL | 110 |  |
| FOREI | GN LANGUA |  |
| MAT | 130 or 151 |  |
| HPR | 100 |  |
| IAS | 101 |  |
| 1AS | 110 |  |
| CAS | 110 |  |

Sophomore Year

| Biology Major |  |  |
| :---: | :---: | :---: |
| BIO | 203, 204 |  |
| CHE | 201, 202 |  |
| REL | 213 |  |
| FOREIGN LANGUAGE 201, 202 ... 6 |  |  |
| LITERATURE |  |  |
| HISTORY/SOCIOLOGY |  |  |


| Biology Major |  |
| :---: | :---: |
| BIO 312 or 362, 332 or 352 |  |
| CHE 311, 312 | 10 |
| PHY 211, 212 | 10 |
| REL 313 |  |
| ARTS PARTICIPATION | 1 |
| INTERTERM OR SUMMER PRACTICUM |  |
|  | 4 |
| Freshman Year |  |
| Chemistry Major |  |
| CHE 201, 202 | 10 |
| MAT 151, 230 | 8 |
| REL 110 |  |
| ENG 110 | 4 |
| IAS 101 |  |
| IAS 110 | 3 |
| HPR 100 | 1 |
| HISTORY/SOCIAL SCIENCE | -5 |
| Junior Year |  |
| Chemistry Major |  |
| CHE 301, 302 | 8 |
| BIO (two courses) | 6-8 |
| LANGUAGE 101, $102 \ldots . . . . . . . . .$. |  |
| HUM 230 | 4 |
| REL 313 ....................... 3 |  |
| ARTS PARTICIPATION |  |
| LANGUAGE 201, 202 . . . . . . . . . . . . 6 |  |
| HISTORY/SOCIAL SCIENCE | 3-5 |

Senior Year
Biology Major
BIO 331, 312 or 362, 332 or 352, 411 ..... 16
HUM 230 ..... 4
PHI 413 ..... 3
HPR 200 ..... 2
NAS 490 ..... 1
HISTORY/SOCIOLOGY ..... 3-5
COS 200 or 220 ..... 4
INTERTERM
SENIOR SEMINAR ..... 4
Sophomore Year
Chemistry Major
CHE 311, 312 ..... 10
BIO 101, 203 ..... 6
PHY 211, 212 ..... 10
REL 210 ..... 3
CAT 110 ..... 2
HPR 200 ..... 1
LITERATURE ..... 3-4
Senior Year
Chemistry Major
CHE 431 (and 431L) ..... 3-4
CHE 493 (Sr. Seminar) ..... 4
CHE 411 ..... 4
PHI 413 ..... 3
HPR 200 ..... 1
BIO (one course) ..... 3-4
COS 220 ..... 4
NAS 490 ..... 1

The Medical Technologist serves as a vital part of the hospital medical team, performing the laboratory tests that lead to successful diagnosis of illness. Taylor University maintains affiliations with six regional hospitals for students wishing to pursue a Bachelor of Science degree in Medical Technology:

Ball Memorial Hospital, Muncie
The Lutheran Hospital, Ft. Wayne
Methodist Hospital of Indiana, Indianapolis
Parkview Memorial Hospital, Ft. Wayne
St. Joseph Memorial Hospital, Kokomo
St. Joseph's Hospital, Ft. Wayne
The National Accrediting Agency for Clinical Laboratory Sciences requires three years of college work as minimum pre-professional preparation. Following a student's completion of this program at Taylor University (a minimum of 96 credit hours) and after satisfactory performance in the medical technology program at an approved hospital, a Bachelor of Science degree will be granted. The student is then eligible to take a national certifying examination. Upon successfully passing the certification examination, he/she will be certified as a registered medical technologist or its equivalent.

Electives should be selected in the natural sciences to enhance acceptance into a medical technology program. A typical program follows.

Freshman Year
IAS 101 ........................... 1

IAS 110 .............................. 3
ENG 110 ............................ 4
CHE 201, $202 \ldots . . . . . . . . . . . . .$.
COS 200 or 220 .................. 3-4
REL 110 .............................. 3
HPR 100, 200 ....................... 2
MAT ................................... $3-4$
CAS 110
2
ELECTIVES ........................ 3-4

## Junior Year



BIO 371 ............................. 4
CHE ............................. 8-10
HUM 230 ............................ 5
BIO 241, 242 ...................... 8
ELECTIVES ............................ 3

LITERATURE ........................ 4
REL 210 ................................. 3
PHYSICS .............................. 8
BIO 101 ........................... 3
CHE .............................. 8-10
SOC ..................................... 3
HIS ................................... 4
HPR 200 ............................. 1
ELECTIVES .......................... 338334ELECTIVES ........................... 3

Taylor University has entered an affiliation program with Goshen College whereby a student can earn a BS in Nursing by taking the Freshman and Sophomore years at Taylor and the Junior and Senior years at Goshen. Details of the program are available from the Associate Vice President for Academic Affairs or the Pre-Nursing Advisor.
Taylor University also offers a two year pre-nursing curriculum designed to prepare the student for entry into a variety of nursing schools. In order to insure smooth transfer into a Nursing School, early contact should be made with the school to which transfer is desired. In addition, it is important to maintain a 2.5 or higher GPA while at Taylor. The following sequence of courses is generally recommended:

|  |  | Year One |
| :---: | :---: | :---: |
| Fall Term |  |  |
| BIO | 101 | 3 |
| ENG | 110 or |  |
|  |  | 3-4 |
| PSY | 200 | 3 |
| HPR | 100 | 1 |
| IAS | 101 | . 1 |
| IAS | 110 | ... 3 |

$\frac{\text { Interterm }}{\text { ENG, HUM, or }}$
SOC SCI Elective $\ldots \ldots \ldots \ldots \ldots . .4$

| Spring Term |  |  |
| :---: | :---: | :---: |
| BlO | 370 | 3 |
| CAS | 120 | 2 |
| ENG | 110 or |  |
| REL | 110 | 3-4 |
| PSY | 300 | 4 |
| HPR | 200 | . 1 |


| Year Two |  |  |
| :---: | :---: | :---: |
|  | Fall Term |  |
| BIO | 241 | 4 |
| CHE | 201 | 5 |
| PSY | 240 or 351 | 4 |
| SOC | 100 | 3 |

$\frac{\text { Interterm }}{\text { REL } 210 \ldots \ldots \ldots \ldots \ldots \ldots \ldots 3}$

| Spring Term |  |  |  |
| :--- | :--- | :--- | :--- |
| BIO | $242 \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ | 4 |  |
| BIO | $371 \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ | 4 |  |
| PSY | $352 \ldots \ldots \ldots \ldots \ldots \ldots$ | 4 |  |
| SOC | Elective $\ldots \ldots \ldots \ldots \ldots \ldots$ |  |  |

The Statement on Pre-Seminary Studies from the Association of Theological Schools gives the following important counsel: "In every case, the student contemplating theological study should correspond at the very earliest opportunity with the school or schools to which he intends to apply and with the authorities of his church in order to learn what will best prepare him for the specific program he expects to enter."
The following normative pattern of pre-seminary education is offered in the Statement: English language and literature; history; philosophy, particularly its history and its methods; natural science; social science; the fine arts, biblical and modern languages; religion, both the Judaeo-Christian and the Near and Far Eastern traditions. A seminary may modify this normative pattern, if it chooses.
The really significant principle underlying this pattern is not that of earning so many hours and meeting minimum requirements, but that of making the most of the opportunities for acquiring knowledge in the fields listed.
The Statement advises students to consider that "many religion departments now represent the best possibility an undergraduate may have on his campus for the integrating values of a liberal education." In addition to this, there is the realization that "strong religion departments may prepare students in such depth that they are ready to bypass the introductory courses of the traditional seminary curriculum."

## Pre-Theological Progranz



## Register

The register of officers and faculty is effective February, 1986.

Mr. John McDougall, Chairman, Bloomfield Hills, Michigan

Dr. Carl W. Hassel, Vice Chairman, Southfield, Michigan

Mr. R. David Boyer, Secretary, Fort Wayne, Indiana

Mr. Robert C. Gilkison, Treasurer, Triangle, Virginia

Dr. Jay Kesler, President of the University, Upland, Indiana

Mr. James H. Barnes, Jr., South Pasadena, Florida

Mrs. LaRita R. Boren, Upland, Indiana

Dr. Theodore W. Engstrom, Monrovia, California

Rev. Herbert M. Frazer, Cincinnati, Ohio

Dr. Richard W. Halfast, Rochester, Indiana

Dr. Joseph D. Brain, Needham, Massachusetts

Dr. Beverly E. Brightly,
Princeton, New Jersey
Mr. Theodore F. Brolund, Rockford, lllinois

Mr. Thomas A. Dillon, Columbus, Ohio

Dr. J. Paul Gentile, Leo, Indiana
Dr. Lester C. Gerig, Fort Wayne, Indiana

Dr. Edward H. Hermanson, Marion, Indiana

Dr. John O. Hershey,
Hummelstown, Pennsylvania

Mr. V. Donald Jacobsen, Greensboro, North Carolina

Mrs. G. Roselyn Kerlin, Danville, Indiana

Dr. Walter C. Randall, Park Ridge, Illinois

Mr. Richard Russell, Grosse Pointe Shores, Michigan

Mr. Norman A. Sonju, Dallas, Texas

Dr. Fred S. Stockinger, Grand Rapids, Michigan

Dr. L. Marshall Welch, Sedona, Arizona

Dr. Samuel F. Wolgemuth, Mr. Prospect, lllinois

Robert Larsen ' 63
Zeeland, Michigan
President
Wendell C. True '56
Cincinnati, Ohio
President Elect
David K. Sorensen '71
Carmel, Indiana
Past President
Art Deyo '62
Indianapolis, Indiana
Recording Secretary
Wayne Augustine '63
East Springfield, Pennsylvania

Dr. Milo A. Rediger, Upland, Indiana

Dr. Charles W. Shilling, Arlington, Virginia

## Mark Bowell ' 85

Indianapolis, Indiana
Brenda Brenneman '69
Washington, Pennsylvania
Kimberly Carlsen '86
Lancaster, New York
Ben Fulton '84
Troy, Ohio
Michael W. Kendall '83
Niles, Michigan
Michael May '75
San Marino, California

Mr. Howard M. Skinner,
Glendale, Arizona
Mr. Linton A. Wood, Hendersonville, North Carolina

JoAnne Metcalf Powell '72
Worthington, Ohio
Adele Courtney Roney '73
Haddonfield, New Jersey
Carol Fricke Thor '59
Arlington Heights, Illinois
Elmer Vogelsang '64
St. Cloud, Florida
David Wheeler '53
Randolph, New York

## Ex-officio Members:

## George Glass

Associate Vice President for Alumni and Institutional Relations

Charles C. Stevens
Director of Alumni Programs

## Administration

Jay Kesler
President of the University
Daryl R. Yost
Provost/Executive Vice President

## Joe Romine

Director of Athletics

## Bob Davenport

Director of Wandering Wheels

## Academic Affairs

Richard J. Stanislaw
Vice President for Academic Affairs

Janice Shaw Crouse
Associate Vice President for Academic Affairs

Wynn A. Lembright
Dean of Enrollment
Carmen L. Taylor
Director of Records
David C. Dickey
Director of Library
Herb Frye
Assistant Dean of Enrollment
Judy D. Goodman
Admissions Coordinator
Gerald L. Hodson
Director of Learning Resources
Center
Daniel Jeran
Director of Teacher Education
Marian Kendall
Director of Teacher Certification
Billie J. Manor
Director of Learning Skills Center
Steve Mortland
Admissions Coordinator
Mary Kay Nugent
Assistant Dean of Enrollment
John W. Wallace
Director of Continuing Education

## Student Development

## Paul Lowell Haines

Vice President for Student Development and Dean of Students

Betty G. Freese
Associate Director of Alumni
Programs
Jay Kesler
President of the University
Daryl R. Yost
Provost/Executive Vice President

Walter E. Campbell
Dean of Career Development and Associate Dean of Students

Timothy W. Herrmann
Associate Dean of Students and Director of Housing

## Robert Griffin

University Chaplain and
Associate Dean of Students
David W. Aycock
University Psychologist and
Director of the Counseling Center

## Steven G. Brooks

Coordinator of Community
Outreach and Assistant
Basketball Coach
David E. Conn
Residence Hall Director
Basil Dempsey
Director of Campus Security
Linda J. DiMenna
Residence Hall Director and
Assistant to the Director of
Housing
Randall E. Dodge
Director of Leadership
Development and Student
Programs
Wendy J. Koons
Director of Special Programs and Placement

Diane A. Meyer
Director of Student Ministries
Louona Roth
Director of the Health Center
Melanie A. Taylor
Residence Hall Director
Julie D. Young
Residence Hall Director

## Business and Finance

Norman K. Mathews
Vice President for Business and Finance

Allan J. Smith
Controller

## Charles R. Jaggers

Vice President for University
Advancement
Thomas G. Beers
Associate Vice President,
University Advancement
Steve Manganello
Associate Director of
Development

## Laura Hutson

Coordinator of Office Services and Personnel

Kathy Street
Director of Financial Aid
Janet Anderson
Chief Accountant

## Gail Bragg

Superintendent of Buildings and
Grounds

## Beth Fisher

Assistant Director of Financial Aid

William Gross
Grounds Foreman
Robert D. Hodge
Director of Information Systems
and Services Group
Clarke Holtsberry
Systems Analyst/Data
Administrator
Michael Koch
Communications Manager
Robert Neideck
Campus Store Manager
Jerry Nelson
Director of Food Services
David Ratliff
Print Shop Manager
Robert Vander Woude
Director of Physical Plant

## Advancement

Charles R. Jaggers
Vice President for University
Advancement
Thomas G. Beers
Associate Vice President for University Advancement

George A. Glass
Associate Vice President for
Alumni and Institutional
Relations

## Kurt Bullock

Director of News Media Services

## Brian Christy

Associate Director of
Development
Betty G. Freese
Associate Director of Alumni Programs

Helen L. Jones
Manager of Donor Services

Ronald L. Keller
Director of Church Relations
Steve Manganello
Associate Director of
Development
Dwight L. Mikkelson Archivist

## DIVISION III

LANGUAGE, LITERATURE,
RELIGION \& PHILOSOPHY
William Fry, Chair
Departments:
William Fry, ENG
Janet Loy, MOL
Herbert Nygren, REL
DIVISION IV
NATURAL SCIENCES \& MATHEMATICS
Stanley Burden, Chair Departments:
Timothy Burkholder, BIO
Stanley Burden, CHE
Paul Harms, MAT
R. Waldo Roth, INS

Roger W. Roth, PHY

Dale L. Sloat
Director of University Marketing and Media Services

Charles C. Stevens
Director of Alumni Programs
Lois E. Wygant
Executive Director of the
Campaign for Taylor University

DIVISION V
HEALTH, PHYSICAL
EDUCATION \& RECREATION
Richard Gates, Chair
DIVISION VI
SOCIAL \& BEHAVIORAL
SCIENCES
Philip Loy, Chair
Departments:
Robert Gortner, BAE
Roger Jenkinson, GEO
William Ringenberg, HIS
Philip Loy, POS
Mark Cosgrove, PSY
Daniel Yutzy, SOC
Alice Jackson, SWK

Mildred S. Chapman,
Professor of Education (1959, 1975);
Asbury College, AB; University of Kentucky, MA, EdD

Faculty
Brian G. Christy,
Associate Director of Development and Instructor (1978); Taylor University, BA

James G. Coe,
Assistant Professor of Business (1983); Indiana University, BS; National College of Education, MS

David Conn,
Residence Hall Director and
Instructor (1985); Taylor
University, BA
Winfried Corduan,
Associate Professor of Philosophy and Religion (1977); University of Maryland, BS; Trinity Evangelical
Divinity School, MA; Rice
University, PhD
Mark P. Cosgrove,
Professor of Psychology (1976);
Creighton University, BA;
Purdue University, MS, PhD
Janice Shaw Crouse,
Associate Vice President for Academic Affairs and Professor (1984); Asbury College, AB; Purdue University, MA; State University of New York at Buffalo, PhD

## Division Chairs/ <br> Department Heads

Jay L. Kesler,
President and Professor (1985);
Taylor University, BS, LHD;
Asbury Theological Seminary,
DD; Huntington College, DH;
Barrington College, DD
Daryl R. Yost,
Procost/Executive Vice President (1983); Manchester College, BS; Ball State University, MA, EdD

Richard J. Stanislaw,
Vice President for Academic Affairs and Professor of Music (1982);
Philadelphia College of Bible, BS;
Temple University, BMus Ed,
MMus; University of Illinois,
DMA
H. Leon Adkison,

Professor of Systems (1974); Texas Christian University, BS, MS, PhD

David W. Aycock,
University Psychologist and Director of Counseling Center and Associate Professor (1983); Tennessee
Temple University, BA; Georgia
State University, MEd, PhD
Beulah P. Baker,
Professor of English (1979): Spring Arbor College, BA; Michigan State University, MS, PhD

Thomas G. Beers,
Associate Vice President for University Advancement and Assistant Professor (1969); North
Park College, AA; TayIor
University, BS; American
University, MEd
Robert P. Benjamin,
Associate Professor of Accounting (1979); Bowling Green State University, BSBA; University of Michigan, MBA; Florida State University, MAcc; CPA

Ray E. Bullock,
Professor of Art (1969); Ball State
University, BS, MAEd, EdD

## Stanley L. Burden,

Professor of Chemistry and Physics (1966); Taylor University, BSEd; Indiana University, PhD

Timothy J. Burkholder,
Professor of Biology (1970); Taylor
University, BA; Ohio State
University, MS, PhD

## Joe Burnworth,

Professor of Education (1969); Ball State University, BSEd, MAEd, EdD

Walter E. Campbell,
Dean of Career Development, Associate Dean of Students and Assistant Professor (1969); Taylor University BSEd; Ball State University, MA

Robert W. Davenport, Director of Wandering Wheels and Assistant Professor of Physical Education (1958); University of California at Los Angeles, BS;
Ball State University, MA
Barbara C. Dickey,
Associate Professor of Music (1961);
Asbury College, AB; University
of Michigan, MM; Indiana
University, DME
David C. Dickey,
Director of Library and Associate
Professor (1972); Taylor
University, BA; Western
Michigan University, MS
Timothy C. Diller,
Associate Professor of Information Sciences (1981); Taylor
University, BA; Fuller Theological Seminary, MDiv; U.C.L.A., MA, PhD;

## Linda DiMenna,

Residence Hall Director, Assistant
Director of Housing and Instructor (1983); Taylor University, BA

Edward E. Dinse,
Associate Professor of English (1970); University of WisconsinMilwaukee, BA, MA

## Richard Dixon,

Assistant Professor of Spanish (1982); Wheaton College, BA; University of Wisconsin, MA

## RandaII Dodge,

Director of Leadership Development and Student Programs (1984);
Taylor University, BA; Ball State University, MA

## Lee E. Erickson,

Assistant Professor of Economics (1979); University of Washington, BA, MA; University of Michigan, PhD

William A. Ewbank,
Associate Professor of Mathematics (1964); Royal Military College of Science; University of London, BSc; Ball State University, MAEd

## Robert J. Freese,

Associate Professor of Education (1971); Taylor University, BA;

Xavier University, MEd
William A. Fry,
Professor of English (1978); Nyack College, Dipl; Wheaton College,
BA; Columbia University, MA,
PhD
Richard W. Gates,
Associate Professor of Physical
Education (1969); Wheaton
College, BS; University of
Buffalo, EdM; State University of New York at Albany, Syracuse University, Director's Certificate (HPR)

George A. Glass,
Associate Vice President of Alumni and Institutional Relations and
Associate Professor (1960); Taylor
University, BSEd; Ball State
University, MA

## Carl E. Gongwer,

Associate Professor of Spanish (1966); Taylor University, BA; Indiana University, MA

## Robert V. Gortner,

Associate Professor of Business
(1980); Drexel University, BS, MBA

## Robert Griffin,

University Chaplain, Associate Dean of Students and Assistant Professor (1981); California State University, BA; Conservative Baptist Theological Seminary, MRE

## Scott Hafemann,

Assistant Professor of Religion
(1985); Bethel College, BA; Fuller

Theological Seminary, MA;
University of Tuebingen, West
Germany, DTh
Paul Lowell Haines,
Vice President for Student Development, Dean of Students and Assistant Professor (1977); Taylor University, BA; Ball State University, MA

Daniel G. Hammond, Assistant Professor of Chemistry (1981); Bethel College, BA;

Wayne State University, PhD
Paul M. Harms,
Associate Professor of Mathematics (1971); Bethel College, AB; Iowa State University, MS; University of Missouri at Rolla, PhD

Albert D. Harrison,
Assistant Professor of Music (1978);
Virginia Commonwealth
University, BMEd; University of llinois, MS, EdD

## George W. Harrison,

Professor of Biology (1963); West
Virginia University, BS; Marshall University, MS; Michigan State
University, PhD
Dale E. Heath,
Professor of Ancient Language and History (1961); Greenville College, AB; Asbury Theological Seminary, BD; Michigan State University, PhD

Larry R. Helyer,
Associate Professor of Religion (1979); Biola College, BA;

Western Conservative Baptist
Seminary, MDiv; Fuller
Theological Seminary, PhD

Timothy W. Herrmann,
Associate Dean of Students, Director of Housing and Assistant Professor (1978); Taylor University, BA; Ohio State University, MA

David D. Hess,
Associate Professor of Education
(1967); North Park Jr. College,

AA; Taylor University, BSEd; Ball
State University, MAEd
Gerald L. Hodson,
Director of Learning Resources
Center and Associate Professor of Education (1967); Ball State University, BS, MAEd
M. Jane Hodson,

Associate Professor of Education (1966); Taylor University, BSEd; University of Cincinnati, MS

Stephen P. Hoffmann,
Associate Professor of Political Science (1976, 1981); Rutgers
University, AB; Princeton
University, PhD
Oliver F. Hubbard, Jr.,
Associate Professor of
Communication Arts, and Director of Theatre (1976); Asbury College, BA; University of Kentucky, MA;
Kent State University, PhD
Alice Allein Jackson, ACSW
Head of Social Work Department, Director of Social Work and Associate Professor (1985); University of Mississippi, BA; Tulane University, MSW; University of Alabama, DSW

DaIe M. Jackson,
Professor of Conmunication Arts (1966); Asbury College, AB; Ball

State University, MA; Indiana
University, PhD
Charles R. Jaggers,
Vice President for University Advancement and Assistant Professor (1972); Taylor
University BA; Ball State
University, MA, EdD
Roger L. Jenkinson,
Professor of Geography and History
(1965); Taylor University, BSEd;

Ball State University, MA;
Oklahoma State University, EdD

## Daniel Jeran,

Director of Teacher Education and Professor of Education (1980); Upland College, BA; Drake University, MSE; University of Nebraska, EdD

## Charles B. Kirkpatrick,

Associate Professor of
Communication Arts and Director of Television Services (1979); Asbury College, AB; Indiana University, MS, PhD

Patricia E. Kirkpatrick,
Assistant Professor, Learning Skills Center (1982); Bethel College, BS;
Indiana University, MS

## Wendy Koons,

Director of Special Programs and Placement and Instructor (1984);
Taylor University, BA; Ball State University, MA

Philip K. Kroeker,
Professor of Music (1963);
Westminster Choir College, BM,
MM; Indiana University, PhD
Leroy C. Kroll,
Associate Professor of Chemistry
(1979); Lafayette College, $A B$;

Michigan State University, PhD; postdoctoral research at
University of Colorado
James B. Law,
Head Football Coach and Assistant
Professor of Physical Education (1982); Indiana University, BA; Ball State University, MA

Wynn A. Lembright,
Dean of Enrollment and Assistant Professor (1983); Toledo
University, BS; Asbury Seminary, MDiv; Princeton Theological Seminary, ThM

Connie D. Lightfoot,
Associate Professor of Information Science (1982); Taylor University, BS; Ball State University, MA

Janet C. Loy,
Assistant Professor of French (1971);
Indiana University, AB, MAT
R. Philip Loy,

Associate Professor of Political
Science (1964); Taylor University,
BA; Indiana University, MA
Joe W. Lund,
Associate Professor of Psychology (1973); Grace College, BA; Ball State University, MA; Indiana University, PhD

Fred H. Luthy, Associate Professor of Religion (1955); Taylor University, AB; United Theological Seminary, MDiv; Butler University, MA; Southern Baptist Theological Seminary, MRE

Vance E. Maloney,
Director of Testing and Assistant Professor of Psychology (1981);
Cedarville College, BA; Ball State University, MA.

Billie J. Manor,
Director of Learning Skills Center and Assistant Professor (1980); Ball State University, BA, MA

Marilyn F. McQueen, ACSW Associate Professor of Social Work and Sociology (1974); Taylor University, BA; Indiana University, MSW

## Allen D. Meyer,

Associate Professor of Psychology (1979); Bob Jones University, BA, MA; Indiana University, MA, PhD

Diane A. Meyer,
Director of Student Ministries
Instructor (1980); University of Missouri, BS

Dwight L. Mikkelson,
Professor of History (1968); Asbury
College, AB; University of
Kentucky, MA, PhD
Craig W. Moore,
Assistant Professor of Art (1979); Taylor University, BS; Ball State University, MA

David L. Neuhouser,
Professor of Mathentatics (1971);
Manchester Çollege, BS;
University of lllinois, MS; Florida
State University, PhD
Gary C. Newton,
Instructor of Religion (1985);
Houghton College, BA; Trinity
Evangelical Divinity School, MA
E. Herbert Nygren,

Professor of Religion and Philosophy
(1969); Taylor University, BA;

Biblical Seminary, STB; New York
University, AM, PhD
Richard A. Parker,
Professor of Music (1974);
Wittenberg University, BSEd;
Ohio State University, MA, PhD
Paul W. Patterson,
Head Basketball Coach, and
Assistant Professor of Physical
Education (1979); Hanover
College, BS; Central Missouri
State, MSE
Roger W. Phillips,
Assistant Librarian and Assistant
Professor (1982); General Motors Institute, BIE; Trinity Evangelical
Divinity School, MDiv; Emporia
State University, MLS
Robert D. Pitts,
Professor of Religion (1973);
Greenville College, AB; Northern
Baptist Theological Seminary,
MDiv; University of Michigan,
MA; Indiana University, EdD
William C. Ringenberg,
Professor of History (1967); Taylor University, BSEd; Indiana
University, MAT; Michigan State
University, PhD

Helen E. Rogers,
Assistant Professor of Education
(1976); Ball State University, BS, MA

Joe W. Romine,
Coordinator of Athletics, Assistant Football Coach, Head Men's Track Coach, and Assistant Professor of Physical Education (1972, 1981);
Taylor University, BS; Ball State
University, MA
R. Waldo Roth,

Associate Professor of Information
Sciences (1967); Taylor
University, BSEd; Ball State
University, MA
Roger W. Roth,
Associate Professor of Physics
(1965); Taylor University, BA;

Cornell University, MS
Paul E. Rothrock,
Associate Professor of Biology
(1981); Rutgers University, BA; Pennsylvania State University, MS, PhD
E. Stanley Rotruck, Associate Professor of Business (1979); Indiana University, BS, MBA

Jessica L. Rousselow,
Professor of Communication and Theatre Arts (1967); Northwestern
College, BA; University of
Minnesota, MA, PhD
Timothy W. Sharp,
Associate Professor of Music (1981);
Bluefield College, AA; Belmont
College, BM; The Southern
Baptist Theological Seminary,
MCM; Southern Baptist
Theological Seminary, DMA
Frederick B. Shulze,
Professor of Music (1970); Wheaton
College, BMus; Northwestern
University, MMus; University of
Washington, DMA
Ronald M. Sloan,
Assistant Professor of Music (1981);
University of Toledo, BM;
University of Louisville, MM;
University of Arizona, DMA
Stephen J. Snyder,
Assistant Professor of Psychology
(1982); Cedarville College, BA;

Trinity Evangelical Divinity
School, MA

## E. Richard Squiers,

Professor of Biology and Director of the Environmental Science Program (1976); State University of New York at Binghamton, BA; Rutgers University, MS; Ohio University, PhD

Kenneth D. Swan,
Professor of English (1968); Olivet Nazarene College, BA; Ball State University, MA, PhD.

Melanie A. Taylor,
Residence Hall Director and
Instructor (1984); Asbury College, BA; Ball State, MA

Marilyn A. Walker,
Associate Professor of
Communication Arts (1969); Ball
State University, BSEd; Indiana
University, MA
John W. Wallace, ACSW,
Assistant Professor of Social Work (1977); Asbury College, BA; University of Pittsburg, MSW

Lois A. Weed,
Assistant Librarian and Associate Professor (1953); Taylor
University, BA; University of Kentucky, MSLS

Dale E. Wenger
Associate Professor of Mathematics (1963); Manchester College, BS; Ohio University, MS

## Professors Emeriti

Hazel E. Carruth,
English - 32 years of service
Frances W. Ewbank,
English - 18 years of service
George E. Fenstermacher,
English and German - 25 years of service

Alice K. Holcombe,
Library - 35 years of service
Gordon M. Krueger,
Chemistry - 24 years of service
Herbert G. Lee,
English - 19 years of service

John W. Wheeler,
Assistant Professor of Business
(1984); Central Wesleyan College,

BA; Virginia Polytechnic, MA

## Andrew P. Whipple,

Associate Professor of Biology
(1984); Ohio State University, BS;

State University of New York at Albany, MS, PhD; Post doctoral research at Harvard Medical School

Arthur J. White,
Assistant Professor of Information Sciences (1984); Christian
Heritage College, BS; Ball State University, MS, MS, Ph.D.

Alan H. Winquist,
Professor of History (1974);
Wheaton College, AB;
Northwestern University, MAT;
New York University, PhD

## Larry E. Winterholter,

Head Baseball Coach, and Associate Professor of Physical Education (1979); Taylor University, BS; Illinois State University, MS

Jennie A. Lee,
Education - 23 years of service
Elmer N. Nussbaum,
Plysics - 31 years of service
Don J. Odle,
Physical Education - 32 years of service

Elisabeth Poe,
Biology - 30 years of service
Milo A. Rediger
Religion and President Emeritus 38 years of service

Carl W. Rice,
Education - 16 years of service

## Laurie J. Wolcott,

Technical Services Librarian and Assistant Professor (1983); Taylor University, BS; Ball State
University, MLS

## Robert C. Wolfe,

Associate Professor of Chemistry and Physics (1962); Taylor University, BSEd; Indiana University, MA

Jill A. Wyant,
Volleyball/Women's Track Coach, Instructor of Health, Physical
Education, and Recreation (1984);
Marion College, BS; Ball State
University, MA
Julie D. Young,
Residence Hall Director and Instructor (1984); Taylor
University, BA; Azusa Pacific
College, MA
Daniel Yutzy,
Professor of Sociology (1976);
Eastern Mennonite College, BA;
Ohio State University, MA, PhD

## Frank W. Roye,

Sociology - 27 years of service
Harold Z. Snyder,
Biology - 23 years of service
Hilda L. Steyer,
Music - 30 years of service
Charles R. Wilson,
Religion and Philosophy - 18 years of service

Vida Wood,
Biology - 16 years of service



Charles H. Aust, Medical Technology

## William Bauer,

Health, Physical Education $\mathcal{E}$
Recreation
Nancy Beck,
Music
John Bell,
Business, Accounting \& Economics

## David Blakley,

Music
George E. Branam,
Medical Technology
James R. Browne,
Business, Accounting \& Economics
Bruce Campbell, Art

Connie Christner,
Music
Janice Craig,
Medical Technology
Penny Dimmick,
Music
Steve Dingledine, Music

Fritz Dolak,
Music

## Donna Doty,

Music

## Frances Ewbank,

Honors Program
Bettylyn M. Hanna,
Medical Technology

Donna Haviland, Communication Arts

Kathy Herrmann, Art

Artis Hoffmann,
Modern Languages

## Jamie Johnson,

Music
Helen Kellogg, Music

Dorothy Leblanc,
Health, Physical Education $\mathcal{E}$ Recreation

Doris Mathews,
English
Tim McGinley,
Music
Betty Mealy,
English
Virginia Miller,
Religion
John Moore,
Information Sciences
Patricia A. Mullenix, Medical Technology

## Gerritt Quelle,

Modern Languages
Kay Rehner,
Communication Arts
Shirley Replogle,
Medical Technology
Robert Rodman,
Information Sciences

Max Rudicel,
Medical Technology

## Louis Schneider,

Medical Technology
Dale M. Schulz, Medical Technology

Alan Severs, Music

Darlene Shulze,
Mathematics
Patricia Stanley,
Mathemetics
Daryl Smith,
Medical Technology
Rebecca Stanislaw,
English
Tom Steffen,
Public Speaking
Sandra S. Stump,
Medical Technology
Morris Thompson,
Religion \& Philosophy
Robert Thompson,
Music
Cheryl Tilford,
Medical Technology
Constance Wall,
Medical Technology
Shawncey Webb,
Modern Languages
Diane Whitlock,
Medical Technology

Part-time
Instructors


## Index



| sification of Students .... 39 | Grants ..................... . 36 |
| :---: | :---: |
| College Community Life .... 17 | Greek ..................... 118 |
| College-Level Examination | Grievances ................ 47 |
| Program (CLEP) ....... 28, 29 | Guest Student Status ....... 39 |
| Comprehensive | Guided Student Status ...... 39 |
| Examinations ............ 46 |  |
| Communication Arts Studies . 68 | Hall Regulations . . . . . . . . . 25 |
| Community Housing ....... 25 | Health, Physical Education and |
| Community Life Statement . 19 | Recreation |
| Computer Science ....... 93, 97 | Health Service .............. 19 |
| Continuing Student | History .................. 9, 91 |
| Status .................. 127 | Honors Program . . 33, 39, 46, 48 |
| Continuing Education .... 13, 39 | Housing .................. 24 |
| Correspondence Study ...... 28 | Housing Deposit ........... 24 |
| Costs ..................... . 29 |  |
| Counseling and Psychological | Incompletes . . . . . . . . . . . . . 41 |
| Services Center ........... 19 | Independent Study ......... 52 |
| Courses of lnstruction . . . . . . 51 | Individual, Goal-Oriented |
| Credits-in-Escrow Program .. 12 | Major .................. 49 |
| Cultural Activities .......... 17 | Information Directory ........ 3 |
|  | Information Sciences . . . . . . . 93 |
| Dean's List ................. 41 | Insurance ................. 30 |
| Debate $\ldots \ldots \ldots \ldots \ldots \ldots \ldots .{ }^{\text {c }} 70$ | Inter-Area Studies ......... 126 |
| Degree Requirements . 43, 45, 51 | Intercollegiate Athletics ..... 42 |
| Degrees ................. . 51, 52 | International Students ... 19, 27 |
| Deposit Refunds ............ 29 | International Study ..... . 12, 81 |
| Directed Research .......... 52 | Interterm .................. 12 |
| Divisions ................ 137 |  |
| Double Majors ...... 43, 46, 51 |  |
| Drama . . . . . . . . . . . . . . . 68, 72 |  |
| Dropping Courses ....... 31, 41 | Language |
|  | Requirements ... 45, 100, 118 |
| Early Childhood Education .. 76 | Late Registration ........ 30, 43 |
| Economics ................ 64 | Law ...................... . 130 |
| Education ................. 73 | Library . . . . . . . . . . . . . . . . 13 |
| Eligibility Requirements ..... 42 | Library Research ....... 14, 127 |
| Employment . . . . . . . . . . . . . 37 | Loans ..................... 36 |
| Engineering . . . . . . . . . . . . . . 129 |  |
| English ................ 45, 81 | Majors . . . . . . . . . . . . . . 49, 51 |
| English Proficiency ........ 45 | Map .......... Inside Back Cover |
| Ensembles (Music) . . . . 106, 107 | $\text { Mass Communication .... 68, } 70$ |
| Environmental Science ... 56, 84 | $\text { Mathematics ............ 45, } 97$ |
| Examinations ........ 28, 29, 46 | Media ..................... 70 |
|  | Medical .................... 19,130 |
| Expectations ........... 19, 22 | Medical Technology ........ 131 |
|  | Mid Term Reports ......... 42 |
| Faculty ................... 137 | Minors ...... 52, 74, 75, 76, 105 |
| Fees . . . . . . . . . . . . . . . . . . . 29 | Mission ..................... 9 |
| Financial Aid ............... 32 | Modern Languages ........ 100 |
| Financial Information ....... 29 | Multicultural Philosophy |
| Fine Arts ................. 126 | Statement ................ . 19 |
| French . . . . . . . . . . . . . . . . . 101 | Music ................... 103 |
| General Education | Natural Resources .......... 13 |
| Requirements ......... 43, 44 | Natural Science Major ...... 128 |
| General Information .. 9, 39,46 | Non-Departmental Courses . 127 |
| Geography ................. . 86 | Nondiscrimination Policy .. 1, 23 |
| German ................... . 101 | Notification of Admission ... 28 |
| Grading System ............ 40 | Nursing ................. 133 |
| Graduation ......... 30, 41, 46 |  |
| Graduation Evaluation ...... 46 | Organizations ............. 18 |
| Graduation Honors ........ 46 | Orientation ......... 9, 10, 127 |

College Community Life .... 17 Greek ........................ 118
Grievances . . . . . . . . . . . . . . . . . 47
Guest Student Status ........ 39
Guided Student Status ....... 39

Hall Regulations . . . . . . . . . . . . 25
Health, Physical Education and
Recration ................... 86
History . . . . . . . . . . . . . . . . . 9, 91
Honors Program . . 33, 39, 46, 48
Housing ....................... 24

Incompletes . . . . . . . . . . . . . . . . 41
Independent Study . . . . . . . . . 52
Individual, Goal-Oriented
Major ...................... 49
Information Directory ......... 3
Information Sciences . . . . . . . . 93
nsurance ....... ......... 30

Intercollegiate Athetics .....
International Students ... 19, 27
International Study . . . . . . 12, 81
Interterm ..................... . . 12
Journalism .................. 70
Language
Requirements . . . 45, 100, 118
Law Registation .......... 30, 130
Library . . . . . . . . . . . . . . . . . . . . 13
Library Research . . . . . . . . 14, 127
Loans ......................... . . . 36
Majors . . . . . . . . . . . . . . . . . 49, 51
Map . . . . . . . . . Inside Back Cover
Mathematics
Media . . . . . . . . . . . . . . . . . . . . . 70
Medical Technology . . . . . . . . 131
Mid Term Reports . . . . . . . . . . 42
Minors . . . . . . 52, 74, 75, 76, 105
Modern Languages ........ 100
Multicultural Philosophy
Statement . . . . . . . . . . . . . 19
Music . . . . . . . . . . . . . . . . . . . . 103
Natural Resources ........... . 13
Natural Science Major . . . . . . 128
Non-Departmental Courses . 127
Nondiscrimination Policy .. 1, 23
Notification of Admission ... 28
Nursing . . . . . . . . . . . . . . . . . . 133
Organizations $\ldots \ldots . . . . .18$
Orientation $\ldots \ldots . .9,10,127$
Registration ..... 41, 42
Registration Change Fee ..... 30
Religion and Philosophy ..... 17
Religious Studies ..... 120
Repeated Courses ..... 42
Residence Life ..... 17
Residence Requirements ..... 25
Room Assignments ..... 25
Room Furnishings ..... 25
Scholarships ..... 33
Second Degree ..... 43
Selected Topics ..... 42
Seminar ..... 127, 128
Senior Seminar ..... 128
Social Activities ..... 17
Social Work ..... 122
Sociology ..... 125
Spanish ..... 101
Special Examinations ..... 29
Speech ..... 69
Student Life ..... 17, 19
Student Ministries ..... 17
Student Teaching ..... 29, 74, 80
Summer School ..... 12
Political Science ..... 1
Practicum Courses ..... 8, 52
Pre-Engineering Program
130
Pre-Law Program

Pre Medical Trogran
Pre-Medical Technology Program ..... 131
Pre-Nursing Program ..... 133
Pre-Professional Studies ..... 52, 129
Pre-Theological Program ..... 133
Printed Media ..... 17, 68
Private Music Lessons ... ..... 29, 106
114
Publi ..... 18
Radio ..... 68, 70
Refund Policy ..... 29, 31
Parental Authonity42
Payment of Bills111, 117, 12Physical Education
Suspension ..... 41
Systems ..... 96
Taylor University Today ..... 9
Teacher Education ..... 74
Television ..... 69
Theatre ..... 14, 71
Theology ..... 17, 133
Time Payment Plan ..... 31
4047
Transcripts
28, 73
Transfer Students ..... 135
Tuition ..... 29
Tuition Free Summer
Programs ..... 28
Tutorial ..... 52
Undergraduate Program ..... 12
Unexcused Absences ..... 47
Wandering Wheels ..... 19
Wesleyan Urban Coalition ..... 12
Withdrawal Procedures ..... 31, 41
Work-Study Program ..... 37
Worship ..... 17




 Proposed major: (Please Circle)

100ч ${ }^{5}$ 48!
d!z
Street Address Area/Home Phone
(gulad aseaj) auen


Parental Authority .......... 24
Pass/Fail Courses ............ 42
Payment of Bills ............. 31
Philosophy ...... 111, 117, 121
Physical Education
(See Health) .................. 86
(See Health) .................. 86
Placement ........... 25, 29, 77
Political Science ............ 113
Practicum Courses ....... 48, 52
Pre-Engineering Program ... 129
Pre-Law Program .......... . 130
Pre-Medical Program ....... 130
Pre-Medical Technology
Program ................. 131
Pre-Nursing Program ...... 133
Pre-Professional Studies . 52, 129
Pre-Theological Program .... 133
Printed Media ........... . 17, 68
Private Music Lessons ... 29, 106
Probation ................... 41
Psychology .................. 114
Publications .................. . 18
Radio $\ldots . . . . . . . . . . . . . . . .68, ~ 29, ~$
Refund Policy $\ldots \ldots \ldots$

Registration ............. 41, 42
Registration Change Fee .... 30
Religion and Philosophy ... 117
Religious Studies .......... 120
Repeated Courses .......... 42
Residence Life ................. . 17
Residence Requirements .... 25
Room Assignments ......... 25
Room Furnishings ........... 25

Scholarships ................ 33
Second Degree .............. 43
Selected Topics .............. 42
Seminar ............... 127, 128
Senior Seminar . ............ 128
Social Activities ............... 17
Social Work .................. . 122
Sociology ................... 125
Spanish ..................... 101
Special Examinations . . . . . . . . 29
Speech ........................ 69
Student Life .............. 17, 19
Student Ministries .......... 17
Student Teaching .... 29, 74, 80
Summer School ............. 12
Suspension ..... 41
Systems ..... 96
Taylor University Today ..... 9
Teacher Education ..... 74
Television ..... 69
Theatre ..... 14, 71
Theology ..... 117, 133
Time Payment Plan ..... 31
Transcripts ..... 40, 47
Transfer Students ..... 28, 73
Trustees ..... 135
Tuition ..... 29
Tuition Free Summer Programs ..... 28
Tutorial ..... 52
Undergraduate Program ..... 12
Unexcused Absences ..... 47
Wandering Wheels ..... 19
Wesleyan Urban Coalition ..... 12
Withdrawal Procedures
37
Work-Stu
Worship ..... 17




[^0]:    *Subject to approval by Parents Cabinet

[^1]:    Other Requirements Two (2) courses designated as "WR" (writing)
    Two (2) courses designated as "SP" (public speaking)
    Entry Tests are required in Math, English, and Bible. Language is required for a BA degree, although not technically a component of General Education.

    COMPUTER SCIENCE is required either by passing a computer literacy test or taking a computer science course.

