

1959

Bulletin of the University of Nebraska: Annual Catalog of the College of Medicine, 1959-1960

University of Nebraska College of Medicine

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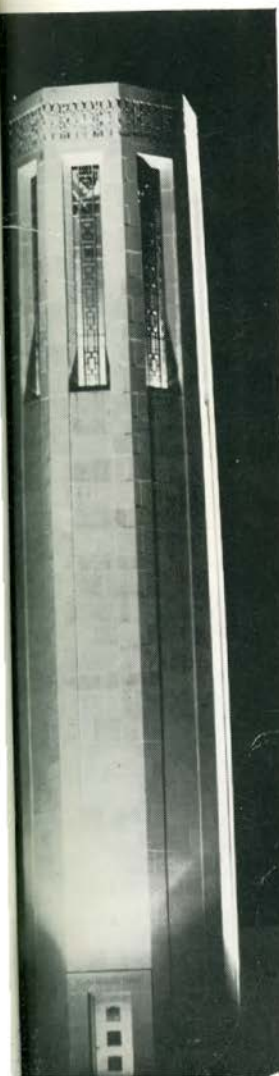
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BULLETIN OF THE
UNIVERSITY OF NEBRASKA

ANNOUNCEMENTS *1959* | *1960*

**College of
Medicine**

Omaha



THE HIPPOCRATIC OATH FORMULATED AT GENEVA*

Now being admitted to the profession of medicine I solemnly pledge to consecrate my life to the service of humanity. I will give respect and gratitude to my deserving teachers. I will practice medicine with conscience and dignity. The health and life of my patient will be my first consideration. I will hold in confidence all that my patient confides in me. I will maintain the honor and the noble traditions of the medical profession. My colleagues will be as my brothers. I will not permit considerations of race, religion, nationality, party politics or social standing to intervene between my duty and my patient. I will maintain the utmost respect for human life from the time of its conception. Even under threat I will not use my knowledge contrary to the laws of humanity. These promises I make freely and upon my honor.

* Adopted by the Second General Assembly of the World Medical Association held in Geneva, Switzerland, September 8 to 11, 1948

college of medicine
1959-1960
course offerings

SERIES LXIV

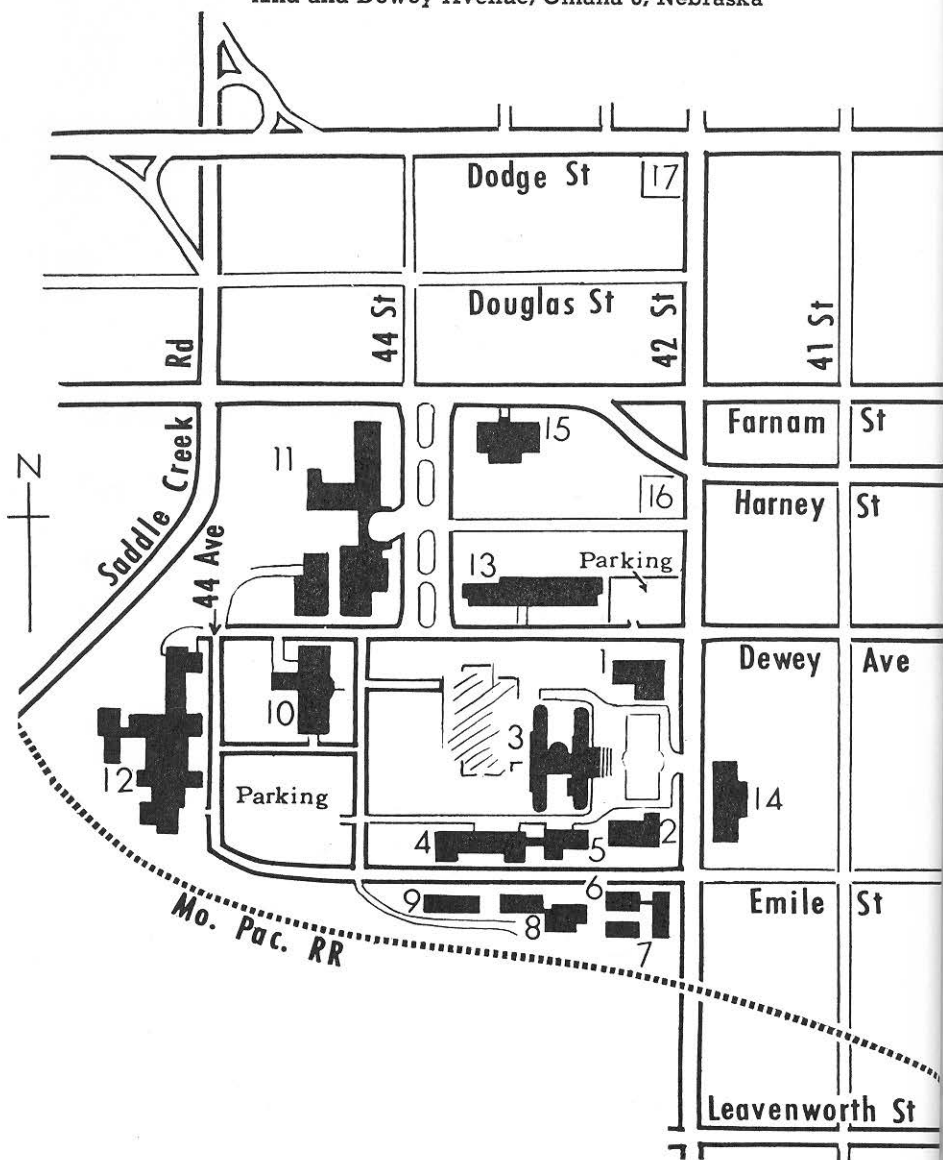
AUGUST 5, 1959

NUMBER 17

Issued 3 times a month in January, February and March; semi-monthly in April and December; monthly in May, July, August, and November by the University of Nebraska Office of Publications, Administration Building, 14th and R Sts., Lincoln 8, Nebraska. Second-class postage paid at Lincoln, Nebraska.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE CAMPUS

42nd and Dewey Avenue, Omaha 5, Nebraska



- | | |
|--|---|
| 1. North Lab | 10. Children's Memorial Hospital |
| 2. South Lab | 11. Children's Rehabilitation Center |
| 3. University Hospital | 12. Nebraska Psychiatric Institute |
| 4. School of Nursing | 13. Clarkson Hospital |
| 5. Conkling Hall | 14. Child Saving Institute |
| 6. Service Building (Cardiovascular Lab) | 15. Doctor's Building |
| 7. Shops, Laundry, Warehouse | 16. Nebraska Division, American Heart Association |
| 8. Power Plant | 17. Nebraska Division, American Cancer Society |
| 9. Memorial Research Lab | |

COLLEGE OF MEDICINE CALENDAR

ACADEMIC YEAR 1959-60

Freshmen and Sophomores

Sept. 22, Tues.	Sophomore registration
	First half of tuition due
Sept. 24, Thurs.	Freshman orientation and registration. First half of tuition due
Sept. 28, Mon.	Fall quarter classes begin
Nov. 26-29, Thurs. through Sun.	Thanksgiving vacation
Dec. 20-Jan. 3, Sun. through Sun.	Christmas vacation
Feb. 1, Mon.	Balance of tuition due
April 15-17, Fri. through Sun.	Spring vacation
May 30, Mon.	Memorial Day holiday
June 11, Sat.	Academic year ends

Juniors

Aug. 31, Mon.	Registration—first half of tuition due
	Classes begin 1:00 P.M.
Nov. 26-29, Thurs. through Sun.	Thanksgiving vacation
Dec. 20-Jan. 3, Sun. through Sun.	Christmas vacation
Feb. 1, Mon.	Balance of tuition due
April 15-17, Fri. through Sun.	Spring vacation
May 30, Mon.	Memorial Day holiday
June 11, Sat.	Academic year ends

Seniors

July 6, Mon.	Clinical assignments begin
Aug. 24, Mon.	Didactic exercises begin
Sept. 7, Mon.	Labor Day holiday
Nov. 26-29, Thurs. through Sun.	Thanksgiving vacation
Dec. 20-Jan. 3, Sun. through Sun.	Christmas vacation
Feb. 1, Mon.	Balance of tuition due
Feb. 29, Mon.	Degree application due
April 15-17, Fri. through Sun.	Spring vacation
May 30, Mon.	Memorial Day holiday
June 4, Sat.	Clinical and didactic exercises end
June 6-11, Mon. through Sat.	Senior Week
June 11, Sat.	Commencement

Graduate Students

Sept. 14-19, Mon. through Sat.	Fall quarter registration
Dec. 14-19, Mon. through Sat.	Winter quarter registration
March 14-19, Mon. through Sat.	Spring quarter registration

Special Days

Nov. 1, Sun.	Family Day
April 23, Sat.	Pre-Medic and Pre-Nursing Day

ADMINISTRATION

The Board of Regents

	<i>Term Expires</i>
J. Leroy Welsh, Omaha.....	January 1961
Clarence E. Swanson, Lincoln.....	January 1961
Frank Foote, Axtell.....	January 1963
J. G. Elliott, Scottsbluff.....	January 1963
B. N. Greenberg, M.D., York.....	January 1965
Richard E. Adkins, Osmond.....	January 1965
John Kent Selleck, Lincoln, Corporation Secretary	

The University

- Clifford Morris Hardin, B.Sc., M.Sc., Ph.D., Chancellor of the University.
Adam Carlyle Breckenridge, Ph.D., Dean of Faculties.
James Pittinger, B.Sc., Assistant to the Chancellor.
James Perry Tollman, B.Sc., M.D., Dean of the College of Medicine and Superintendent of the University Hospital.
James Winfred Benjamin, B.A., M.A., Ph.D., Assistant Dean of the College of Medicine.
J. Philip Colbert, B.Sc., M.Sc., Dean of the Division of Student Affairs.
Floyd Hoover, Ph.D., Registrar.

Emeriti Faculty

- John Franklin Allen, B.Sc., M.D., Professor of Clinical Medicine, Emeritus, and Director of Student Health Service, Emeritus.
Elmer William Bantin, B.Sc., M.D., Assistant Professor of Pediatrics, Emeritus.
*Rodney Waldo Bliss, A.B., M.D., Professor of Medicine, Emeritus.
John Francis Bresnahan, B.Sc., M.Sc., M.D., Instructor in Internal Medicine, Emeritus.
Alfred Jerome Brown, A.B., M.D., Professor of Surgery, Emeritus.
George Worthington Covey, B.Sc., M.D., Clinical Associate Professor of Internal Medicine, Emeritus.
Harold Everett Eggers, A.M., M.D., Professor of Pathology and Bacteriology, Emeritus.
Harry Evans Harvey, B.Sc., M.D., Clinical Associate Professor of Obstetrics and Gynecology, Emeritus.
Lloyd Oliver Hoffman, M.D., Associate in Surgery, Emeritus.
Charles Franklin Moon, B.Sc., M.D., Professor of Obstetrics and Gynecology, Emeritus.
John Clyde Moore, Jr., A.B., B.Sc., M.D., Professor of Pediatrics, Emeritus.
Sergius Morgulis, A.M., Ph.D., Professor of Biochemistry, Emeritus.
Reuben Allyn Moser, B.A., M.D., Associate Professor of Internal Medicine, Emeritus.
Charles Austin Owens, B.Sc., M.D., Associate Professor of Urology, Emeritus.
Abraham Srol Rubnitz, A.B., M.D., Assistant Professor of Pathology and Bacteriology, Emeritus.
Robert D. Schrock, A.B., M.D., Professor of Orthopedic Surgery, Emeritus.
William Lete Shearer, A.B., D.D.S., M.D., Professor of Surgery, Emeritus.
Robert James Stearns, M.D., Assistant Professor of Obstetrics and Gynecology, Emeritus.
Chester Hill Waters, Sr., B.Sc., M.D., Professor of Surgery, Emeritus.
William Albert Willard, Ph.D., Professor of Anatomy, Emeritus.

* Deceased September 5, 1958.

Senior Consultants

- Arthur Wesley Anderson, Sr., B.A., M.D., Clinical Associate in General Practice, Senior Consultant.
- Maine C. Andersen, M.D., Assistant Professor of Internal Medicine, Senior Consultant.
- Gordon Newell Best B.Sc., M.D., Assistant Professor of Internal Medicine, Senior Consultant.
- George Leonard Clark, B.Sc., M.D., Assistant Professor of Pediatrics, Senior Consultant.
- Edwin Davis, B.A., M.D., Professor of Urology, Senior Consultant.
- Herbert Haywood Davis, M.D., Professor of Surgery, Senior Consultant.
- John Calvin Davis, Jr., A.B., M.D., Professor of Otorhinolaryngology, Senior Consultant.
- Herman Mandel Jahr, M.D., Professor of Pediatrics, Senior Consultant.
- J. Jay Keegan, A.B., A.M., M.D., Professor of Surgery, Senior Consultant.
- *Antonius Andrew Larsen, B.Sc., M.D., Clinical Associate in General Practice, Senior Consultant.
- Ralph Herbert Luikart, M.D., Professor of Obstetrics and Gynecology, Senior Consultant.
- Ernest Lynn MacQuiddy, A.M., M.D., Professor of Internal Medicine, Senior Consultant.
- James Sylvester McAvin, Ph.G., M.D., Associate in Radiology and Physical Medicine, Senior Consultant.
- Willson Bridges Moody, A.B., M.D., Professor of Internal Medicine, Senior Consultant.
- Floyd Joshua Murray, B.Sc., M.D., Associate in Surgery, Senior Consultant.
- Friedrich Wilhelm Niehaus, B.Sc., M.D., Professor of Internal Medicine, Senior Consultant.
- Sidney O. Reese, B.Sc., M.D., Clinical Associate Professor of Surgery, Senior Consultant.
- Oliver Francis Reihart, D.V.S., Instructor in Pathology, Senior Consultant.
- Earl Cuddington Sage, B.Sc., M.D., Professor of Obstetrics and Gynecology, Senior Consultant.
- Donald Benjamin Steenburg, B.Sc., M.D., Clinical Associate in General Practice, Senior Consultant.
- Harry Allen Taylor, A.B., B.Sc. in Med., M.D., Senior Consultant.
- Chesler Quay Thompson, B.Sc., M.D., Associate Professor of Internal Medicine, Senior Consultant.
- Irwin Levi Thompson, B.Sc., M.D., Clinical Associate in General Practice, Senior Consultant.
- Warren Thompson, B.Sc., M.D., Professor of Internal Medicine, Senior Consultant.
- James E. M. Thomson, A.B., M.D., Clinical Associate Professor of Orthopedic Surgery, Senior Consultant.

Active Faculty

- Henry B. Adams, A.B., M.A., Ph.D., Instructor in Neurology and Psychiatry.
- Payson Stone Adams, B.Sc. in Med., M.D., Professor of Urology.
- Dean Craig Affleck, Ph.D., Assistant Professor of Medical Psychology, Neurology and Psychology.
- Herbert George Ahrens, B.Sc., M.D., Clinical Instructor in Internal Medicine.
- John Andrew Aita, Ph.D., M.D., Associate Professor of Neurology and Psychiatry.
- Leland Clayton Albertson, A.B., M.D., Instructor in Internal Medicine.
- George Thomas Alliband, B.Sc., M.D., Assistant Professor of Ophthalmology.
- Harley Eric Anderson, B.Sc. in Med., M.D., Associate Professor of Obstetrics and Gynecology.
- Lawrence Lloyd Anderson, A.B., M.D., Associate in Surgery.
- Thorwald Robert Anderson, A.B., M.D., Clinical Assistant Professor of Pathology.
- Carol Remmer Angle, A.B., M.D., Assistant Professor of Pediatrics.
- William Dodge Angle, B.Sc., M.D., Assistant Professor of Internal Medicine.
- Stanley Monrad Bach, A.B., M.D., Assistant Professor of Orthopedic Surgery and Anatomy.
- Marion Bacon, B.Sc., M.Sc., Ph.D., Assistant Professor of Microbiology.
- John William Ballew, B.Sc., M.D., Clinical Instructor in Obstetrics and Gynecology.
- Paul Martin Bancroft, B.Sc., M.Sc., M.D., Clinical Associate Professor of Pediatrics.
- Clarence Fredrick Bantin, B.Sc., M.D., Associate in Pediatrics.
- Anthony Joseph Barak, B.Sc., M.Sc., Ph.D., Assistant Professor of Biochemistry.
- John Lucian Barmore, M.D., Associate Professor of Surgery.
- Wilbur W. Bartels, A.B., M.D., Clinical Assistant Professor of Orthopedic Surgery.

* Deceased July 26, 1958.

- John Hodgson Barthell, M.D., Clinical Instructor in Dermatology and Syphilology.
 Meyer Beber, B.Sc., Ph.D., M.D., Associate Professor of Internal Medicine and Associate Professor of Biochemistry.
 Harold Beenken, B.Sc., Research Associate in Internal Medicine.
 James Winfred Benjamin, B.A., M.A., Ph.D., Associate Professor of Anatomy, Assistant Dean of the College of Medicine.
 Arthur Lawrence Bennett, A.B., Ph.D., M.D., Professor of Physiology and Pharmacology. (*Assistant Chairman of Department.*)
 Reba Ann Benschoter, M.S., Assistant Instructor in Medical Teaching Aids, Neurology and Psychiatry.
 Rolland Russell Best, B.Sc., M.D., Professor of Surgery and Assistant Professor of Anatomy.
 James Dewey Bisgard, A.B., M.D., Professor of Surgery.
 William Carl Boelter, B.A., M.D., Instructor in Obstetrics and Gynecology.
 Donald Robert Bohenkamp, Demonstrator in Bracing and Prosthetics, Rehabilitation and Physical Medicine.
 Warren Quentin Bradley, M.D., Clinical Instructor in Radiology.
 Russell Charles Brauer, M.D., Associate in Surgery.
 John Grierson Brazer, A.B., M.D., Associate Professor of Internal Medicine.
 I. William Brill, B.Sc., M.D., Assistant Professor of Neurology and Psychiatry.
 Herman Henry Brinkman, B.Sc. in Med., M.D., Clinical Assistant in Surgery.
 Marion Porter Broisma, A.B., B.Sc., M.D., Clinical Instructor in Internal Medicine.
 Kenneth Murle Browne, M.Sc., M.D., Assistant Professor of Neurological Surgery and Adjunct Instructor in Physiology and Pharmacology.
 Karl Wayne Bruce, B.Sc., M.Sc., D.D.S., Instructor in Surgery.
 John Hobart Brush, A.B., M.D., Assistant Professor of Surgery.
 Donald John Bucholz, A.B., M.A., M.D., Assistant Professor of Internal Medicine.
 William H. Bunstock, M.D., Assistant Instructor in Surgery.
 Richard Bunting, M.D., Instructor in Radiology.
 Dwight Willard Burney, Jr., A.B., M.D., Assistant Professor of Orthopedic Surgery and Assistant in Anatomy.
 David Samuel Burton, Demonstrator in Prosthetics, Rehabilitation and Physical Medicine.
 Olin James Cameron, M.S., M.D., Professor of Dermatology (*Chairman of Department.*)
 Louis Scott Campbell, B.Sc., M.D., Associate Professor of Orthopedic Surgery.
 Oscar Carp, B.Sc., M.D., Associate Professor of Otorhinology.
 James Goodlow Carter, B.A., M.D., Instructor in Anesthesiology in the Department of Surgery.
 Michael J. Carver, Ph.D., Assistant Research Professor of Biochemistry and Associate Professor of Neurology and Psychiatry.
 Waldron Alvin Cassidy, A.B., M.D., Professor of Otorhinolaryngology and Consultant in Bronchoscopy.
 LeGrande Dwight Cherry, B.Sc., M.D., Clinical Assistant Professor of Surgery.
 William John Chleborad, M.D., Assistant Instructor in Surgery.
 Robert Morris Cochran, B.Sc., M.D., Associate in Surgery and Instructor in Anatomy.
 John Daniel Coe, A.B., M.D., Assistant Professor of Surgery.
 Frank Cole, B.Sc., M.D., Clinical Associate in Surgery.
 Francis C. Coleman, M.D., Clinical Assistant Professor of Pathology.
 Robert Marshall Collins, B.Sc. in Med., M.D., Assistant Professor of Obstetrics and Gynecology.
 Walter Thomas Cotton, B.Sc. in Med., M.D., Assistant Professor of Obstetrics and Gynecology.
 Maldon B. Crabill, B.Sc., C.E., M.P.H., Lecturer in Preventive Medicine and Public Health.
 Michael Crofoot, A.B., M.D., Associate Professor of Pediatrics.
 Edmund Jesse Dailey, D.D.S., Assistant Professor of Dental Surgery.
 Louis T. Davies, A.B., B.Sc. in Med., M.A., M.D., Clinical Assistant Professor of Surgery.
 Herbert Leroy Davis, A.B., Ph.D., Associate Research Professor of Biochemistry and Associate Research Professor of Surgery.
 James Allan Davis, M.D., Associate in Otorhinolaryngology.
 John Byron Davis, M.D., Assistant Professor of Surgery.
 Neal Balbcah Davis, M.D., Associate in Urology.
 John Lage Dewey, A.B., M.D., Instructor in Internal Medicine.
 William John Dickerson, A.B., M.D., Associate in Internal Medicine.
 Violet DuBois, B.Sc., M.P.H.A., Lecturer in Preventive Medicine and Public Health.
 H. Dwyer Dundon, A.B., M.A., Assistant Professor of Psychiatric Occupational Therapy, Neurology and Psychiatry.

- Arthur Lovell Dunn, A.B., A.M., Ph.D., Assistant Professor of Biochemistry and Biophysics in Radiology.
- Frank Lowell Dunn, B.Sc., A.M., M.D., Professor of Internal Medicine and Associate Professor of Clinical Physiology and Chief Investigator Cardiovascular Teaching.
- Stephen John Dutch, Jr., A.B. M.D., Associate in Neurology and Psychiatry.
- Frank Lewis Eagle, B.Sc., M.D., Associate in Ophthalmology.
- Dale W. Ebers, B.Sc., M.D., Clinical Instructor in Pediatrics.
- Dorothea Mary Edwards, B.Sc., Instructor in Internal Medicine.
- Robert W. Ehrlich, A.B., M.Sc., M.D., Clinical Instructor in Surgery.
- Alfred George Ellick, A.B., J.D., Associate Professor of Medical Jurisprudence (*Chairman of Department.*)
- Robert James Ellingson, B.Sc., M.A., Ph.D., Associate Professor of Medical Psychology.
- Clarence Kilgore Elliott, A.B., M.D., Clinical Assistant Professor of Internal Medicine.
- H. Chandler Elliott, B.A., M.A., Ph.D., Associate Professor of Anatomy.
- Herman Charles Ellsworth, B.A., M.D., Clinical Associate in Radiology.
- Saeed M. Farhat, M.D., Assistant Instructor in Surgery.
- K. J. Fijan, B.Sc., M.D., Clinical Instructor in Pediatrics.
- John Clayton Filkins, B.Sc., M.D., Associate in Ophthalmology.
- Alister Ian Finlayson, M.A., M.D., Professor of Neurological Surgery.
- Donald Max Fitch, A.B., B.Sc., M.D., Associate in Pathology.
- Max Fleishman, M.D., Associate in Internal Medicine.
- Russel A. Forrest, M.D., Instructor in Internal Medicine.
- Miles E. Foster, A.B., B.Sc., M.D., Assistant Professor of Pathology.
- Muriel Naomi Frank, A.B., M.D., Associate in Anesthesiology.
- Maurice D. Frazer, B.Sc., M.D., Clinical Associate Professor of Radiology.
- Albert Edward Freed, B.Sc., M.D., Associate in Internal Medicine.
- John George Freeman, B.A., M.D., Lecturer in Neurology and Psychiatry.
- Fred J. Fricke, M.D., Associate in Rehabilitation and Physical Medicine.
- Raymond John Friel, B.Sc., M.D., Assistant in Anatomy.
- Dwight Maurice Frost, B.Sc. in Med., M.D., Assistant Professor of Rehabilitation and Physical Medicine (*Chairman of Department.*)
- Samuel Isaiah Fuennig, B.Sc., M.Sc., M.D., Clinical Assistant in Medicine.
- Charles Garetz, M.S.W., Instructor in Neurology and Psychiatry.
- Sol L. Garfield, Ph.D., Professor of Medical Psychology, Neurology and Psychiatry.
- Richard Earl Garlinghouse, A.B., M.D., Clinical Associate Professor of Obstetrics and Gynecology.
- Robert O. Garlinghouse, A.B., M.D., Clinical Assistant Professor of Surgery.
- John Leo Gedgoud, B.Sc., M.D., Professor of Pediatrics.
- John Harold George, M.D. Instructor in Obstetrics and Gynecology.
- Gordon Everett Gibbs, A.B., M.A., Ph.D., M.D., Professor of Pediatrics (*Chairman of Department.*)
- Horace Kerr Giffen, A.B., M.D., Assistant Professor of Pathology.
- Harold Gifford, Jr., B.Sc. in Med., M.D., Associate Professor of Ophthalmology.
- Louis Gilbert, A.B., M.D., Clinical Instructor in Urology.
- Ray O'Herin Gillies, M.D., Associate in Otorhinolaryngology.
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- Robert Leslie Grissom, B.Sc., M.D., Professor of Internal Medicine (*Chairman of Department.*)
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- Denham Harman, M.D., Associate Professor of Biochemistry and Associate in Internal Medicine.
- Charles Robert Hankins, A.B., M.D., Assistant Professor of Internal Medicine.

- Florence Marie Hansen, B.A., M.S.S.A., Lecturer in Medical Social Service Rehabilitation and Physical Medicine.
- Hodson Arthur Hansen, B.Sc., M.D., Clinical Instructor in Obstetrics and Gynecology.
- Harold Elmer Harvey, A.B., M.D., Clinical Instructor in Obstetrics and Gynecology.
- George James Haslam, M.D., Assistant Instructor in Pathology.
- Lyman Howard Heine, A.B., M.D., Assistant Professor of Otorhinolaryngology.
- Malcolm M. Helper, Ph.D., Associate in Neurology and Psychiatry.
- Marj J. Henn, M.D., Assistant Professor of Internal Medicine.
- Bernice Martin Hetzner, B.A.L.S., M.A., Associate Professor of Library Science.
- Marion Robert Hicks, M.Sc., Assistant Instructor in Pathology.
- Robert Antoine Hillyer, B.A., M.D., Clinical Instructor in Surgery.
- Hiram David Hilton, B.A., M.D., Clinical Assistant Professor of Surgery.
- Donald Vincent Hirst, A.B., M.D., Instructor in Obstetrics and Gynecology.
- Roy Groves Holly, B.Sc., Ph.D., M.D., Professor of Obstetrics and Gynecology (*Chairman of Department.*)
- Joseph Michael Holthaus, B.Sc. in Med., M.D., Assistant Professor of Internal Medicine.
- Edward Augustus Holyoke, B.Sc., M.A., Ph.D., M.D., Professor of Anatomy.
- Leo Thomas Hood, M.D., Assistant Professor of Orthopedic Surgery.
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- Thomas Wellington Howell, M.D., Instructor in Internal Medicine.
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- Theodore Franklin Hubbard, A.B. M.Sc., M.D., Associate Professor of Internal Medicine.
- Wayne McKinley Hull, B.A., B.Sc. in Med., M.Sc., M.D., Assistant Professor of Internal Medicine.
- Fred Ludwig Humoller, B.Sc., Ph.D., Associate Research Professor of Chemical Physiology and Pharmacology.
- Herbert Haynes Humphreys, A.B., M.A., Ph.D., Associate Professor of Medical Psychology, Neurology and Psychiatry.
- Howard Beeman Hunt, A.M., M.D., Professor of Radiology (*Chairman of Department*), and Professor of Rehabilitation and Physical Medicine.
- Charles Gregory Ingham, M.D., Associate in Neurology and Psychiatry.
- Donald Robert Jackson, A.B., M.D., Associate in Internal Medicine.
- Herbert Paul Jacobi, B.Sc., M.Sc., Ph.D., Professor of Biochemistry (*Chairman of Department.*)
- Lawrence Royce James, B.Sc., M.D., Clinical Instructor in Radiology.
- George Nick Johnson, M.D., Assistant Professor of Surgery.
- Herman Frank Johnson, M.D., Professor of Orthopedic Surgery.
- Robert Dale Jones, M.D., Associate in Neurology and Psychiatry.
- Robert Eric Joranson, B.Sc., M.D., Associate in Internal Medicine.
- John Hewitt Judd, B.Sc., M.D., Professor of Ophthalmology. (*Chairman of Department.*)
- Henry Kammandel, B.Sc., M.D., Assistant Professor of Urology.
- John Charles Kennedy, B.Sc. in Med., M.A., M.D., Associate Professor of Surgery.
- Kisik Kim, M.D., Research Assistant in Neurology and Psychiatry.
- Kenneth Francis Kimball, B.A., M.D., Instructor in Surgery.
- Esley Joseph Kirk, A.B., M.D., Associate Professor of Medicine.
- Frank Klabenes, B.Sc. in Med., M.D., Associate Professor of Otorhinolaryngology (*Chairman of Department.*)
- William Philip Kleitsch, M.D., Assistant Professor of Surgery.
- George John Klok, A.B., B.Sc., M.D., Assistant Professor of Pediatrics.
- James LeRoy Knott M.D., Instructor in Internal Medicine.
- James Robert Kovarik, B.Sc. in Med., M.D., Associate in Obstetrics and Gynecology.
- Thaddeus P. Krush, B.Sc., M.D., Associate Professor of Neurology and Psychiatry and Clinical Director of Community Services, Nebraska Psychiatric Institute.
- Morton Howard Kulesh, A.B., M.D., Assistant Professor of Pathology.
- Benton Kutler, A.B., D.D.S., Instructor in Surgery and Preventive Medicine and Public Health.
- Marion Labusohr, B.A., Lecturer in Occupational Therapy, Rehabilitation and Physical Medicine.
- Charles William Landgraf, B.Sc., M.D., Instructor in Neurology and Psychiatry.
- Gerard R. F. Landry, M.D., Instructor in Anesthesiology, Department of Surgery.
- John LeRoy Lang, M.D., Assistant Instructor in Pathology.
- Edward Langdon, B.Sc., M.D., Assistant Professor of Internal Medicine.
- John Francis Latenser, M.D., Associate in Surgery.
- John Stephens Latta, Ph.D., Professor of Anatomy. (*Chairman of Department.*)

- Jerome L. L'Ecuyer, M.D., Instructor in Pediatrics.
- Leroy William Lee, B.Sc. in Med., M.S., M.D., Professor of Urology. (*Chairman of Department.*)
- Henry John Lehnhoff, Jr., A.B., M.D., Associate Professor of Internal Medicine.
- Raymond Gerald Lewis, A.B., B.Sc., M.D., Assistant Professor of Internal Medicine.
- George William LeWorthy, A.B., M.D., Clinical Instructor in Surgery.
- Robert Stanley Long, B.Sc., M.D., Assistant Professor of Internal Medicine.
- George Walter Loomis, A.B., M.D., Assistant Professor of Internal Medicine.
- Robert Ellsworth Lovgren, B.Sc., M.D., Associate Professor of Otorhinolaryngology.
- Burdette W. Lundy, Ph.D., Instructor in Neurology and Psychiatry.
- G. Prentiss McArdle, B.Sc., M.D., Lecturer in Public Health and Preventive Medicine.
- John O. McCarthy, M.D., Assistant Instructor in Obstetrics and Gynecology.
- Joseph Daniel McCarthy, M.D., Professor of Internal Medicine.
- Harry Webber McFadden, A.B., M.D., Professor of Medical Microbiology (*Chairman of Department.*)
- Kenneth T. McGinnis, B.Sc., M.D., Clinical Assistant Professor of Obstetrics and Gynecology.
- Leon Steiner McGoogan, A.B., M.D., Professor of Obstetrics and Gynecology.
- Archibald Ross McIntyre, Ph.D., M.D., Professor of Physiology and Pharmacology. (*Chairman of Department.*)
- Charles William McLaughlin, Jr., B.Sc. in Med., M.D., Professor of Surgery.
- George Boone McMurtry, B.Sc., M.D., Assistant Professor of Surgery.
- Clarence Austin McWhorter, B.Sc. in Med., M.D., Professor of Pathology.
- Reginald Anslow MacHaffie, B.Sc., M.A., M.D., Instructor in Internal Medicine.
- Ernest Lynn MacQuiddy, Jr., A.B., M.D., Associate in Internal Medicine.
- Bernard Magid, M.D., Clinical Instructor in Obstetrics and Gynecology.
- Frank Majka, B.Sc., M.D., Assistant Professor of Neurology and Psychiatry.
- Edward Marvin Malashock, B.A., M.D., Assistant Professor of Urology.
- Morris Margolin, A.B., M.D., Assistant Professor of Internal Medicine.
- Strother Barton Marshall B.A., M.D., Instructor in Surgery.
- Harold R. Martin, B.Sc., M.D., Associate Professor of Neurology and Psychiatry and Clinical Director In-services, Nebraska Psychiatric Institute.
- Paul J. Maxwell, M.D., Clinical Instructor in Internal Medicine.
- Morris Meiberger, M.D., Instructor in Internal Medicine.
- Norman Alvin Milgram, Ph.D., Instructor in Medical Psychology, Department of Neurology and Psychiatry.
- Daniel Martin Miller, B.Sc., M.D., Assistant Professor of Surgery.
- Norman Gustav Miller, Ph.D., Associate Professor of Medical Microbiology.
- Clinton Charles Millett, B.Sc., M.D., Clinical Assistant in Internal Medicine.
- Howard Eugene Mitchell, M.D., Clinical Assistant Professor of Orthopedic Surgery.
- Samuel F. Moessner, B.Sc., M.D., Clinical Instructor in Surgery.
- Ralph Cory Moore, B.Sc., M.D., Professor of Radiology.
- Harold Smith Morgan, M.D., Clinical Associate Professor of Obstetrics and Gynecology.
- Haskell Morris, A.B., M.D., Assistant Professor of Internal Medicine and Director of Student Health Service.
- William Howard Morrison, B.Sc. in Med., M.D., Associate Professor of Ophthalmology.
- Paul Newton Morrow, A.B., B.Sc. in Med., M.D., Associate Professor of Pediatrics.
- Herschel B. Morton, B.Sc., M.D., Clinical Associate Professor of Surgery.
- Robert Benton Muffly, M.D., Instructor in Neurology and Psychiatry.
- Horace Varnum Munger, A.B., M.D., Clinical Assistant Professor of Urology.
- Nathan Muskin, A.B., M.D., Instructor in Internal Medicine.
- Merle McNeil Musselman, B.Sc., M.D., Professor of Surgery (*Chairman of Department.*)
- Orvis A. Neely, B.Sc., M.D., Clinical Assistant Professor of Radiology.
- Delbert Delose Neis, A.B., M.D., Assistant Professor of Surgery.
- Shirley Ann Nelson, A.B., M.S.W., Assistant Instructor in Neurology and Psychiatry.
- Yook C. Ng, Ph.D., Assistant Professor of Biochemistry.
- Oliver Clarke Nickum, A.B., M.D., Instructor in Internal Medicine.
- Donald Charles Nilsson, M.D., Assistant Professor of Pediatrics.
- William Edwin Nitzman, A.B., M.D., Assistant Professor of Internal Medicine.
- Byron Bay Oberst, M.D., Assistant Professor of Pediatrics.
- Richard Eugene Ogborn, B.A., B.Sc., M.Sc., M.D., Assistant Professor of Internal Medicine and Nuclear Medicine.
- Leland J. Olson, A.B., M.D., Associate in Obstetrics and Gynecology.
- Harlan Louis Papenfuss, A.B., M.D., Clinical Associate in Pathology.
- Orest Joseph Parrillo, M.D., Instructor in Internal Medicine.
- Frederick Franz Poustian, B.Sc., M.D., Instructor in Internal Medicine.
- Warren Harland Pearse, M.D., Instructor in Obstetrics and Gynecology.

- Paul David Pedersen, M.P.H., M.D., Instructor in Preventive Medicine.
- Earl Stanley Pederson, A.B., M.A., Ph.D., M.D., Associate Professor of Radiology and Assistant Professor of Anatomy.
- Maurice Lewis Pepper, B.Sc. M.D., Assistant Professor of Internal Medicine.
- George Henry Pester, A.B., M.D., Assistant Professor of Surgery.
- Paul L. Peterson, M.D., Clinical Assistant Professor of Otorhinolaryngology.
- Laverne F. Pfeifer, B.A., M.D., Clinical Instructor in Urology.
- George Francois Pinne, M.D., Associate Professor of Dermatology and Syphilology.
- Louis Thomas Placek, B.Sc., M.D., Assistant Professor of Otorhinolaryngology.
- John Wesley Porter, M.D., Instructor in Surgery.
- Stanley Ernest Potter, M.D., Assistant Professor of Surgery.
- Carl John Potthoff B.Sc., M.S.P.H. M.D., Associate Professor of Preventive Medicine and Public Health. (*Chairman of Department*)
- Eugene Francis Powell, A.B., Ph.D., Premedical Adviser, Associate Professor of Zoology and Anatomy.
- Peyton Thomas Pratt, A.B., B.Sc., M.D., Assistant Professor of Internal Medicine.
- Philip France Howard Pugh, B.Sc. in Med., M.Sc., M.D., Lecturer in Neurology and Psychiatry.
- Donald Frederick Purvis, M.D., Clinical Assistant Professor of Internal Medicine.
- Robert Houston Rasgorshek, M.D., Assistant Professor of Ophthalmology.
- John Arthur Rasmussen, M.D., Assistant Professor of Surgery.
- John Philbrook Redgwick, B.Sc., M.D., Associate Professor of Obstetrics and Gynecology.
- E. Burkett Reed, B.Sc., M.D., Clinical Associate Professor of Internal Medicine.
- Barney Benjamin Rees, A.B., M.A., M.D., Associate in Surgery.
- Helen Wyandt Reihart, B.Sc., M.Sc., Research Associate in Microbiology.
- Eugene C. Rembe, B.A., M.A., Lecturer in Physical Therapy, Rehabilitation and Physical Medicine.
- Norman Davis Render, M.D., Associate in Neurology and Psychiatry.
- Rose M. Reynolds, A.B., Assistant Professor of Anatomical Illustration.
- **Charles Erskine Richards, B.Sc., M.D., Associate Professor of Internal Medicine and Director of Clinics.
- Floyd O. Ring, B.Sc., M.D., Assistant Professor of Neurology and Psychiatry.
- George Edwin Robertson, B.Sc. in Med., M.D., Professor of Pediatrics.
- Earl Alvir Rogers, B.Sc., M.D., Associate Professor of Preventive Medicine.
- *Ruth E. Roman, B.Ph., M.S.W., Assistant Instructor in Neurology and Psychiatry.
- Charles Morton Root, M.D., Assistant Professor of Internal Medicine.
- Jerman Walter Rose B.Sc., M.D., Associate Professor of Neurology and Psychiatry and Associate in Pediatrics, and Clinical Director of Children's Service, Nebraska Psychiatric Institute.
- Robert Carl Rosenlof, M.D., Instructor in Internal Medicine.
- Sidney L. Rubin, M.D., Instructor in Pediatrics.
- William Leonard Rumbolz, A.B., M.D., Assistant Professor of Obstetrics and Gynecology.
- Herbert Blake Saichek, B.Sc., M.D., Clinical Instructor in Radiology.
- Catherine Orr Salhanick, A.B. M.D., Instructor in Pediatrics.
- Hilton Aaron Salhanick, A.B., M.A., Ph.D., M.D., Research Assistant Professor of Obstetrics and Gynecology and Assistant Professor of Biochemistry.
- Russell Oliver Saxvik, B.A., M.P.H., M.D., Lecturer in Neurology and Psychiatry.
- Colin Burwell Schack, A.B., M.D., Instructor in Obstetrics and Gynecology.
- Irving J. Schaefer, Demonstrator, Neurology and Psychiatry.
- John Rudolph Schenken, B.Sc., M.D., Professor of Pathology (*Chairman of Department*), Director of the School of Medical Technologists.
- William Arthur Schmidt, M.B.Ch.B., Instructor in Rehabilitation and Physical Medicine.
- Gilbert C. Schreiner, A.B., M.D., Associate in Pediatrics.
- George H. Scofield, A.B., M.S.S.W., Instructor in Psychiatric Social Work, Neurology and Psychiatry.
- Nathaniel Scott, M.D., Instructor in Radiology.
- Rudolph Frederick Sievers, Ph.D., M.D., Instructor in Physiology and Pharmacology.
- Eugene Earl Simmons, B.Sc., M.D., Professor of Internal Medicine.
- Milton Simons, B.Sc. in Med., M.D., Assistant Professor of Pathology.
- Anton William Skoog-Smith, B.Sc. in Med., M.D., Clinical Instructor in Radiology.
- Robert Aiken Slabaugh, B.Sc., M.D., Instructor in Internal Medicine.
- Dorothy Irene Smith, A.B., M.D., Assistant Professor of Pediatrics.
- Evelyn M. Smith, M.A., Instructor in Psychiatric Social Work, Department of Neurology and Psychiatry.

* Deceased March 2, 1959.

** On leave of absence.

- Francis D. Smith, B.Sc., M.D., Assistant Professor of Pathology.
 Jackson Algernon Smith, B.A., M.D., Professor of Neurology and Psychiatry and Assistant Director of Nebraska Psychiatric Institute.
 Richard Dale Smith, A.B., M.D., Assistant Professor of Orthopedic Surgery.
 Mary A. Soule, M.D., Instructor in Obstetrics and Gynecology.
 Robert Morton Spire, B.A., L.L.B., Instructor in Medical Jurisprudence.
 Doris Maxine Spragg, B.A., M.A., Instructor in Internal Medicine.
 George Ewing Stafford, B.Sc., A.B., M.D., Clinical Associate Professor of Pediatrics.
 Phillip Henry Starr, M.D., Associate Professor of Neurology and Psychiatry.
 Robert Johnston Stein, B.Sc., M.D., Clinical Associate Professor of Neurology and Psychiatry.
 Abraham A. Steinberg, B.Sc., M.D., Assistant Professor of Ophthalmology.
 John F. Steinman, A.B., M.D., Instructor in Pediatrics.
 Jack Michael Stemper, M.D., Clinical Instructor in Internal Medicine.
 Frank A. Stewart, M.D., Clinical Associate Professor.
 Frank Paschal Stone, A.B., M.D., Clinical Assistant Professor of Orthopedic Surgery.
 Lee Stover, A.B., M.D., Clinical Assistant Professor of Internal Medicine.
 LaVern Craig Strough, B.Sc., M.D., Associate Professor of Neurology and Psychiatry.
 Donald T. Siroy, A.B., M.D., Instructor in Surgery.
 Samuel August Swenson, A.B., B.Sc., M.D., Assistant Professor of Surgery.
 Jerry X. Tamisiea, M.D., Associate in Pathology.
 Frank Harold Tanner, B.Sc., M.D., Clinical Associate Professor of Pathology.
 Earl S. Taulbee, A.B., Ph.D., Instructor in Neurology and Psychiatry.
 Bowen E. Taylor, A.B., M.D., Clinical Instructor in Internal Medicine.
 Willis Heacock Taylor, B.Sc., M.D., Associate in Obstetrics and Gynecology.
 Frederick Franklin Teal, A.B., M.D., Associate Professor of Orthopedic Surgery.
 Robert Charles Therien, B.Sc. in Med., M.D., Assistant Professor of Anesthesiology.
 John Martin Thomas, A.B., M.D., Professor of Pediatrics.
 Dorothy Helen Thompson, B.Sc. in Med., M.D., Assistant Professor of Anesthesiology.
 Harriett Hicks Thompson, B.A., M.A., Lecturer in Psychology, Rehabilitation and Physical Medicine.
 Lynn Wirt Thompson, B.Sc., M.D., Associate in Anesthesiology.
 Robert Francis Thompson, M.D., Clinical Instructor in Internal Medicine.
 James Perry Tollman, B.Sc. in Med., M.D., Professor of Pathology. Dean of the College of Medicine and Superintendent of University Hospital.
 Stanley Marshall Truhlsen, A.B., M.D., Associate in Ophthalmology.
 Arthur T. Tuma, M.D., Associate in Radiology.
 Bulent T. Tunakan, B.Sc., M.D., Associate in Neurology and Psychiatry.
 Robert D. Vickery, A.B., M.D., Associate in Ophthalmology.
 Philip Henry Vogt, A.B., M.A., Lecturer in Social Welfare, Rehabilitation and Physical Medicine.
 Donald T. Waggener, D.D.S., Associate Professor of Surgery.
 Ronald E. Waggener, B.Sc. M.Sc., Ph.D., M.D., Assistant Professor of Radiology.
 Carl Arthur Walvoord, A.B., M.D., Clinical Assistant in Medicine.
 Nell M. Ward, B.Sc., M.A., Ph.D., Research Assistant in Biochemistry.
 Duane D. Warden, M.D., Clinical Assistant in Obstetrics and Gynecology.
 Frederick Ware, B.Sc., M.Sc., Ph.D., M.D., Assistant Instructor in Internal Medicine.
 Chester Hill Waters, Jr., A.B., M.D., Associate Professor of Orthopedic Surgery.
 Dean Carleton Wailand, B.A., M.Sc., M.D. Instructor in Anesthesiology, Surgery Department.
 Frederick S. Webster, A.B., M.D., Clinical Instructor in Orthopedic Surgery.
 W. Wallace Webster, D.D.S., Clinical Assistant Professor of Oral Surgery.
 William H. Weingarten, B.Sc., M.D., Clinical Assistant in Orthopedic Surgery.
 Herbert Wetherell, Jr., B.Sc., Ph.D., Assistant Professor of Physiology and Pharmacology.
 Horace Halsey Whitlock, B.Sc., M.D., Clinical Instructor in Internal Medicine.
 John Gunsaul Wiedman, A.B., M.D., Clinical Instructor in Surgery.
 Robert Spencer Wigton, B.Sc. in Med., M.A., M.D., Professor of Neurology and Psychiatry.
 Robert C. Wilcott, B.Sc., M.A., Ph.D., Assistant Professor of Neurology and Psychiatry.
 Violet Myrtle Wilder, A.B., M.A., Ph.D., Associate Professor of Biochemistry.
 Jon T. Williams, M.D., Clinical Assistant in Internal Medicine.
 Margaret A. Williams, B.Sc., M.S.S.W., Assistant Professor of Psychiatric Social Work, Neurology and Psychiatry.
 Carlyle Everett Wilson, A.B., B.Sc. M.D., Assistant Professor of Surgery and Assistant in Anatomy.
 Donald Jasper Wilson, A.B., B.Sc., M.D., Professor of Dermatology and Syphilology.

Richard Barr Wilson A.B. M.D., Associate in Pathology.
 Cecil Legriel Wittson, B.Sc., M.D., Professor of Neurology and Psychiatry (*Chairman of Department*) and Director of Nebraska Psychiatric Institute.
 Maynard A. Wood, B.Sc., M.D., Clinical Associate Professor of Ophthalmology.
 Kenneth William Woodward, M.D., Assistant Professor of Pediatrics.
 Willis Dean Wright, B.Sc., M.D., Assistant Professor of Internal Medicine.
 Raymond Joseph Wyrens, A.B., M.D., Assistant Professor of Internal Medicine.
 J. Lewis Yager, A.B., Ph.D., Associate in Neurology and Psychiatry.
 George Alexander Young, Jr., M.D., Associate in Neurology and Psychiatry.
 John Harley Young, A.B., M.D., Lecturer in Neurology and Psychiatry.
 Robert Armstrong Youngman, M.D., Clinical Assistant Professor of Internal Medicine.
 Robert L. Zaayer, B.A., M.S., Assistant Instructor in Microbiology.
 Frank Marshall Zahller, M.D., Associate in Pediatrics.
 Rudolf Zalter, M.D., Assistant Instructor in Internal Medicine.
 Thomas E. Zion, B.A., M.D., Instructor in Pediatrics.

Administration

Richard Eugene Bennett, B.Sc., M.A., Buyer.
 Lawrence A. Capiello, B.Sc. in Educ., M.Sc., D. H. & S., Administrative Assistant in charge of Public Relations and Postgraduate Activities.
 Josephine Chamberlin, R.N., Superintendent of Dispensary, Emeritus.
 Florence M. Classen, Secretary to the Dean.
 Arthur Letcher Irons, D.D.S., Director of Clinics (Interim) and Associate in Surgery.
 Duane Johnson, B.Sc. in M. Hosp. Adm., Hospital Administrator.
 Elmer E. Koch, B.Sc. in E.E., Superintendent of Physical Plant.
 Irma Maurine Kyle, R.N., B.Sc., S.M., Director of the School of Nursing and Professor of Nursing.
 Helen C. Miller, Assistant Registrar.
 Herschel Nuss, Assistant Finance Director.
 Ruth ErDena Pohle, B.A., Supervisor in Hospital Laboratory.
 *Charles Erskine Richards, B.Sc., M.D., Director of Clinics and Associate Professor of Internal Medicine.
 Evelyn Schellak, A.B., M.S. in Soc. Adm., Director of Medical Social Service.
 Doris Spragg, A.B., M.A., Director of Dietetics and Instructor in Internal Medicine.

DEPARTMENT CHAIRMEN

DEPARTMENT OF ANATOMY	DEPARTMENT OF ORTHOPEDIC SURGERY
J. S. Latta, Chairman	W. R. Hamsa, Chairman
DEPARTMENT OF BIOCHEMISTRY	DEPARTMENT OF PATHOLOGY
H. P. Jacobi, Chairman	J. R. Schenken, Chairman
DEPARTMENT OF DERMATOLOGY AND SYPHILOLOGY	DEPARTMENT OF PEDIATRICS
O. J. Cameron, Chairman	G. E. Gibbs, Chairman
DEPARTMENT OF INTERNAL MEDICINE	DEPARTMENT OF PHYSIOLOGY AND PHARMACOLOGY
R. L. Grissom, Chairman	A. R. McIntyre, Chairman
DEPARTMENT OF MEDICAL JURISPRUDENCE	DEPARTMENT OF PREVENTIVE MEDICINE AND PUBLIC HEALTH
A. G. Ellick, Chairman	Carl J. Potthoff, Chairman
DEPARTMENT OF MEDICAL MICROBIOLOGY	DEPARTMENT OF RADIOLOGY
H. W. McFadden, Chairman	H. B. Hunt, Chairman
DEPARTMENT OF NEUROLOGY AND PSYCHIATRY	DEPARTMENT OF REHABILITATION AND PHYSICAL MEDICINE
C. L. Wittson, Chairman	D. M. Frost, Chairman
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY	DEPARTMENT OF SURGERY
R. G. Holly, Chairman	M. M. Musselman, Chairman
DEPARTMENT OF OPHTHALMOLOGY	DEPARTMENT OF UROLOGY
J. H. Judd, Chairman	Leroy W. Lee, Chairman
DEPARTMENT OF OTORHINOLARYNGOLOGY	
F. J. Klabenes, Chairman	

COMMITTEES OF THE FACULTY

ADMISSIONS AND SCHOLASTIC STANDING

Drs. Benjamin, Cotton, Giffen, Jacobi, Martin, McMurtrey, Morrison

BUDGET

Drs. Bennett, Gibbs, Latta, Schenken, Wittson

BUILDING

Drs. Dunn, Henn, Hunt, McFadden, McIntyre, McWhorter, Musselman, Mr. D. Johnson (ex officio)

CURRICULUM

Drs. Alliband, W. D. Angle, Benjamin, Gibbs, Kulesh, McIntyre, Musselman

* On leave of absence.

DISPENSARY

Drs. W. Angle, Cotton, Filkins, McMurtrey, Zahller, Irons (ex officio)

EXPERIMENTAL ANIMAL RESEARCH

Drs. Harman, McWhorter, Neis, Reihart, Wilson

LIBRARY

Drs. Dutch, Latta, McIntyre, Paustian, Pinne, Miss N. Johnson, Mrs. Hetzner (ex officio)

NOMINATIONS FOR APPOINTMENT AND PROMOTION

Drs. Gibbs, Holly, Latta, McFadden

POSTGRADUATE AFFAIRS

Drs. Eagle, Holly, Holyoke, Jahr, Pratt, R. Waggener, Capiello

PRECEPTORSHIP

Drs. Best, MacQuiddy, Sr., McCarthy, Moon, F. W. Neihaus, Sievers, W. Thompson, Benjamin (ex officio)

PUBLIC RELATIONS

Drs. Aita, Bisgard, Brazer, Frost, McLaughlin, Therien, Truhlsen, Capiello (ex officio)

SCHOLARSHIP AND AWARDS

Drs. Benjamin, Bennett, Grissom, Gunderson, Holyoke, Simons

SPECIAL FUNCTIONS

Drs. Barmore, Chapman, Fitch, H. Salhanick, Wilder, Miss Reynolds, Miss Warner, Mrs. H. Miller (ex officio), L. A. Capiello (ex officio)

STUDENT ASSISTANCE

Drs. Benjamin, Holyoke, Jacobi, Jahr, Millett

THESIS

Drs. Burney, Crofoot, Graham, Kovarik, Latenser, Nilsson, Pederson, Rose, Vickery, Wetherell, Mrs. Hetzner (ex officio)

INTERNS*

1959 - 1960

Dennis C. Chipman, M.D.

Hugh R. Holtrop
Robert L. Putze

RESIDENTS*

1959 - 1960

William C. Melcher, M.D.

ANESTHESIOLOGY

Vivita K. Leonard, M.D.

Joseph Lucas, M.D.

INTERNAL MEDICINE

Gerald M. Murphy, M.D.

Andres U. Makalinao, M.D.

Merton A. Quaife, M.D.

Roger Jernstrom, M.D.

OBSTETRICS AND GYNECOLOGY

L. Palmer Johnson, M.D.

Raymond A. Sundell, M.D.

James C. Warren, M.D.

Howard F. Yost, M.D.

Thomas W. Bauer, M.D.

OPHTHALMOLOGY

Lloyd E. Carlson, M.D.

John T. McGreer, M.D.

PATHOLOGY

Donald McKee, M.D.

Arthur Larsen, M.D.

Edgar H. Smith, M.D.

James F. Bivens, M.D.

PEDIATRICS

John S. Gimesh, M.D.

Neemettin M. Kalayci, M.D.

James A. Smidt, M.D.

Hobart E. Wiltse, M.D.

Eugene Almer, M.D.

PSYCHIATRY

John D. Baldwin, M.D.

Isa Abdus Samad, M.D.

Alfredo Figaredo, M.D.

Antonia Sidorwicz, M.D.

Nicholas Godfroy, M.D.

Hormoz Rassekh, M.D.

Harry C. Henderson, M.D.

Jacob David Samler, M.D.

Howard D. Herrick, M.D.

Merle Eugene Sjogren, M.D.

Merl A. Kadel, M.D.

Russel Saxvick, M.D.

Bernard Eugene Kenney, M.D.

Keith Richard Treptow, M.D.

Frank Menolascino, M.D.

Timothy George Young, M.D.

* Pending approval of The Board of Regents.

COLLEGE OF MEDICINE

History.—The legislative Act of February 15, 1869, provided for the formation of the University of Nebraska at Lincoln, and included provision for a college of medicine. In 1883, the University of Nebraska College of Medicine was established at Lincoln. It continued in operation until the 1887 session of the legislature withdrew its appropriation, necessitating discontinuance of the college on May 19, 1887. The Omaha Medical College, incorporated at Omaha in 1881, became a part of the University of Nebraska in 1902. The merger resulted in the first two years of the four-year medical course being given in Lincoln and the last two years in Omaha. Since 1913 the entire four-year course has been given in Omaha.

Standing.—Nebraska legislatures, since 1913, have appropriated more than three million dollars which the Board of Regents has devoted to the construction and equipment of buildings on the University of Nebraska College of Medicine campus at Omaha. In the 1953 Session of the Nebraska Legislature a bill was passed to raise \$6,000,000 within the next five years to build an addition to the University of Nebraska Hospital and to increase other teaching facilities on the College of Medicine campus. The campus provides for the instruction of students in the preclinical sciences, and in the University Hospital and Dispensary, for clinical teaching and experience. A strong faculty has met the demands of the expanding requirements of medical education, and, through affiliated hospitals, adequate clinical facilities have been provided.

The College of Medicine meets the requirements of the most exacting state examining and licensing boards. Its diploma grants the holder all privileges accorded to graduates of any medical college in the United States. It is a member of the Association of American Medical Colleges and is approved by the Council of Medical Education and Hospitals of the American Medical Association. It maintains high standards in instructional staff and content of courses.

The course of study in medicine covers four years of 36 to 48 weeks each. The first two years in medicine include those laboratory sciences which form the basis for the clinical studies of the last two years. The clinical application of laboratory subjects is emphasized and introductory clinical subjects are given in the second year. The last two years are spent largely in the study of disease in clinics of the hospital and outpatient department. The objective method is followed in laboratories and clinical instruction. In all courses students are encouraged to do a large amount of individual work and are arranged in small groups to meet both laboratory and clinical instructors.

APPLICATIONS FOR ADMISSION

Printed application forms are available at the College of Medicine, University of Nebraska, 42nd Street and Dewey Avenue, Omaha 5, Nebraska. Students applying for any given class must have their applications completed by December 1st of the year preceding intended entrance.

In considering scholastic records of applicants, greater weight is given to the quality of work than to an excess of credit hours over the minimum required number. High scholarship alone does not assure acceptance. Consideration is given also to appraisals of character, personal interviews, scores on the Medical College Admission Tests and general fitness and promise of the candidate.

A very limited number of students from states other than Nebraska and not more than two students from foreign countries will be accepted to the freshman class. It is the policy of the Committee on Admissions and

Scholastic Standing to require that foreign students spend at least one year, and preferably two, studying in an undergraduate college in this country before applying for admission to the College of Medicine. This policy has been established in order that the applicant may become familiar with the language, customs, and methods of teaching in the United States, and that the Committee may obtain a better evaluation of his qualifications and preparation for medicine.

APPLICATION PROCEDURE



Applicants for admission to the College of Medicine must present the following:

1. A completed application form available from the College of Medicine.
2. A small *recent*, unmounted photograph, preferably 2 x 2 inches head size.
3. An official transcript sent directly from each college or university attended.
4. Two character appraisals from professors of premedical sciences, preferably chemistry, zoology or physics; or official report of Pre-Med Committee.
5. The result of the Medical College Admission Test. Applicants will take the test by the fall of the year preceding intended entrance. Information concerning this test may be obtained from the pre-medical advisor of the College of Arts and Sciences or from the Education Testing Service, 20 Nassau Street, Princeton, New Jersey. Students should communicate directly with that office for specific details.

A personal interview with members of the Committee on Admissions and Scholastic Standing is required. Interview sessions will be held at the campus of the University of Nebraska in Lincoln in November or December. Interviews will be given at the College of Medicine at stated dates. Inquiries should be made of the premedical advisers at Lincoln or of the Assistant Registrar of the College of Medicine for appointments for interviews.

A fee of \$5.00 must accompany the request for application of a student who is not a legal resident of Nebraska. Remittance should be made by check or postoffice money order and made payable to the University of Nebraska College of Medicine. Currency should not be sent. The fee will cover the cost of handling the application and is not refunded.

Any applicant who has previously applied for admission and has not been accepted or who fails to enroll after an acceptance must re-apply in the regular manner if he wishes consideration for a subsequent year.

Advanced Standing.—Application for admission to the second or third year medical classes will be considered only from students attending medical schools approved by the Council on Medical Education and Hospitals of the American Medical Association and provided a vacancy exists. An applicant for admission to advanced standing must follow the regular application procedure and must furnish evidence that he has satisfactorily completed courses equivalent in kind and amount to those taken by the class to which admission is sought, and must present also a letter of honorable dismissal from the dean of the medical school last attended. The University of Nebraska College of Medicine reserves the right in every case to give examinations in any or all subjects in which credit is requested.

No student coming from another school will be allowed any privileges

in this school which would have been denied him in the school which he leaves.

No student will be admitted to advanced standing in any class while he has a delinquency in any subject. No student may become a candidate for graduation unless he has spent the last two years in residence at this college.

In accordance with the recommendation of the Association of American Medical Colleges, the College of Medicine does not grant any time credit toward the Doctor of Medicine degree to holders of a bachelor's degree; this means that the total time spent by each student taking his medical degree must include as a minimum four years of registration in a medical college, the last two years of which must be in residence in the University of Nebraska College of Medicine.

The granting of transfer credit is at the discretion of the Committee on Admissions and Scholastic Standing. Admission to any class does not necessarily carry with it credit in all work previously done by the class since the Committee on Admissions and Scholastic Standing has the right to demand satisfactory evidence of the completion of previous work in that subject equal to that required of the students of this College, and in case the work is not equal to such requirement the deficiency stands against the student as an "incomplete" until removed.

If a student has been dropped from another medical school because of poor scholarship or unsatisfactory conduct, he is not acceptable for admission to The University of Nebraska College of Medicine.

SPECIFIC EDUCATIONAL REQUIREMENTS

◇ ◇

High School.—Sixteen secondary school units are required for admission and must include three units in English, two units in one foreign language (ancient or modern), two units in mathematics (one each of algebra and geometry or an equivalent), and one in science (biology, botany, chemistry, physics or zoology).

College or University.—The University of Nebraska College of Medicine requires a minimum of three years of college work (90 semester hours or 135 quarter hours) in an accredited college. Not more than 65 semester hours credit will be recognized from a junior college. Specific minimum premedical course requirements are as follows:

	<i>Semester Hours</i>
CHEMISTRY	14
The requirement is an adequate complete course in general chemistry and adequate complete course in organic chemistry. Should these total less than fourteen semester hours, they will be subject to approval by the Admissions Committee.	
BIOLOGY	8
Four hours must be zoology. Half of the credit must be in laboratory work.	
PHYSICS	8
Must include mechanics, sound, heat, electricity, magnetism and light.	
ENGLISH	6
Six semester hours of English composition and literature. Students should develop ability to speak and write good English. Those found deficient in use of written or spoken English will not be permitted to enter upon or continue the medical course.	
FOREIGN LANGUAGE	6-18
Students must have reading knowledge of a foreign language. Two years of a selected modern or classical foreign language at the college level, or equivalent, is required. This requirement may be met by satisfactorily completing a fourth-semester course in the elected language without having earned college credit in the more elementary courses. Or it may be met by certification of proficiency equal to second-year college level in the elected language.	

ELECTIVES 36-54

A sufficient number of electives are required so that, combined with required hours above, the total is ninety. It is urged that electives include subjects not related to specific medical requirements. Recommended subjects include psychology, social studies, history, philosophy and other humanities, chosen to give a broad cultural background.

Total minimum hours required..... 90

Credits offered from professional schools which do not regularly receive arts college credit are not accepted for premedical college requirements.

Semester hours of credit in subjects specifically offered in the medical college cannot be used in satisfying admission requirements.

A student applying to the College of Medicine should have a grade average of at least 6.0 in all the required science courses. The grade point of 6.0 is based upon the grading system of the University of Nebraska. The equivalent in other grading systems will be determined by the Assistant Registrar's Office, College of Medicine, and the Committee on Admissions and Scholastic Standing. In determining the equivalent, the grading system and the scholarship requirements of the college or university wherein the work was completed will be taken into consideration.

REGISTRATION AND ADMISSION TO CLASSES ◇ ◇

When an applicant receives notice that he has been accepted for entrance to the College of Medicine, he is required to send a deposit of \$25.00. This is applied as part payment of the tuition fee for the first quarter or is forfeited if the applicant fails to register in the class for which he was accepted.

Veterans entering under PL-550 must submit on day of registration a Certificate of Education and Training (VA Form 7-1993) approved for a program with objective of Doctor of Medicine Degree, indicating the University of Nebraska College of Medicine as place of training.

Registration is accomplished on the day indicated in the official calendar. A fee of \$3.00 is charged any student who, unless excused by the dean, seeks to register later than this day. A fee of \$2.50 is charged for reregistration. Any change whatever in a registration once made is considered as a reregistration. No work done in the College of Medicine may be granted credit without proper registration. No student may add any subject to his schedule or drop from it any subject for which he has been regularly registered without written permission from the dean.

Class Standing and Examination.—The standing of a student in any course is determined by the instructor in charge of the subject through examinations, personal contact, and observation of work. The passing grade for subjects of the first and second medical years is 4 (70 to 74). However, a student who fails to make a yearly average of 5 (75 to 79) must pass an oral examination in all of the subjects of the year just completed before being permitted to register for the following year. A student is allowed to take only one recapitulation examination. The passing grade for the third and fourth years is 5 (75 to 79).

A course which for a good reason has not been completed may, if of passing grade, be marked "incomplete." Such incomplete must be removed according to the procedure outlined by the instructor of the course. The incomplete cannot be removed later than the end of the first quarter in which the course is again offered or it becomes a failure.

A failed subject must be absolved by reregistration in and satisfactory

completion of the subject at or before the next offering in the college schedule. A reregistered subject takes precedence over all other subjects. A minimum grade of 5 in each course is required of students repeating work during the first two years. A student who has failed twice here or elsewhere in the same subject is not eligible for registration in that subject at this college.

Whenever at the end of any quarter a student is delinquent in half or more of his registered hours, his name is automatically dropped from the rolls of the College of Medicine and his registration cancelled.

Student discipline will be handled by the Dean of the College of Medicine. A student who by quality of work or conduct indicates an unfitness to enter the medical profession may be required at any time to withdraw from the medical college. Recommendations for suspensions, dismissals, or other suitable action as the case warrants, will be made to the Faculty of the College of Medicine, the Chancellor, and the Board of Regents. The Dean may appoint a committee of the Faculty to advise him on such matters.

Absence or Withdrawal.—Attendance at less than 80 per cent of the scheduled lectures and recitations or 85 per cent of the scheduled laboratory and clinical hours constitutes a failure in any course and shall be so reported.

The Dean of the College of Medicine is the adviser of all students in the College of Medicine. A leave of absence for a short time may be granted by the dean. This is merely a justification for absence and not an excuse from any work. If a student in good and honorable standing finds it necessary to withdraw from the University before the close of a quarter, the dean grants him permission to do so. If he is in good standing and is not a minor he is given honorable dismissal from the University at his own request; if a minor, at the request of his parents or guardian.

REQUIREMENTS FOR GRADUATION



The degree of Doctor of Medicine is granted only under the following conditions:

1. The candidate must be at least 21 years of age.
2. He must possess a good moral reputation.
3. He must have complied with all the requirements of admission.
4. He must have pursued the study of medicine for at least four years and must have passed all required courses and examinations of the College of Medicine, University of Nebraska. The last two years' work must have been taken at this institution.
5. He must have written an acceptable paper on an examination posed by the Examinations Committee at the end of the senior year, and also have passed all departmental examinations.
6. He must have written and presented an acceptable, typed senior thesis.
7. He must have discharged all indebtedness to the University of Nebraska.

The degree of Doctor of Medicine *cum laude* may be conferred upon a student who has made a high scholastic record, and who, in addition, has in the course of his medical studies performed some original research. Such a student must be recommended by the department in which the original work was done. Usually he must stand in the upper ten per cent of his class.

Courses Leading to the Degrees of Bachelor of Arts or Bachelor of Science and Doctor of Medicine.—Students who have transferred from the University of Nebraska College of Arts and Sciences may at the end of their fourth year earn the Bachelor of Arts degree or Bachelor of Science degree by:

1. Completing the group requirements of the College of Arts and Sciences.
2. Completing two minors or one major.
3. Using the subjects of the first year of the medical course as a major, all of which must be completed satisfactorily.

Both of these degrees are conferred by the College of Arts and Sciences at a Commencement on the Lincoln campus.

Candidates for baccalaureate degrees in institutions other than the University of Nebraska may arrange with their colleges to accept transcripts of the work of the first two years in medicine to apply to such degrees, or otherwise satisfy the requirements of those institutions.

Course Leading to the Degree of Bachelor of Science in Medicine.—Only students presenting premedical college credits of high standard and who have satisfactorily completed all courses of the first two years in medicine, the last year of which shall be in residence in this institution, but who have not fulfilled the requirements for the degree of Bachelor of Science or Bachelor of Arts in the College of Arts and Sciences, may become candidates for the degree of Bachelor of Science in Medicine.

FEES AND EXPENSES

All students who are legal residents of Nebraska and who carry a full student load will pay a single annual fee of \$525.00. Nonresident students will be charged a single annual fee of \$765.00. Adjustments may be made in the case of students carrying less than the full student load. One-half of tuition is due at registration, the balance on February 1.

The annual fee includes matriculation, registration, medical, laboratory, library, diploma and course fees. In case of undue usage of materials or breakage or loss of equipment other than that allotted to each course, and because of negligence on the part of the student, a penalty charge will be levied based on the fair value of such material and equipment so lost or broken.

Fee Refunds.—A student who withdraws from the University during any term for which he registered is entitled to claim a refund of a portion of his fees. A refund schedule is available at the Finance Office.

Miscellaneous Fees.—Candidates for a degree to be awarded at public exercises shall be present at such exercises, except as herein provided. A candidate must make application and show just cause in order to obtain the necessary faculty recommendation to receive a degree *in absentia*. Candidates to whom diplomas or certificates in course are awarded *in absentia* shall pay a special fee of \$10.00. The following fees are not included in the schedule listed above:

Late registration	\$ 3.00*
Transcript—one copy furnished free	
Each additional original	1.00
Degree in absentia.....	10.00
Special examination, each course.....	5.00
Photostatic copy of diploma, 3 copies50
Cap and gown rental fee—amount fluctuates.	

* This charge is made to all students paying during the first week following the date the tuition installment falls due. An additional charge of \$1.00 is made for each additional week after the first week of late registration.

Expenses.—Board may be obtained in the vicinity of the College campus at an average cost of \$15 to \$20 a week and comfortable rooms for \$30 to \$40 a month. Students rooming together may obtain comfortable rooming quarters at slightly less than this amount. One hundred dollars a year should be allowed for books and instruments. The average expenses of the student for a school year, including board and room, books, instruments (exclusive of microscope and other special equipment) and all fees is between \$1,400 and \$1,600.

MISCELLANEOUS INFORMATION

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Form of Payment.—To avoid misunderstanding as to the amount charged for fees, checks on personal accounts will be received only when written for the exact amount of the fees. Parents or guardians should write checks for fees and for other expenses separately; if this is not done, students should deposit funds in a local bank and give personal checks for the amount of the fees.

Remittance by mail should be by draft, money order, or cashier's check. Do not send coin or money except by registered mail. It is impossible to trace money lost in the mail and University officials cannot be held responsible for such loss.

Housing.—Although the College of Medicine has no on-campus housing for medical or technology students, the Registrar's Office maintains listings of rooms, apartments, duplexes and houses reported available.

Nonresident Students.—According to the Nebraska law, any student whose legal residence is not Nebraska is required to pay the nonresident fee.

A student's right to classification as a resident for purposes of registration in a state educational institution must be determined under the provisions of Sec. 85-502, Revised Statutes of 1943, 1955 Cumulative Supplement.

Any student who has been classified as a nonresident student who believes he can qualify as a resident may secure from the University Comptroller a resident application form and, when it is properly filled out, file such form with the Comptroller for review and ruling. The form must be filed in the Office of the Comptroller *before the end of the ninth week* of the term for which the tuition fee was charged.

The exact wording of the state law on residency is given on the resident application form.

Students who are interested in the requirements for residency may write the Comptroller's Office, University of Nebraska, Lincoln 8, Nebr.

Microscopes.—Students are required to provide suitable microscopes for their own use. Inquiries regarding specifications for microscopes as recommended by the faculty may be obtained by addressing the Assistant Registrar, College of Medicine.

GRADUATE WORK

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Graduate course work in the field of the Medical Sciences is offered in eleven departments: Anatomy, Biochemistry, Internal Medicine, Microbiology, Neurology and Psychiatry, Obstetrics and Gynecology, Orthopedic Surgery, Pathology, Pediatrics, Physiology and Pharmacology and Radiology. Three of these departments (Anatomy, Biochemistry and Physiology and Pharmacology) offer independent majors leading to the Master's degree or to the Ph.D. degree. Four additional departments (Microbiology, Neurology and Psychiatry, Pathology and Radiology)

offer independent majors leading to the Master's degree only. The eleven departments also cooperate in offering an interdepartmental area program which permits the student to pursue a course of study for the Master's or the Ph.D. degree with concentration in the medical sciences rather than in a specific department.

The requirements for admission are identical for study in an independent department or under the interdepartmental area program.

Admission for graduate work leading to the Master of Science or Doctor of Philosophy degrees may be granted to students from any of the following categories:

1. Students with Bachelor of Science or Bachelor of Arts degrees from recognized colleges or universities who attain an acceptable grade in a qualifying examination in basic medical sciences.
2. Students with a baccalaureate degree and the degree of Doctor of Medicine with an acceptable record.
3. Students with a master's degree from an acceptable college and the equivalent of two semesters, credit in the basic medical sciences.
4. Students from the College of Medicine who have bachelor's degrees, who have completed the first two years of the regular curriculum in the College of Medicine, or its equivalent, and who have attained acceptable grades in their courses or passed a qualifying examination in basic medical sciences.

For admission for work in the Department of Neurology and Psychiatry, leading to the degree of Master in Psychiatric Nursing, a student must have completed an approved professional program in nursing with a bachelor's degree from a recognized college or university. Acceptable evidence will also need to be submitted on the student's personal qualifications for psychiatric nursing.

A student registering for graduate work in the medical sciences must comply with the general requirements of the Graduate College and with any special rules established by the graduate committee of his major department, or if the major is in medical sciences, by the interdepartmental area committee. Certain special rules which are applicable to all students in the medical sciences regardless of the major are set forth in the paragraphs which follow. Other rules which pertain to the work in specific departments or in the interdepartmental area are indicated under the headings designating the respective departments.

Graduate students who are admitted with deficiencies in the medical sciences may, by permission of the appropriate graduate or area committee and approval of the Dean of the Medical College, register for courses on the College of Medicine campus in preparation for their qualifying examinations. Such graduate students may, upon the passing of qualifying examinations, make application to the appropriate graduate or area committee for graduate credit in certain medical courses successfully completed. The graduate or area committee may make recommendation for such credit on the basis of the attainment and aptitude of the applicant. In any case, at least one-half of the total credit for the Master's degree shall be taken in graduate courses listed as 350 and above. Medical courses for which partial or total graduate credit may be allowed are listed under the respective departmental headings in the sections which follow.

Graduate students may be required to attain proficiency in their field of concentration by participation in the instruction of medical students for at least one quarter in a regularly required course in the College of Medicine. A student who fails to earn an average grade of at least 7 may not continue his program of study without the special permission of the appropriate graduate or area committee.

A student who wishes to become a candidate for an advanced degree with concentration in the medical sciences must select work in the departments which have been approved to offer graduate work. He may elect to do his thesis research in any one of the eleven cooperating departments. The distribution of graduate work shall be such that not more than two-thirds of the total program, including thesis research, shall be in the major field of study with a remainder in at least one other department for candidates for the Master's degree and two other departments for candidates for the degree of Doctor of Philosophy.

Candidates who select one of the preclinical departments for their thesis research may come from any of the four categories (for admission) listed on page 21. They may select other preclinical departments for additional work.

Candidates who select one of the clinical departments for their thesis research must have qualified for admission through Category 2, page 21. They must select preclinical departments for additional work. Such students may be required to serve as residents for one year before being admitted to the Graduate College. While fulfilling their minor (preclinical) requirements, these candidates must be assigned to the minor department or departments during at least one-third of the total hour requirement for the degree sought.

Candidates electing to work in the interdepartmental area will do their work under the supervision of the area committee: Professors McIntyre, *Chairman*, L. F. Dunn, Gibbs, Hamsa, Holly, Hunt, Jacobi, Latta, McFadden, McWhorter and Wittson.

GRADUATE FEES



All students who are legal residents of Nebraska and who carry a full schedule (12 or more hours) in any quarter will pay a fee of \$80.00 per quarter. Nonresident students will be charged a fee of \$160.00 each quarter. The single fee includes—in addition to course charges—registration, library, diploma and Student Health fees. For additional miscellaneous fees, consult the Bulletin of the Graduate College.

A resident student who originally registers for less than 12 quarter hours will be charged one-twelfth of \$80.00 for each quarter hour registered up to and—if courses are added later—including the twelfth quarter hour. Quarter hours added thereafter will be free of charge.

A change of registration fee of \$2.50 is charged in addition to the regular tuition for any changes made from the original registration.

A nonresident student who registers for less than 12 quarter hours will be charged one-twelfth of \$160.00 for each quarter hour registered up to and—if courses are added later—including the twelfth quarter hour as well as the \$2.50 change of registration fee for each change in registration.

For thesis publication and binding fees, consult the Librarian of the College of Medicine before starting thesis.

Teaching and Research Assistantships.—A graduate student holding an appointment as a teaching or research assistant during a quarter or sum-

mer session is required to pay only the administrative fee, providing the appointment carries a University stipend equal to at least the maximum tuition fee of \$120.00 for a quarter, or for the summer. If the stipend received by an assistant for an academic year (three quarters) is equal to at least the maximum fee for all four quarters (\$480.00), he will pay only the administrative fee for the summer session following, or intervening between quarters for which he is appointed, even though he does not hold an appointment for the summer session.

The administrative fee is \$20.00 for a registration of 12 or more hours during a quarter. If an assistant is registered for less than 12 hours during a quarter, he pays only one-twelfth of \$20.00 for each hour registered up to and—if courses are added later—including the twelfth quarter hour.

Graduate Fellowships.—A student must carry a full program of graduate study or research for each quarter during which the fellowship stipend is received. Recipients of Regents Tuition Fellowships are required to pay only the administrative fee of \$20.00 for each quarter.

GRADUATE REGISTRATION



Registration will be accomplished during the early part of each quarter in consultation with the chairmen of the different departments in which the graduate work will be carried on.

UNIVERSITY STAFF EXEMPTION



Members of the academic-administrative staff employed full time may be permitted to register for not more than 4 credit hours per quarter, or 5 credit hours if a single 5 credit hour course, for which the charge is \$1.00 plus a \$5.00 matriculation fee. All such registrations must carry the signed approval of the chairman of the department and the dean or director of the college, school or division in which the staff member is employed during the period for which he is registered.

Academic-administrative staff members of the University employed by the Nebraska Psychiatric Institute are eligible for this staff exemption.

POSTGRADUATE WORK



Postgraduate courses are offered to practicing physicians and ancillary medical groups through the Office of Postgraduate Affairs. These courses number from fifteen to twenty each school year and are presently provided as a cooperative project between the College of Medicine and the University Extension Division.

Well-known authorities from throughout the country and from our own campus take part in these programs as guest lecturers. The course fee is \$10.00 per day, and the average length of these courses is two and one-half days. Each course is announced by mail to each practicing physician in the state, and to others interested, at least one month prior to the course date.

All clinical courses are approved for hour-for-hour Category 1 credit by the American Academy of General Practice. Further information may be obtained by writing the Office of Postgraduate Affairs.

FELLOWSHIPS, GRADUATE ASSISTANTSHIPS AND SCHOLARSHIPS



Fellowships are available to students who qualify for graduate study and research in the medical sciences. Application should be made to the chairman of the department concerned.

Graduate assistantships are available to students of exceptional ability to give them opportunity to do research in the medical sciences and fulfill the requirements for a Master of Science or Doctor of Philosophy degree.

Jetur Riggs Conkling and Jennie Hanscom Conkling Foundation.—The will of the late Clementine C. Conkling provides for the creation of a trust to be known as the "Jetur Riggs Conkling and Jennie Hanscom Conkling Foundation," the income of which is used by the Regents of the University of Nebraska in providing scholarships for deserving medical students. Scholarships may be awarded only after the close of the students' first year in the Medical College. These scholarships are awarded on the basis of recommendation by the Committee on Scholarships and Awards.

August Frederick Jonas Senior Memorial Fund.—This fund was established by Mrs. A. F. Jonas of Omaha to provide assistance for needy students who are judged worthy both for scholastic attainment and for character and promise. This fund is administered under the direction of the Committee on Scholarships and Awards.

The Anna Glock Fellowship in Cancer.—The will of the late Anna Glock provided money for research and treatment of cancer during a five-year period. A fellowship is awarded annually to the person who has had sufficient training and qualifications to pursue these studies. Applications should be addressed to the Dean.

The Sidney R. Kent Fellowship in Medicine.—An award of \$500 is available annually to the student in the College of Medicine who has made the most outstanding record and who desires to pursue further work in medicine. Such study may be pursued either in the University of Nebraska or elsewhere agreeable to the action of the Committee. Details of this award may be learned on application to the Dean's office or to the Sidney R. Kent Committee of Awards.

The C. W. M. Poynter Foundation.—A fellowship under the sponsorship of the Poynter Foundation provides a stipend of \$2,000 for a period of ten months, during which time the recipient will be expected to devote his entire time to research in the Department of Anatomy. Appointment is made by the Chairman of the Department. Applicants should have completed two or more years of medicine and have demonstrated ability and aptitude for investigative work. The recipient may, if he desires, become a candidate for an advanced degree in the medical sciences.

LOANS



There are a number of funds available to the University of Nebraska College of Medicine from which money can be loaned to deserving students who are in need of financial assistance. These funds are available to students enrolled in the College of Medicine. Generally they are reserved for students who have established themselves as able and worthy during the completion of at least the first year in medical school.

Applications for loans from any of these funds should be made to the Student Assistance Committee on forms which are available in the Registrar's office.

Ordinarily the Student Assistance Committee will accept applications during a period ending about one month before the dates on which payment of tuition is required. The exact dates will be posted at the College well in advance. Students who foresee the need of financial assistance should have submitted applications by these dates. Except under

extreme and unusual emergencies, applications which fail to meet the deadline will be held for review until the next posted date.

The College of Medicine Alumni Association Student Loan and Scholarship Fund.—On July 15, 1958, a fund was established by the University of Nebraska College of Medicine Alumni Association and placed in custody of the University of Nebraska Foundation to provide loans or scholarships to students registered or accepted for admission in the College of Medicine. Application for loans on this fund are received by the Student Assistance Committee.

Students enrolled in the College of Medicine may also receive loans through the Nebraska Medical Foundation and the Nebraska Medical Education Fund, Inc. The Student Assistance Committee can supply information on either of these sources.

The Josephine Chamberlin Loan Fund.—On the retirement of Miss Josephine Chamberlin as Superintendent of the University of Nebraska Dispensary, on June 11, 1946, a fund was established in her honor. From this fund loans are available to students of the College of Medicine and the School of Nursing.

The Faculty Woman's Club of the University of Nebraska College of Medicine Student Loan Fund.—This fund was established in 1956. Money is assigned to it from operation of the student exchange shop. The fund is administered by the University of Nebraska Foundation under conditions which apply to loans from other funds.

Kellogg Fund.—In April, 1942, the W. K. Kellogg Foundation of Battle Creek, Michigan, gave the College of Medicine \$10,000 to be used as a student loan fund, particularly to meet the emergency created by the accelerated war schedule and the consequent loss of student earnings during the summer. An additional grant of \$5,000 was made later in the year.

Omaha Medical College Foundation.—This foundation, created in April, 1921, was established largely through contributions received from former professors in the Omaha Medical College. The object of the foundation is to promote the study of medicine and to provide for medical research in the University of Nebraska College of Medicine and to assist worthy students with loans.

Lizzie Oltmans and Frederick Oltmans Student Loan Fund.—In March, 1950, the donors named above paid \$1,000 to the University of Nebraska Foundation to be used as a loan fund for undergraduate and graduate students enrolled in the College of Medicine.

Robert H. Storz Student Loan Fund.—This fund was established by Storz Brewing Company in 1952 as an annual sum of \$1,500.00 paid to the University of Nebraska. This fund was established to provide loans to students in the College of Medicine who are in need of assistance.

Dr. Carl P. Wagner Memorial Medical Student Loan Fund.—The sum of \$500.00 was paid to the University of Nebraska Foundation in 1952. This fund was established to provide loans to students in the College of Medicine adjudged to be worthy and in need of assistance.

AWARD



University of Nebraska College of Medicine Alumni Association Award.—An award of \$50.00 is given each year to the senior student presenting the best thesis as judged by the Thesis Committee.

STUDENT AND ALUMNI ORGANIZATIONS ◇ ◇

Student Activities Council.—The Student Activities Council governs the organization and regulation of student activities of the College of Medicine and School of Nursing. It serves as an agency through which faculty relationships with student activity may be fostered and maintained. Recognized student groups elect members who serve as representatives in the Student Activities Council. Officers for 1959-60 include James Peck, President; Frederic Boyden, Vice-President; Karen Kavanaugh, Secretary; and Steven Lowe, Treasurer.

Alumni Association.—Alumni of the University of Nebraska College of Medicine maintain an active organization with headquarters in Omaha at the college. Activities include sponsorship of class reunions, luncheons, dinners and the traditional senior reception following Commencement each year. A monthly news bulletin is sent to members. Officers for 1959-60 are: Dr. S. A. Swenson, Jr., President; Dr. Leroy W. Lee, Vice-President; Dr. E. A. Holyoke, Secretary-Treasurer.

The alumni of the medical college offer a prize of \$50 for the senior thesis of the year judged best by the Thesis Committee.

Alpha Omega Alpha.—A.O.A. is a non-secret medical college honorary society, membership in which is based upon scholarship and moral qualifications.

Elections are made from the students who have completed nine or more quarters of the four-year medical curriculum and are made by unanimous vote of the active members of the Chapter. Not more than one-sixth of any class may be elected to membership. The University of Nebraska Chapter was organized November 2, 1914.

Student American Medical Association.—Founded in 1950 with the aid of a grant from the AMA, the Student American Medical Association swiftly grew to its present membership of over twenty thousand students, representing sixty-nine medical schools. Serving expressly "to advance the profession of medicine, to contribute to the welfare and education of medical students, to familiarize its members with the purposes and ideals of organized medicine, and to prepare its members to meet the social, moral, and ethical obligations of the medical profession." SAMA offers group insurance plans, an internship evaluation program and a monthly Journal. Plans for the immediate future include low-interest student loans, new scholarships and a job placement service.

At Nebraska, among other functions SAMA jointly sponsors "Premed Day" and a series of convocations held regularly throughout the school year. Membership closely approaches one hundred per cent of the student body.

SCHOOL OF NURSING ◇ ◇

The School of Nursing, which is a part of the College of Medicine, affords three years of professional education following one year of liberal arts in an accredited college. The immediate administration of the School of Nursing is provided through the director and the faculty. The program of instruction is given by the faculties of the University of Nebraska which includes the College of Arts and Sciences, Teachers College, the College of Medicine and the School of Nursing. Students are admitted as candidates for the degree of Bachelor of Science in Nursing. The School of Nursing Building on the College of Medicine campus provides resi-

dence and educational facilities for the student nurses. Requests for bulletins and application blanks should be made to the Director, School of Nursing.

MEDICAL CURRICULUM



Departmental Hours.—The course of study outlined is constructed in accordance with the recommendations of the Council on Medical Education and Hospitals of the American Medical Association and of the Association of American Medical Colleges. The University Hospital and Dispensary on the Medical College campus furnish ideal opportunities for bedside clinical instruction in close relation to the scientific departments of the college.

CLINICAL FACILITIES



University Hospital.—The University Hospital forms the largest unit of the group of buildings constituting the College of Medicine. It is the center around which all the activities of the various departments are grouped, making possible a close correlation between clinical and laboratory teaching. The hospital, modern in every respect, contains floor space for 202 beds, and provides for the care of a wide variety of cases.

Patients are received from the several counties of Nebraska and are admitted on the application of a legally qualified practitioner of medicine and chairman of the county board.

The ground floor contains an admitting department, diet kitchen, patient's library, drug room, kitchen, dining rooms, pathological laboratories, necropsy amphitheater, the X-ray department and the stack room of the library. The first or main floor contains the college and hospital administration offices, registrar's office, medical records office, medical amphitheater, reading room of the library, office of the medical department, three medical wards and electro-cardiograph room. The second floor provides four surgical wards similar to those on medicine, faculty conference room, the offices of the School of Nursing, surgery department office and the photography department. The third floor contains wards for obstetrics, a nursery, a children's ward, offices of Departments of Pediatrics and Obstetrics and Gynecology and a central hospital supply as well as the operating pavilion for obstetrics. On the fourth floor are situated the operating pavilion with rooms for general surgery and the surgical specialties which will accommodate large and small groups of observers, the hospital laboratory, the laboratory for clinical clerks and interns' quarters. Each ward is provided with a large solarium.

The control of the University Hospital rests in The Board of Regents and is administered by the College of Medicine.

University Dispensary.—The dispensary is located in the South Laboratory Building. Separate services, each having its own rooms and equipment, are provided in: dermatology; eye, ear, nose and throat; genitourinary diseases; gynecology; internal medicine; neurology; obstetrics; orthopedic surgery; pediatrics; surgery; and urology. These activities furnish a wide diversity of diseases and are organized for the teaching of the senior students, under the supervision of the clinical staff.

Extramural Hospitals.—Bishop Clarkson Memorial, Children's Memorial, Lutheran, Immanuel Deaconess, Nebraska Methodist, Hattie B. Munroe Convalescent Home, Douglas County and Veterans hospitals in Omaha and Bryan Memorial and Lincoln General hospitals in Lincoln are avail-

able for regular or special clinics as needed. Clinics in psychiatry are provided at the Nebraska Psychiatric Institute. Members of the University faculty are on the staffs of all these hospitals.

Hospital Appointments.—Graduates of the College of Medicine are afforded a wide choice in the selection of internships. Twelve internships and thirty-four residencies in the major specialties are available at the University Hospital.

Medical Social Service Department.—The Medical Social Service Department provides a service to the patient and to the doctor. It interprets the medical findings and recommendations to the patient and his family and gives to the doctor information regarding the economic, social and cultural problems of the patient. This information gives the doctor a better understanding of the patient and enables him to evaluate better the patient's ability to carry out his orders.

LABORATORY FACILITIES



Anatomy.—The Department of Anatomy occupies the third and fourth floors of the North Laboratory Building. The rooms are well lighted and ventilated. The "unit room" system—each unit accommodating four or eight students—has been adopted as superior to that of a large common dissecting room. The state anatomical law provides ample material for dissection. In the laboratory for microscopic anatomy individual desks, lockers, reagents, etc., are at the student's disposal, as are also excellent collections of histological and embryological material, models, charts, etc.

Biochemistry.—This department occupies the entire fifth floor of the South Laboratory Building. The well-equipped student laboratory can accommodate 90 students. Adjoining it are a classroom, balance room, "walk-in" incubator, and student stock room. The department also has several large research laboratories equipped with all of the modern tools of biochemistry. Among these are analytical and preparative ultracentrifuges, filter paper and zone electrophoresis apparatus, chromatography cabinets, Warburg apparatus, metabolic shaking incubator, spectrophotometers, special balances, flash evaporator, blood gas apparatus, micro-Soxhlet extraction battery, as well as the usual items of a research laboratory. Facilities for techniques with radioisotopes are also available.

Microbiology.—Occupying the first floor of the North Laboratory Building, this department uses the same student laboratory as Pathology. There are excellent facilities for support of the teaching exercises and for support of an active research program being carried out. The diagnostic work for the University Hospital provides material useful in the class exercises. An extensive collection of color lantern slides, mounted specimens and charts is available for the teaching exercises.

Pathology.—The office and classroom area is principally on the second floor of the North Laboratory Building. The student laboratory is utilized also by Microbiology. Equipment, loan sets of slides, and apparatus, with the exception of microscopes, are provided for the student. Approximately 7,000 color lantern slides are used for the teaching exercises. The Pathologic Anatomy and Clinical Pathology laboratories of the University Hospital provide material and support the teaching program.

Physiology and Pharmacology.—Experimental physiology and pharmacology occupies the fourth floor, a part of the second, and the sixth floor of the South Laboratory Building. Laboratory exercises of the medical

students are carried out on part of the fourth floor, and research work for graduate students in the remainder of the space. The main laboratories accommodate forty-four students in each section with separate tables and lockers for each group of students. There is a separate mammalian laboratory in which students work in groups of five.

There are special rooms for specialized research instruments, including space provided for an ultracentrifuge and for spectrophotometric work. In addition there is a well-equipped workshop for the construction and repair of a wide variety of apparatus.

Museum.—The pathological museum of the College of Medicine contains about 5,000 specimens. Nearly every variety of pathological lesion is represented and the constant addition of fresh material from the autopsies performed continually adds to its interest. In addition to the gross specimens are thousands of microscopic sections and a large collection of wax reproductions of various lesions. The museum is an important and necessary adjunct to the teaching of pathology and of clinical medicine.

Clinical Pathology.—For clinical clerk service a central hospital laboratory is provided in which clinical laboratory work on assigned cases is done under supervision. For tissue examination, a special laboratory is located on the ground floor of the first hospital unit, with necropsy room adjacent.

LIBRARY FACILITIES



The College Library is located in the Hospital Building within easy access from the various laboratories and stands as a vital common interest to the laboratory and clinical branches of medical instruction. The reading room, seating ninety, furnishes a congenial place for students, faculty and staff to work. Most of the 1,100 current journals received are shelved in this room. The book stacks are directly below on two levels and contain 78,000 bound volumes and 30,000 pamphlets, theses and unbound journals. This collection is the result of purchases and acquisitions extending over more than half a century, building up complete files of important journals in the fields of clinical medicine and the medical sciences in English and foreign languages as well. Here the student has access to one of the most complete medical libraries in the Midwest which offers abundant opportunities for research and additional reading and study. First year students are given instruction in the use of the library including an introduction to all the important medical reference tools and indexes.

Incident to its ordinary function, the Library maintains a collection of material on the history of medicine in Nebraska, graduates of the College, activities of its staff and keeps a complete file of reprints of the writings of staff members. Incorporated within the library of the College of Medicine are 2,000 volumes of the Omaha-Douglas County Medical Society, periodicals and transactions of the Nebraska State Medical Association and several outstanding private medical libraries of former practitioners of the state.

The resources of the University of Nebraska Libraries in Lincoln are available to students and faculty in Omaha, putting an additional 550,000 volumes at their disposal. Through close cooperation with other medical libraries it is possible for the Librarian to secure interlibrary loan material available in other libraries, including the Midwest Interlibrary Center in Chicago and the National Library of Medicine in Washington.

SUMMARY OF DEPARTMENTAL HOURS

	Clock Hours	◇ ◇ Total Clock Hours
ANATOMY		
310 Gross Anatomy	312	624
311 Embryology-Histology	212	
312 Neuro-Anatomy	100	
BIOCHEMISTRY		
310 Medical Biochemistry	264	276
340 Clinical Biochemistry	12	
CORRELATION COURSES		
310 First Year Correlation Course	36	64
320 Introduction to Clinical Medicine	12	
330 Medical Surgical Conference	8	
340 Medical Therapeutics	8	
DERMATOLOGY		
330 Fundamentals	8	40
331 Diagnostic Clinic	8	
341 Dispensary	24	
INTERNAL MEDICINE		
320 History Taking and Physical Diagnosis	108	926
Clinical Correlation, Sophomores	12	
330 Principles of Internal Medicine	454	
341 Senior Clerkship	148	
342 Dispensary	184	
343 Clinical Conferences	20	
MEDICAL ETHICS		
340 Medical Ethics and Professional Relationships	12	12
MEDICAL JURISPRUDENCE		
340 Medical Jurisprudence	16	16
MEDICAL MICROBIOLOGY		
320 Medical Bacteriology and Clinical Parasitology	252	252
NEUROLOGY AND PSYCHIATRY		
310 Normal Personality Development	24	360
320 Basic Psychiatry	36	
321 Neurology	12	
331 Neurology	12	
335 Clinical Clerkship	92	
340 Neuropsychiatric Demonstrations	4	
341 Senior Clerkship	120	
342 Dispensary	60	
OBSTETRICS AND GYNECOLOGY		
320 Introduction to Obstetrics and Gynecology	16	376
330 Obstetrics and Gynecology	24	
335 Clinical Clerkship	84	
340 Obstetrics and Gynecology	28	
341 Senior Hospital Clerkship	224	
OPHTHALMOLOGY		
320 Medical Ophthalmology	12	84
335 Clinical Clerkship	24	
340 Dispensary	48	
ORTHOPEDIC SURGERY		
330 Fractures, Dislocations and Sprains	12	156
340 Diseases of Bones and Joints	16	
341 Clinical Clerkship	112	
342 Fractures, Dislocations and Sprains	16	
OTORHINOLARYNGOLOGY		
330 Diseases of Ear, Nose, Throat and Larynx	16	40
Ward Clinic	12	
340 Dispensary	12	

SUMMARY OF DEPARTMENTAL HOURS

31

	Clock Hours	Total Clock Hours
PATHOLOGY		
		550
321 General Pathology	275	
322 Clinical Pathology	60	
331 Clinical Pathology	75	
332 Clinical Pathology Conference.....	24	
333 Correlative Clinical Pathology.....	36	
340 Clinical Pathology Conference.....	40	
341 Correlative Clinical Pathology	40	
PEDIATRICS		
		350
320 Growth and Development.....	16	
330 Diseases of Childhood.....	40	
335 Clinical Clerkship	88	
340 Hospital Clinic	18	
341 Dispensary	68	
342 Senior Clerkship	120	
PHYSICAL MEDICINE AND REHABILITATION		
		32
330 Principles of Rehabilitation Medicine.....	16	
340 Senior Clinical Clerkship	16	
PHYSIOLOGY AND PHARMACOLOGY		
		540
310 General Introductory Course.....	72	
311 Laboratory Course	84	
322 Lectures and Demonstrations	84	
323 Laboratory Course	84	
324 Lectures and Demonstrations	96	
325 Laboratory Course	84	
336 Applied Physiology and Pharmacology to Clinical Problems	36	
PREVENTIVE MEDICINE		
		103
310 Accident Problems and Field Emergency Care.....	16	
320 Principles of Preventive Medicine	28	
321 Principles of Preventive Medicine	24	
330 Clerkship in Preventive Medicine	35	
RADIOLOGY		
		76
Radiological Anatomy (included in Gross Anat.)		
320 Principles of Radiology	12	
330 Principles of Radiology	28	
331 Clinical Radiology	16	
341 Radiologic Conference and Clinic	20	
SURGERY		
		738
Sophomore Clinical Correl. (jointly with Int. Med.)		
330 Fundamentals of Surgery.....	68	
335 Clinical Clerkship	374	
340 Neuro-Surgery	16	
341 Senior Clerkship	216	
342 Dispensary	64	
UROLOGY		
		28
330 Fundamentals of Urology.....	16	
Ward Clinics (included in Surgery Clk.)		
341 Dispensary	12	
		5,544
Freshman Year	1120	
Sophomore Year	1103	
Junior Year	1582	
Senior Year	1694	

Courses of Instruction

In the following departments, courses numbered 310-319 are given in the first medical year; courses numbered 320-329, in the second medical year; courses numbered 330-339, in the third medical year; courses numbered 340-349, in the fourth medical year. Courses numbered 350 carry graduate credit. Roman I indicates courses offered the fall quarter; II, the winter quarter; III, the spring quarter; and SS, the summer.

Anatomy

Professors Latta, *Chairman*, Holyoke; Associate Professors Benjamin, Chapman, Elliott; Assistant Professors Bach, R. R. Best, Pederson, Reynolds; Instructor Cochran; Demonstrators Burney, Coe, Rees, Wilson.

In this department instruction is given in gross, microscopic, and developmental anatomy including gross and microscopic anatomy of the nervous system. The work of the department extends through the first two quarters of the first medical year.

All instruction is based on laboratory work carried out under the supervision of the staff. Lectures covering subjects of broad morphological significance are given before the entire class, but for the discussion of details, in conjunction with laboratory work, the class is subdivided into small groups. Every effort is made to correlate the work in gross and microscopic anatomy. A comprehensive examination covering all phases of anatomy is given at the end of the second quarter.

Anatomy.—

310. Gross Anatomy (Total 312 hrs I, II)

The course covers dissection of the entire body. This work is carried out in groups of four, each group being assigned a separate room. From time to time table demonstrations and quizzes are required. Through this table teaching the student's proficiency is increased and calibration of individual progress is made possible. (240 hrs or 10 qtr hrs credit for graduate work.)

311. Embryology-Histology (Total 212 hrs I, II)

A brief survey of the fundamental facts of vertebrate development as based on chick, pig and human embryos is first undertaken. This is followed by a study of the histogenesis of the fundamental tissues leading directly to their adult histological structure. Morphogenesis and histogenesis of the various organ systems of the body, excepting the nervous system which is studied independently, are similarly correlated with their adult histological and gross structure and with the relationships shown in gross anatomy. Special emphasis is placed on the study of the blood and blood-forming organs and the organs classified as endocrine which are studied somewhat independently. (200 hrs or 9 qtr hrs credit for graduate work.)

312. Neuro-Anatomy (Total 100 hrs II)

Lecture and laboratory

The gross and microscopic anatomy of the nervous system including sense organs. Study is made of the human brain by means of gross dissection; gross and microscopic sections; gross and microscopic study of the eye, and other sense organs by specially prepared demonstrations. Text and lectures aim to integrate the details of laboratory study into functional systems applicable to later physiological and clinical studies. (80 hrs or 7 qtr hrs credit for graduate work.)

350. General and Special Methods in Histological Technique (3-8 qtr hrs) Mr. Latta,

Mr. Elliott, Dr. Holyoke

Prereq Anat 310-314

Principles and practice in general methods of preparation of tissue for histological study; special training given in the field of the student's particular interest.

351. Special Neurohistological and Experimental Neurological Techniques (3-8 qtr hrs)

Mr. Elliott, Mr. Latta

Prereq Anat 350

Advanced special technical methods of demonstrating the histological structure of nervous tissue and of the experimental approaches to neurological problems.

352. Techniques of Histochemistry (3-8 qtr hrs) Mr. Latta, Mr. Jacobi

Prereq Anat 350

Development of methods for demonstrating various chemical features in tissues of the body.

353. Morphological and Experimental Hematology (4-9 qtr hrs) Mr. Latta

Prereq Anat 350

Detailed study of the morphology and inter-relationships between the cells of the blood, blood-forming organs and the connective tissues. Experimental studies of the biological significance of the cellular elements of the blood.

354. **Comparative Human Embryology** (4-9 qtr hrs) Mr. Latta, Mr. Benjamin, Dr. Pederson
Prereq Anat 350
 Special advanced studies of various features of reproduction and development as illustrated in the departmental and embryological collection.
355. **Experimental Embryology** (4-9 qtr hrs) Dr. Holyoke, Mr. Latta
Prereq Anat 350
 Advanced study and training in the methods employed in analysis of the factors and potentials operative in mammalian development processes.
356. **Advanced Human and Comparative Neuroanatomy and Neurohistology** (4-9 qtr hrs) Mr. Elliott, Mr. Benjamin
Prereq Anat 350
 Advanced detailed study of the structural organization of the central and peripheral nervous system of a man and/or various laboratory animals.
357. **Morphological Endocrinology** (4-9 qtr hrs) Dr. Pederson, Mr. Latta, Dr. Holyoke
Prereq Anat 350
 Advanced study of histological features of the various endocrine glands and morphological effects of endocrine substances on various target organs.
358. **Biology of Radiation** (4-9 qtr hrs) Mr. Latta, Dr. Pederson, Mr. Chapman
Prereq Anat 350
 Morphological alterations induced in the living organism by radioactive substances.
359. **Thesis Research** (cr arranged) Staff
 Independent investigation of some problem chosen by consultation between student and the staff.
360. **Seminar** (1 cr per qtr) Staff
 By permission
 Presentation of problems and accomplishments of investigations conducted by the graduate students and members of the department with critical discussion.
361. **Advanced Gross Anatomy** (2-5 qtr hrs) Dr. Holyoke, Dr. Pederson
Prereq Anatomy 310, 311, 312
 Studies of general and special gross dissection of the human body.

Biochemistry

Professor Jacobi, *Chairman*; Associate Professors Beber, Harman, Ng, Wilder; Associate Research Professor H. L. Davis; Assistant Professors Barak, A. L. Dunn, Salhanick; Assistant Research Professor Carver; Research Assistant Ward.

The Courses in Biochemistry 310 and 340 aim to acquaint students with the basic facts of the science, particularly as these relate to an understanding of disease states. Moreover, biochemical aberrations in disease states are introduced to aid in the understanding of normal reactions and mechanisms.

The instruction offered in these courses is supplemented with more advanced and specialized courses (350-371, inclusive) for students who are candidates for the M.S. or Ph.D. degree; and for other students, such as hospital residents, desiring advanced training in medical biochemistry independently of the requirements for a degree.

310. **Medical Biochemistry** (Total 264 hrs II, III) (14 qtr hrs credit for graduate work except for those completing a graduate major in biochemistry.) Mr. Jacobi and Staff.

The descriptive and dynamic aspects of biochemistry with special reference to the human are presented. Physico-chemical principles are reviewed and applied to understanding normal physiological processes and their derangements in disease. Lipids, carbohydrates and proteins are discussed from the standpoints of descriptive chemistry, digestion, absorption, intermediary metabolism and of their relationships in metabolism and nutrition. Principles of biochemistry as they relate to clinical medicine are further considered in discussions of blood and other body fluids and tissues; urine; water, electrolyte, and acid-base balance; mineral metabolism; enzymes; vitamins; and of hormones. The laboratory work is illustrative of the problems and methods discussed, and the experiments performed by the students constitute an important and integral part of the course in medical biochemistry.

340. **Clinical Biochemistry** (12 hrs III) Dr. Harman
 Although this course deals with clinical problems, it is presented against a background of basic biochemistry. The content varies, depending on topics of current interest as well as on student needs. Such subjects as acid-base balance, water and electrolytic metabolism, protein metabolism and antibiotics have been

covered. The biochemical aspects of these topics are emphasized in extensive correlation with clinical material. In this way the biochemistry of clinical medicine is brought into sharp focus.

Biological Chemistry, Electives.—

- 350. Biochemistry of Disease** (3-9 qtr hrs) Dr. Harman, Dr. Beber, Mr. Jacobi
Prereq Biochem 310
 This course consists of the systematic presentation of the biochemical aspects of various diseases. Biochemical principles and facts are studied and utilized in a detailed manner in connection with the pathogenesis, course and treatment of disease.
- 351. Vitamins and Nutrition** (3-9 qtr hrs) Miss Wilder
Prereq Biochem 310
 Each of the vitamins is considered from the standpoints of history, chemistry, determination, physiological function and requirements. Nutritional aspects of proteins, carbohydrates, lipids and essential mineral elements are reviewed and integrated with the study of vitamins.
- 352. Enzymes** (3-9 qtr hrs) Mr. Barak
Prereq Biochem 310
 This course deals with the chemical nature of enzymes, the methods for their isolation, the kinetics of enzyme reactions, and the physiological function of enzymes. The clinical significance of certain of the enzymes is considered.
- 353. Hormones** (3-9 qtr. hrs) Miss Wilder, Dr. Angle
Prereq Biochem 310
 Hormones are discussed from the standpoints of chemical nature, isolation, determination and function. The hormonal control of metabolism and the relationship of hormones to enzymes and vitamins are emphasized.
- 354. Intermediary Metabolism** (3-9 qtr hrs) Mr. Jacobi
Prereq Biochem 310
 The chemical reactions involved in the anabolism, catabolism, transformations and interconversions of proteins, lipids and carbohydrates are presented in detail.
- 355. Water, Electrolyte, and Acid-Base Balance** (3-9 qtr hrs) Mr. Jacobi, Dr. Angle
Prereq Biochem 310
 This course is an advanced study of the chemical structure and volume of the various body fluids and the mechanisms whereby they are formed and maintained within normal limits. Deviations in various pathological conditions are interpreted in terms of normal mechanisms.
- 356. Advanced Biochemical Techniques** (3-9 qtr hrs) Staff
Prereq Biochem 310
 Instruction in advanced biochemical techniques including paper and solution electrophoresis, spectrophotometry, Warburg manometry, paper chromatography, ultracentrifugation and special chemical determinations.
- 357. Histochemistry** (3-9 qtr hrs) Mr. Carver, Mr. Latta
Prereq Biochem 310
 The histochemistry of proteins, lipids, carbohydrates, enzymes and other biologically important compounds will be reviewed with emphasis on the chemistry of the staining techniques. The application of histochemistry to physiological and pathological problems will be described.
- 358. Radioactive Tracers in Biochemistry** (3-9 qtr hrs) Mr. Dunn
Prereq Biochem 310
 The employment of radioisotopes as a research tool in biochemistry will be presented. The theoretical and practical aspects of isotope methodology and the application of this technique to the solution of biochemical problems will be emphasized.
- 359. Proteins** (3-9 qtr hrs) Mr. Barak, Mr. Carver
Prereq Biochem 310
 This course consists of a survey of the chemistry and biology of proteins and the products of their hydrolysis. Descriptive chemistry, methods of isolation, techniques for characterization and biological significance of proteins and amino acids will be considered.
- 360. Physical Biochemistry** (3-9 qtr hrs) Mr. Davis, Mr. Ng
Prereq Biochem. 310 and Chemistry 217 or equivalent
 Purely physical phenomena will be reviewed and applied to the interpretation of biological systems. In particular, the course will emphasize the view that colloidal phenomena are concerned in the functioning of all living systems. Colloidal aspects of proteins, lipids, carbohydrates, blood, bone, muscle, nerve, etc., will be scrutinized.

361. **Lipids** (3-9 qtr hrs) Mr. Ng, Mr. Davis*Prereq* Biochem 310

Studies of chemical and physical properties of lipids; methods for isolation and analysis; physiology and metabolism; role of lipids in biological structure; and clinical applications involving lipid metabolism are presented.

362. **Endocrinology of the Sex Hormones** (Obstetrics and Gynecology 355) (3-5 qtr hrs)

Dr. Salhanick, Miss Wilder

Prereq Biochem 310 or equivalent

Designed to acquaint the student with the chemistry and metabolism of the estrogens, androgens, progestational substances and gonadotropins. As needed, essential information on adrenal hormones will be included.

370. **Seminar** (cr arr) Staff371. **Research** (cr arr) Staff**Correlation Courses**310. **First Year Correlation Course** (36 qtr hrs I, II, III)

Clinical patients and problems are presented by clinical staff members to illustrate the application of basic science course content to medical problems and practice.

320. **Introduction to Clinical Medicine** (12 qtr hrs III)

An introduction to clinical medicine for sophomores is held weekly, jointly with the Department of Surgery. A member of each department is present and they jointly discuss such subjects as Ageing and Involution, Diseases of Medical Progress, Shock, Fever and Reaction to Injury and Stress.

330. **Medical Surgical Conference** (8 qtr hrs)

A combined medical-surgical conference is held once each month, at which staff members of both departments discuss patients and their diagnosis and care. This conference is directed to both undergraduate and postgraduate students and is attended by junior students, senior students and the faculties of the Departments of Surgery and Medicine. Physicians in practice are cordially invited to attend.

340. **Medical Therapeutics** (8 qtr hrs)

This is a seminar-type conference for students in small groups, held jointly by the Department of Medicine and the Department of Physiology-Pharmacology. Students report in pairs on the backgrounds of several types of diseases and discuss the rationale of treatment with specific drugs.

Dermatology and Syphilology

Professors Cameron, *Chairman*; D. Wilson; Associate Professor Pinne; Clinical Instructor Barthell.

A foundation in dermatology and syphilology is laid by lectures, clinics and demonstrations. At the University Dispensary the students are brought in personal contact with patients whom they observe throughout their entire care under the supervision of the attending physician. A large and carefully selected collection of plates and photographs is available for lantern use.

Dermatology.—330. **Fundamentals** (1 hr weekly, total 8 hrs I) Dr. Pinne

General classification of skin diseases, with lectures and quizzes on anatomy, histology, physiology, pathology, general symptomatology, etiology, diagnosis and treatment.

331. **Diagnostic Clinic** (1 hr weekly, total 8 hrs I) Dr. Cameron

A more advanced course in dermatology consisting largely of patient and colored slide demonstrations with particular reference to differential diagnosis and treatment.

341. **Dispensary** (3 hrs weekly, for 8 wks, total 24 hrs SS, I, II, III)

Two weekly 2-hour clinics are held at the University Dispensary

Fourth-year students are assigned to these clinics for practical experience in the diagnosis of skin diseases and the treatment of syphilis.

Internal Medicine

Professors Grissom, *Chairman*, F. L. Dunn, J. D. McCarthy, Simmons; Associate Professors Beber, Brazer, Greene, Hubbard, Kirk, Lehnhoff, Richards (on leave); Clinical Associate Professor Reed; Assistant Professors W. D. Angle, Bucholz, Graham, Hankins, Henn, Holthaus, Hull, Langdon, Lewis, Long, Loomis, Margolin, Morris, Nutzman, Ogborn, Pepper, Pratt, Root, Wright, Wyrens; Clinical Assistant Professors C. K. Elliott, Purvis, Stover, Youngman; Associates Beenken, Dickerson, Fleishman, Freed, Harman, Jackson, Joranson, E. L. MacQuiddy, Jr.; Instructors Albertson, Dewey, Egan, Graves, Harvey, Knott, MacHaffie, Muskin, Nickum, Par-

rillo, Paustian, Rosenlof, Slabaugh, Spragg; Clinical Instructors Ahrens, Broisma, Edwards, Maxwell, Meiberger, Nelp, Stemper, B. E. Taylor, R. F. Thompson, Whitlock; Assistant Instructor Ware; Clinical Assistants Fuenning, Millett, Walvoord, J. T. Williams; Senior Consultants Anderson, G. N. Best, E. L. MacQuiddy, Sr., Moody, Niehaus, C. Q. Thompson, W. Thompson; Emeritus Breshahan, Covey, Moser.

It is the aim of instruction in Internal Medicine to establish a broad understanding of patients with disease and to develop a scholarly approach to the study of medical problems. Intensive study by each student of relatively fewer patients is emphasized rather than superficial observation of many patients. The student studies health as well as disease. Small group conferences (four to six students) are utilized, with each member of the group participating. Time is allowed in each weekly program for reading, research and other independent pursuits for the purpose of establishing habits for self-development which will persist for life.

Internal Medicine.—

320. History-Taking and Physical Diagnosis (1 hr lecture demonstration, 2 hrs practical, weekly. Total 108 hrs I, II, III)

Instruction in history taking and the performance of the complete physical examination. Special methods of examination are taught by members of other departments. Students are assigned in groups of six to each instructor. During the final eight weeks, the lectures in Principles of Internal Medicine begin with a study of Respiratory Diseases.

330. Principles of Internal Medicine (Total 454 hrs I, II, III)

The lectures (68) are designed to acquaint the students with fundamental problems encountered in medical practice and to supplement bedside learning. Students are assigned to the University Hospital and to the Omaha Veterans Hospital for a period of twelve weeks, where they take histories, do physical examinations and perform designated laboratory tests. Small-group instruction in nutrition, hematology, radioisotopes, tuberculosis, rheumatology and cardiology supplements general assignments.

Grand Rounds at the University of Nebraska Hospital and the Veterans Administration Hospital are held weekly throughout the year and attended by all those assigned to Internal Medicine services. In addition, a combined medical-surgical conference is held once monthly.

341. Clinical Clerkship (Total 148 hrs SS, I, II, III)

Each student has four weeks of experience studying hospitalized patients in one of the cooperating hospitals: University of Nebraska, Bishop Clarkson Memorial, Douglas County, Nebraska Methodist, Immanuel, Bryan Memorial or Lincoln General Hospital.

342. Dispensary (Total 184 hrs SS, I, II, III)

Students participate in general medicine and sub-specialty clinics for ambulatory patients during the mornings of an eight-week period. During this period conferences on clinical problems and courses in hematology and ECG are held. A weekly conference in Therapy is held cooperatively with the Department of Physiology and Pharmacology.

343. Clinical Conference (Total 20 hrs I, II, III)

Formal presentation, discussion of patients and presentation of special lectures.

General Exercises. (Total hours—see Correlation Courses)

An introduction to Clinical Medicine for sophomores is held weekly, jointly with the Department of Surgery. A member of each department is present and jointly discusses such subjects as Ageing and Involution, Diseases of Medical Progress, Shock, Fever, Reaction to Injury and Stress.

Internal Medicine Electives.—Professors Grissom, *Chairman*, Dunn; Associate Professor Hubbard; Assistant Professors Angle, Henn, Langdon, Loomis, Pepper, Pratt; Associate Beenken.

350. The Physiology of Symptoms (1 qtr hr cr per qtr—total 3) Dr. Grissom

351. Problems in Metabolism and Endocrinology. Drs. Grissom, Henn

a. **Diabetes Mellitus** (1 qtr hr cr per qtr—total 3)

b. **Advanced Endocrinology** (1 qtr hr cr per qtr—total 3)

c. **Metabolism and Nutrition** (1 qtr hr cr per qtr—total 3)

d. **Rheumatology** (1 qtr hr cr per qtr—total 3)

352. Advanced Gastroenterology and Biliary Diseases (1 qtr hr cr per qtr—total 3) Drs. Grissom, Langdon, Loomis

353. Advanced Studies of the Cardiovascular Renal System—Drs. Grissom, Dunn, Pepper, Angle, Hubbard, Beenken

a. **Cardiologic Diagnosis and Electrocardiography** (4 qtr hr cr per qtr—total 12)

b. **The Management of Heart Disease** (3 qtr hr cr per qtr—total 9)

c. **Hypertension and Nephritis** (3 qtr hr cr per qtr—total 9)

d. **Peripheral Vascular Diseases** (1 qtr hr cr per qtr—total 3)

354. **Infectious Diseases, Chemotherapy and Antibiotics** (3 qtr hr cr per qtr—total 9)
Drs. Grissom, Langdon, Loomis
355. **Advanced Allergy** (1 qtr hr cr per qtr—total 4) Dr. Hull
356. **Advanced Hematology** (1 qtr hr cr per qtr—total 4) Dr. Pratt
360. **Research** (cr arr) Staff

Medical Ethics

Lecturers, F. C. Coleman, M.D.; J. H. Judd, M.D.; R. K. Kirkman; J. D. McCarthy, M.D.; L. S. McGoogan, M.D.; C. A. McWhorter, M.D.; R. F. Sievers, M.D.; M. D. Smith; J. P. Tollman, M.D., Dean.

These selected physicians and laymen present pertinent facts and considerations relating to the economics, the organization, the types of practice and the obligations of physicians to patients, to their community and to their fellow physicians.

340. **Medical Ethics and Professional Relationships** (12 qtr hrs II)

Medical Bibliography

Librarian Hetzner; Associate Librarian Farris; Assistant Librarians Toner, Slagle. Lectures and conferences are held to acquaint the student with resources in medical literature and bibliographic methods in medical research.

First year students are given instruction regarding the use of reference and indexing tools and receive practical experience in the application of literature-searching techniques. Advanced students may receive instruction and arrange conferences on the bibliography of science and the problems involved in thesis writing.

Medical Jurisprudence

Associate Professor Ellick, *Chairman*; Instructor Robert M. Spire

The course in medical jurisprudence has for its purpose the presentation of medico-legal relationships in order that the student may be familiar with that increasingly pertinent phase of professional life and practice. This course is a comprehensive survey of the medico-legal field and a detailed analysis and study of that science which applies the principles and practice of medicine to the elucidation and settlement of legal questions which arise in everyday professional practice as well as in courts of law.

340. **Medical Jurisprudence** (2 hrs weekly, total 16 hrs I)

Medical legislation, medical evidence and witnesses, privileged communications, general medico-legal relations, physicians' contracts and compensation, income taxes, malpractice and liability of hospitals and nurses are some of the subjects discussed.

Medical Microbiology

Professors McFadden, *Chairman*, M. F. Gunderson; Assistant Professors Bacon, N. Miller; Research Associate H. Reihart; Assistant Instructor Zaayer.

It is the aim of this department to develop with the student the character and host relationships of disease-causing microorganisms. It is also our aim to consider the effect upon the human host of microbial agents and to suggest the manner in which a bacteriological diagnosis may be made. This is done by lectures which emphasize host-parasite relationships. Immunity and associated phenomenon are discussed and laboratory exercises demonstrate the essential features of disease and resistance.

Medical Microbiology.—

320. **Medical Bacteriology and Clinical Parasitology** (Total 252 hrs. I, II)

Lect and lab course on the cultural characteristics, pathogenic properties, immunological responses, etc., of bacteria, fungi, viruses and Rickettsia in general, with special reference to those of importance in disease. The course also provides a consideration of Clinical Parasitology and deals with Protozoa, Helminths and Arthropods of medical importance.

Medical Microbiology, Electives.—

350. **Physiology of Bacteria** (8 cr) Mr. Bacon, Mr. Gunderson, Mr. Miller

Prereq Medical Microbiology 320

Nutritive requirements of bacteria, growth, metabolism, enzymes, dormancy and death. Determinative bacteriology.

351. **Public Health Bacteriology**

The facilities of the diagnostic lab with its turnover of at least 5,000 diagnostic tests per annum are available for this course.

- a. **Study of Diagnostic Technics** (8 cr) Dr. McFadden, Mr. Gunderson
Prereq Medical Microbiology 350
Hospital lab diagnosis.
- b. **Immunology** (4 cr) Dr. McFadden, Mr. Gunderson
Prereq Medical Microbiology 350
Laws of hemolysis, antigen-antibody relationships, blood grouping, anaphylaxis.
352. **Molds, Yeast, and Actinomycetes** (4 cr) Mr. Bacon, Mr. Gunderson, Mr. Miller
Prereq Medical Microbiology 350
A study of fungi of medical importance, their morphological and immunological characteristics. With emphasis on the recognition and diagnosis of those producing mycotic infections in man.
353. **Filterable Viruses** (4 cr) Mr. Gunderson, Dr. McFadden, Mr. Miller
Prereq Medical Microbiology 350
Character, nature and transmission of viruses. Important human virus diseases.
354. **Applied Bacteriology** (4 cr) Mr. Bacon, Mr. Gunderson
Prereq Medical Microbiology 350
Bacteriology of sanitation. Food bacteriology.
355. **Medical Parasitology and Tropical Diseases** (4 cr) Mr. Bacon, Mr. Gunderson, Dr. McFadden, Mr. Miller
- a. **Diseases Due to Animal Parasites**
Prereq Medical Microbiology 350
Life cycles. Vectors.
- b. **Diseases of Animals Transmissible to Man**
Prereq Medical Microbiology 350
Plague, Tularemia, Undulant Fever, Typhus, Spotted Fever, etc.
361. **Seminar** (1 cr) Staff
By permission.
362. **Research** (cr arr) Staff

Neurology and Psychiatry

Professors Wittson, *Chairman*, Garfield, J. A. Smith, Wigton; Associate Professors Aita, Carver, Ellingson, Gysin, Humphreys, Krush, Martin, Rose, Starr, Strough; Clinical Associate Professor Stein; Assistant Professors Affleck, Dundon, Majka, Ring, Wilcott, Williams; Associates Dutch, Goldner, Helper, Ingham, Jones, Tunakan, Yager, G. A. Young, Jr.; Research Associate Kim; Instructors Garetz, Hornberger, Landgraf, Lundy, Milgram, Muffly, Scofield, Taulbee; Assistant Instructors Benschoter, D. Hubbard, Lunde, Nelson, Noordsij, E. Smith; Lecturers Freeman, Pugh, Saxvik, J. H. Young; Demonstrator Schaefer.

Courses are planned to give the student, commencing in his freshman year, correlated, progressive training in the anatomical, physiological and psychological fundamentals of psychiatry and neurology.

Lectures and demonstrations in the freshman year emphasize the significance of personality development in relation to normal and abnormal functioning. The sophomore program consists of lectures and case demonstrations in basic psychiatry which include descriptive and dynamic psychopathology and techniques of examination; and in neurology in which neurological illnesses, their relationship to the anatomical, pathological and physiological factors are introduced. In the junior and senior years stress is placed on supervised experience with psychiatric and neurological patients, both on inpatient and outpatient bases. Formal lectures are kept to a minimum, except for the clinical neurology lectures in the junior year. Instruction in psychiatry is correlated with the teaching in other departments.

Neurology and Psychiatry.—

310. **Personality Development and Clinical Perspectives** (1 hr weekly, total 24 hrs, II, III)

This course reviews the emotional and psychophysiological growth of the individual with primary emphasis on the normal aspects of personality development from birth to old age. The more common psychiatric syndromes are presented from the clinical viewpoint. The historical, psychoanalytic, biochemical, pharmacological and neurophysiological aspects of psychiatry are presented. The relationship of physical factors to disease states is outlined and psychological aspects of medical practice are considered.

320. **Basic Psychiatry** (1 hr weekly, total 36 hrs, I, II, III)

During this course lectures and demonstrations of clinical material are held at the Nebraska Psychiatric Institute. The historical background of psychiatry, methods of interviewing, history-taking and general mental examination are

presented. Descriptive aspects of clinical syndromes are presented. The course is preparatory to the junior clerkship in psychiatry and gives the student a basic understanding of mental illness from the standpoint of a general practitioner.

321. **Neurology** (1 hr weekly, total 12 hrs, III)
The neurological illnesses are discussed and demonstrated from the descriptive viewpoint and related to anatomical, pathological, physiological and psychiatric factors. The material is correlated with medicine generally and particularly with psychiatry. Diagnosis and treatment are emphasized.
331. **Neurology** (1 hr weekly, total 12 hrs, II)
Continuation of course 321.
335. **Clinical Clerkship** (23 hrs weekly, total 92 hrs I, II, III)
The junior class is divided into groups, each of which is assigned four weeks at the Nebraska Psychiatric Institute. Selected inpatients are assigned for history taking and physical and mental examination. Students continue to see the patient in interviews during the whole of the clerkship. Work is supervised in detail. Seminars and lectures are included as well as demonstrations of interviewing technique and treatment. Lectures and demonstrations of common psychiatric disorders are presented.
340. **Neuropsychiatric Demonstrations** (1 hr weekly, total 4 hrs, SS, I, II, III)
Selected patients demonstrating various psychiatric and neurological disorders are presented and discussed by the senior faculty.
341. **Senior Clerkship** (32 hrs weekly, total 120 hrs, SS, I, II, III)
The senior class is divided into groups, each of which is assigned four weeks at the Nebraska Psychiatric Institute. Under supervision, students are given increasing clinical responsibility with patients on the adult inpatient service, adult outpatient service and children's services. Regular teaching seminars and conferences are scheduled.
342. **Dispensary** (7½ hrs weekly, total 60 hrs, SS, I, II, III)
Practical experience in diagnosis and treatment of outpatients in the psychiatric, neurologic and epileptic clinics is provided. Under supervision, the student gains experience in the diagnosis, treatment and management of a variety of common neurologic and psychiatric problems.

Obstetrics and Gynecology

Professors Holly, *Chairman*, McGoogan; Associate Professors H. Anderson, Redgwick; Clinical Associate Professors Richard Garlinghouse, H. Morgan; Assistant Professors Collins, Cotton, Rumbolz; Research Assistant Professor Salhanick; Clinical Assistant Professor McGinnis; Associates Kovarik, Olson, Taylor; Instructors Boelter, George, Hirst, Pearse, Schack, Soule; Clinical Instructors Ballew, Gorthey, Hansen, Harvey, Magid; Assistant Instructor John McCarthy; Clinical Assistant Warden.

The instruction in obstetrics and gynecology consists largely of practical demonstrations in the University Hospital and the dispensary. In these clinics the student is trained in clinical diagnosis and treatment. The University Hospital affords abundant opportunity for the assignment of obstetric cases under direction to members of the third-year medical class. The prenatal clinic at the dispensary provides an excellent opportunity for both third- and fourth-year students to learn the proper care of the expectant mother. After a didactic review of the principles of obstetrics, the junior student is assigned to serve as assistant to the intern or house officer in the care of a patient during labor. During the fourth year the medical students are assigned to dispensary prenatal clinic and the gynecology clinic.

Obstetrics and Gynecology.—

320. **Introduction to Obstetrics and Gynecology** (1 hr weekly, total 16 hrs, I, II)
Anatomy and physiology of the female genital organs in their relation to normal pregnancy, labor and the puerperium and to gynecology. Physical diagnosis in obstetrics and gynecology.
330. **Obstetrics and Gynecology** (1 hr weekly, total 12 hrs, II)
Abnormalities and complications of pregnancy, labor, puerperium and the newborn child. Theory, diagnosis and management of gynecologic disease.
335. **Junior Clinical Clerkship** (Total 84 hrs, I, II, III)
Third-year students are assigned to a hospital obstetric and gynecologic service, where they are assigned patients. They follow the progress of patients in labor, assist at deliveries, follow the workup and management of gynecology patients, assist at operative procedures and maintain a complete record until the patient

is discharged from the hospital. They attend weekly obstetric and gynecologic conferences, ward rounds and gynecological pathology conferences.

340. **Obstetrics and Gynecology** (1 hr weekly, total 40 hrs, I, II, III)
Continuation of Course 330.
341. **Senior Clinical Clerkship** (Total 224 hrs, SS, I, II, III)
Fourth-year students are assigned to a hospital obstetrics and gynecologic service for more advanced and practical experience. They follow the progress of patients in labor and assist at or perform deliveries. They follow the workup and management of gynecologic patients and assist at operative procedure. They are assigned to the dispensary obstetric and gynecologic clinics. They attend weekly obstetric and gynecologic conferences, ward rounds and gynecologic pathology conferences.

Obstetrics and Gynecology, Electives.—

350. **Advanced Obstetrics and Gynecology** (6 cr) Staff
Seminars, conferences, lectures and demonstrations designed to familiarize the student with the applications of basic science to the field of obstetrics and gynecology. The student will be required to evaluate the clinical condition of the patient, write records of his findings and recommendations, and outline a program of treatment to be carried out under supervision.
351. **Gynecological Pathology** (3 cr) Staff
An advanced course in gross and microscopic pathology in the field of obstetrics and gynecology, including the physiological variations encountered in the reproductive cycle. A written discussion of all clinical, surgical and autopsy specimens in the field of obstetrics and gynecology is required.
352. **Anatomy** (4 cr) Mr. Latta, Dr. Holyoke, Staff
Special dissection and study to cover the basic science aspects of anatomy and embryology as applied to obstetrics and gynecology. This work will be special dissections, reading and histologic study of the generative tract.
353. **Gynecological Radiology** (1-5 cr) Dr. Hunt, Staff
Readings, demonstrations, clinics and seminars designed to show the application of radiographic and radio-therapeutic principles and procedures to obstetrics and gynecology. Conducted in conjunction with the department of radiology, this course gives experience in radiographic techniques, the interpretation of films, and the use of X-ray and radium. Independent reports will be required.
354. **Advanced Course in Gynecological Surgery** (4 cr) Staff
Personal conferences, discussions, and demonstration of the principles and technique of gynecological surgery. The nature of the material covered will depend upon the student's aptitude and experience.
- 360(355). **Special Problems and Thesis** (cr arr) Staff
The student will select or be assigned special research problems in the basic science fields as applied to obstetrics and gynecology, including lab studies, literature analysis and clinical evaluation of problems.

Ophthalmology

Professor Judd, *Chairman*; Associate Professors Gifford, Morrison; Assistant Professors Alliband, Rasgorshek, Steinburg; Associates Eagle, Filkins, Truhlsen, Vickery; Clinical Assistant Wood.

Ophthalmology.—

320. **Medical Ophthalmology** (1 hr weekly, total 12 hrs, III)
The didactic course consists of demonstrations and lectures on diseases of the eye, including ocular changes in general diseases. The lectures are illustrated by cases, diagrams, charts and slides. The course is supplemented by textbook work and quizzes.
335. **Clinical Clerkship** (Total 24 hrs, I, II, III)
Selected cases of eye pathology are shown to small groups of students illustrating the major types of disease that are encountered in medical practice.
340. **Dispensary** (Total 48 hrs, SS, I, II, III)
Students are regularly assigned to the dispensary clinic for practical experience in the diagnosis and treatment of eye conditions. This course includes a drill in the principal uses of the ophthalmoscope and other instruments employed in the diagnosis of diseases of the eye.

Orthopedic Surgery

Professors Hamsa, *Chairman*, H. Johnson; Associate Professors Campbell, Teal, Waters; Assistant Professors Bach, Burney, R. Smith; Clinical Assistant Professors Bartels, Mitchell, Stone; Associate Hood; Clinical Assistant Weingarten; Clinical Instructors Horn, F. Webster.

Orthopedic Surgery deals with the diseases, deformities and injuries of the structure composing the musculo-skeletal system.

Orthopedic Surgery.—

330. **Fractures, Dislocations and Sprains** (1 hr weekly, total 12 hrs, III)
Lectures and clinics on anatomy, pathology and treatment of fractures, dislocations and sprains.
340. **Diseases of Bones and Joints** (1 hr weekly, total 16 hrs, I)
Lecture clinics on disease of bones and joints, synovial membranes and bursae. Congenital, acquired and disease-producing deformities. Prevention of deformities and dystrophies with principles of treatment. Illustrated by photographs, slides, etc.
341. **Orthopedic Clinical Clerkship** (Total 112 hrs, SS, I, II, III)
Practical work in the diagnosis and treatment of orthopedic cases. Includes 6 hrs in Crippled Children's Clinic; 6 hrs Orthopedic Dispensary; two weeks (100 hrs) clerkship, consisting of experience in the University Hospital and affiliated private hospitals.
342. **Fractures, Dislocations and Sprains** (1 hr weekly, total 16 hrs, SS, I, II, III)
Lectures, quizzes and demonstration course on fractures, dislocations and sprains. X-ray diagnosis with application of splints and casts.

Orthopedic Surgery, Electives.—

350. **Research** (1-7 cr) Staff
Work for specially qualified students in special fields of investigation.
351. **Seminar** (1-6 cr) Staff
Literature reviews and reports of progress of research in special fields of investigation.

Otorhinolaryngology

Associate Professor Klabenes, *Chairman*; Professor Cassidy; Associate Professors Carp, Lovgren; Assistant Professors Heine, Placek; Clinical Assistant Professor P. L. Peterson; Instructors J. A. Davis, Gillies.

Otorhinolaryngology.—

- One lecture is given on the anatomy of the ear and temporal bone and demonstration of the tympanic membrane in the freshman year in Anatomy. Two lectures on the examination of the ear, nose, pharynx and larynx; and two 2-hour demonstrations on the use of instruments commonly used in ORL examinations is given in conjunction with the sophomore course in Physical Diagnosis.
330. **Disease of Ear, Nose, Throat and Larynx** (1 hr weekly, total 16 hrs, I)
Lectures covering the anatomy, physiology, common diseases, abnormalities, tumors, diagnosis and treatment in the ORL field.
- Ward Clinics** (Groups of ten students, 3 hrs weekly, total 12 hrs)
Four periods of two hours each are given each group of students which includes ward rounds whenever feasible and definitive instruction in carrying out complete ORL examinations.
340. **Dispensary** (3 hrs weekly, total 12 hrs, SS, I, II, III)
Clinics are held once weekly at the University Dispensary. Senior students are assigned patients for examination, diagnosis and treatment under supervision. Conferences are frequently held during these hours.

Pathology

Professors Schenken, *Chairman*, McWhorter, Tollman; Clinical Associate Professor Tanner; Assistant Professors Foster, Giffen, Kulesh, Simons, F. Smith; Clinical Assistant Professors T. R. Anderson, Coleman; Associates Fitch, Greene, Wilson; Clinical Associates Papenfuss, Tamisiea; Assistant Instructor Lang.

It is the aim of this department to acquaint the student with the etiology, the pathologic physiology and the morphologic changes produced by disease processes in the human body.

Pathology.—

321. **General Pathology** (Total 275 hrs, I, II, III)
This course emphasizes the etiology and morphologic alterations produced by disease processes. It comprises the general principles of the reaction of the body to injury and of specific disease processes in detail by organ systems in

- both lecture and laboratory exercise. This course is closely integrated with the course in Medical Microbiology 320 so that at the time the student studies microbiologic aspects of microorganisms, the alterations produced in the tissues and organs of the body by the same organisms are covered.
322. **Clinical Pathology** (2 hrs lecture, 3 hrs laboratory weekly, total 60 hrs, III)
The lecture and laboratory course emphasizes selection and performance of laboratory tests used by the physician. The student becomes proficient with many such tests and acquires a working knowledge of the remainder. Special emphasis is placed upon the selection of tests and the interpretation of the results of such tests, correlating these results with the clinical findings.
331. **Clinical Pathology** (Total 75 hrs, I, II)
Continuation of course 322.
332. **Clinical Pathology Conference** (1 hr weekly, total 24 hrs, II, III)
Selected cases are presented by a clinical department and the Department of Pathology for discussion of the differential diagnosis, management, and correlation of the clinical findings with the pathology.
333. **Correlative Clinical Pathology** (1 hr weekly, total 36 hrs, I, II, III)
Selected cases are discussed from the standpoint of correlation of clinical observations with radiological and pathological findings. Whenever possible these cases parallel the lectures given in clinical departments.
340. **Clinical Pathology Conference** (Total 40 hrs, I, II, III)
Continuation of course 332.
341. **Correlative Clinical Pathology** (Total 40 hrs, I, II, III)
Continuation of course 333.
- Pathology, Electives.—**
356. **Autopsy Pathology** (8 cr) Dr. Schenken
Prereq Path 320
In addition to participation in autopsies, the student will study in detail both gross and microscopic tissue changes, and will correlate these with clinical findings.
357. **Pathology of Tumors**
a. **An Intensive Course in Oncology, With Special Attention to the Morphology, Derivation and Course, of Various Tumors** (4 cr) Dr. Schenken, Staff
Prereq Path 356
b. **Studies of Bone Tumors** (3 cr)
Prereq Path 357a
c. **Studies of Tumors of the Nervous System** (3 cr)
Prereq Path 357a
358. **Etiology of Tumors** (1 cr) Dr. Schenken
Prereq Path 356
This will be a general study of the subject of tumor etiology with special emphasis on the phases represented by the investigative work carried on by the student. In large part this will be carried on by study of the periodical literature.
359. **Seminar** (1 cr) Staff
By permission
360. **Research** (cr arr) Staff

Pediatrics

Professors Gibbs, *Chairman*, Gedgoud, Robertson, Thomas; Associate Professors Crofoot, Morrow; Clinical Associate Professors Bancroft, Stafford, Stewart; Assistant Professors C. R. Angle, Klok, D. C. Nillson, Oberst, D. Smith; Associates C. F. Bantin, Rose, Schreiner, Zahler; Instructors L'Ecuyer, Rubin, C. Salhanick; Clinical Instructors Ebers, Fijan, Grant, Steinman.

The aim of this department is to develop in the student an understanding of human growth and development, as well as the diseases characteristic of infancy, childhood and adolescence. This is done through the lectures and demonstrations, small group bedside conferences and discussions, clinical clerkship at the University and at the Childrens Memorial Hospitals and the outpatient service at the University Hospital. Special orientation and training in rehabilitation is given at the new Rehabilitation Center.

Undergraduate students are encouraged to participate in research on a wide variety of projects, and students who show particular interest in a given problem are afforded guidance and support in their scientific investigations.

Pediatrics.—

320. **Growth and Development** (1 hr weekly, total 16 hrs, II, III)
Lectures on basic principles of total growth. The rate of progress to be expected in weight and length, together with the mental and emotional development from birth to adolescence, is discussed. Part of the course is devoted to presentation of some of the anomalies and diseases encountered during the newborn period.

- 330. Diseases of Childhood** (1 hr weekly, total 40 hrs, I, II, III)
In this course are covered the various diseases of childhood, including the diseases by systems, deviations in growth and development, nutritional diseases and communicable diseases.
- 335. Clinical Clerkship** (22 hrs weekly, total 88 hrs, I, II, III)
Students are assigned cases on the pediatric wards of the University and Children's Memorial Hospitals for complete study including history, physical examination, routine and special laboratory tests and other aids for the establishment of diagnosis with a view toward an effective program of therapy. Students are expected to have full knowledge of the cases assigned to them and also to be familiar with patients on the ward assigned to other students. Each student is held responsible for presentation of his cases at any time he may be called upon by the instructor during ward walks. One ward walk a week is devoted to discussion of behavior problems in childhood.
- 340. Hospital Clinics** (1 hr weekly, total 18 hrs, SS, I, II, III)
Clinics in all aspects of pediatrics are included in this course, utilizing material on the wards of the University Hospital and Children's Memorial Hospital as well as other institutions affiliated with the College of Medicine. An effort is made to cover the entire field of pediatrics as seen in the various institutions.
- 341. Dispensary** (17 hrs weekly, total 68 hrs, SS, I, II, III)
Clinics are held at the dispensary to which fourth-year students are assigned for practical work in the diagnosis and treatment of ambulant cases. All children enter the dispensary through the pediatric clinics. Special clinics utilizing postnatal cases, and rheumatic heart cases are held each week.
- 342. Senior Clerkship** (40 hrs weekly, total 120 hrs, SS, I, II, III)
Senior students are assigned to the wards of the University and Children's Memorial Hospitals for a period of 3 weeks under staff direction. They are required to work up cases assigned to them, and to acquire general information regarding diagnosis and therapy on all patients admitted to the hospital to enable them to participate in the discussion of these cases. They are also assigned to the admitting and emergency sections of the hospital under the direction of the Staff. Senior clerks are required to attend ward walks twice daily, and a radiological conference once a day. Attendance at pathology conferences is also a requirement. Senior clerks are encouraged to participate freely in all staff conference discussions and to attend monthly staff meetings.
- Pediatrics, Electives.—**
Junior and senior students interested in special problems in pediatrics are encouraged to engage in research under the direction of the staff. Arrangements for such work should be discussed with the Chairman of the Department.
- 350. Pediatric Gastroenterology** (3 qtr hrs per qtr, total 9 qtr hrs) Dr. Gibbs
Prereq medical school courses as follows: biochemistry, physiology, and histology or their equivalents
The special characteristics of the gastrointestinal physiology of the normal infant and the pathological physiology, clinical manifestations, and treatment of gastrointestinal diseases of special importance in early life will be surveyed. Particular attention will be given to the chronic metabolic diarrheas.
- 351. Endocrine and Metabolic Diseases in Early Life** (3 qtr hrs per qtr, total 9 qtr hrs) Dr. Gibbs
Prereq same as in Course 350
The normal endocrine physiology is reviewed as it pertains to the infant, child, and adolescent. Abnormalities of endocrine and metabolic nature in early life are considered.
- 352. Pediatric Biochemical Ultra-Micro Analysis** (2-3 qtr hrs per qtr, total 9 qtr hrs) Dr. Gibbs
Prereq Biochemistry 310 or completion of course in Medical Technology
Instruction and experience in the performance of micro-biochemical procedures particularly useful to a clinical biochemical laboratory serving a children's ward or children's hospital.
- 353. Developmental Behavior Pattern of the Newborn** (3 qtr hrs per qtr, total 6 qtr hrs) Dr. Gibbs
Prereq M.D. degree or B.Sc. in Nursing or undergraduate major in psychology
A study of activities of the normal infant as related to environmental factors.
- 358. Pediatric Research Seminar** (2 qtr hrs per qtr, total 6 qtr hrs) Dr. Gibbs
Selected topics of current research or contemplated research with presentation of appropriate patients.
- 359. Research in Pediatrics** (cr arr) Dr. Gibbs
Prereq Ped 358 completed or in progress

Physical Medicine and Rehabilitation

Assistant Professor Frost, *Chairman*; Professor Hunt; Lecturers Barger, Hansen, Labusohr, Rembe, H. Thompson, Vogt; Demonstrators Bohnenkemp, Burton.

The principles and techniques of Physical Medicine and Rehabilitation are presented at assigned times to the student body. A one-hour lecture on *Philosophies and Principles of Physical Medicine and Rehabilitation* is given in the sophomore year.

The junior and senior students are divided into groups of approximately eight students each. The junior students receive sixteen hours of lectures and clinics, and the senior students receive sixteen hours of clinical experience at assigned times over a four-week period, at the Nebraska University and Douglas County Rehabilitation Center.

330. Principles of Physical Medicine and Rehabilitation (Total 16 hrs, I, II, III) Dr. Frost and Staff.

Covering the aspect of their individual fields of work or specialty concerned in the total approach to evaluation and treatment of disabled persons.

Physiology and Pharmacology

Professors McIntyre, *Chairman*, Bennett; Associate Professor F. L. Dunn; Associate Research Professor Humoller; Assistant Professor Wetherell; Instructors Ginski, Sievers; Adjunct Instructor Browne.

The courses in physiology and pharmacology 310-336, inclusively, stress the fundamental principles underlying living processes in health and disease and provide a comprehensive basis for medical practice. Courses 350-358, inclusively, are designed for special instruction for advanced students in physiology and pharmacology.

Physiology and Pharmacology.—

310. General Introductory Course (lectures, demonstrations and conferences, total 72 hrs, III)

This course presents the essentials of physiology and pharmacology as a basis for more advanced study. The mechanism by which the body cells maintain the normal *milieu intérieur* are examined and emphasized and the fundamentals of neurophysiology including the autonomic system and the pharmacology of neural-effector cell transmission are described. The principles of endocrinology and the fundamental physiology of the pituitary glands, gonads, thyroid, parathyroid, islet tissue and adrenals are outlined.

311. Physiology and Pharmacology Laboratory Course (total 84 hrs, III)

In this course students perform experiments designed to illustrate basic physiological techniques and apparatus and are directed towards illustrating salient principles as concurrently developed in the lecture course. Several demonstrations are conducted using more advanced techniques to illustrate principles of electrophysiology and the mammalian preparations. Other teaching aids, such as film and discussion groups, are employed.

322. Physiology and Pharmacology Lectures and Demonstrations (total 84 hrs, I)

In this course the normal and pathological physiology of the cardiovascular, renal and respiratory systems are discussed in detail with special reference to the drugs most widely used in cardiovascular and renal disorders, including cardiac decomposition, shock and hypertension.

323. Physiology and Pharmacology Laboratory (total 84 hrs, I)

The elements of anesthesia are presented concurrently with practical work in anesthesiology on mammals. This course consists largely of acute mammalian experiments designed to illustrate the fundamentals of cardiovascular, renal and respiratory physiology, and the pharmacology of cardiovascular drugs.

324. Physiology and Pharmacology Lectures and Demonstrations (total 96 hrs, II)

This course presents a detailed account of endocrinology together with a discussion of the physiology of the G.I. tract and drugs used to correct its disorders, together with a presentation of the pharmacology of specific agents including the antibiotics, chemotherapeutic substances and vitamins.

325. Physiology and Pharmacology Laboratory (total 84 hrs, II)

This course consists of practical work performed chiefly on the students themselves in gastro-enterology and experiments designed to demonstrate the physiology of vision and hearing.

336. Application of Physiology and Pharmacology to Clinical Problems (lectures and demonstrations, total 36 hrs, I, II, III)

This course is designed to illustrate the practical use of drugs, hormones and chemotherapeutic agents in the treatment of patients including prescription writing. The fundamentals of normal and pathological physiology are stressed, together with the pharmacodynamics of the agents discussed.

Physiology and Pharmacology, Electives.—

350. **Technique in Experimental Physiology and Pharmacology** (1-9 qtr hrs cr) Dr. McIntyre and Staff

Prereq Physiology and Pharmacology 310, 311

This course consists of instruction in surgical procedures on mammalia, reptilia, and amphibia and the preparation of organs and tissues *in situ* and *ex situ* for experimental study; instruction in the construction, manipulation and operation of apparatus.

Special Physiology and Pharmacology.—

- 351-1. **Advanced Physiology and Pharmacology** (1-9 qtr hrs cr) Drs. Bisgard, Hendrickson and Jodrey

Prereq Physiology and Pharmacology 350

In Vivo aseptic preparations; instruction in the fundamental techniques of aseptic surgery for the preparation of animals for study, and their postoperative care.

- 351-2. **Advanced Physiology and Pharmacology** (1-9 qtr hrs cr) Dr. McIntyre

Prereq Physiology and Pharmacology 350

In Vivo preparations. The preparation of tissues for *in vitro* metabolism studies, perfusion of organs, isolated heart preparations, isolated smooth and striated muscles, myography, electromyography, cardiography, oncometry, and plethysmographic studies.

- 351-3. **Electro-Physiology** (1-9 qtr hrs cr) Dr. Bennett

Prereq Physiology and Pharmacology 350

Preparation of nerve for action-potential studies and other phenoma associated with nerve-activity; the electrostatic voltmeter, the cathode ray oscilloscope, direct-current amplification; the modification of nerve-activity by chemical and physical agents.

Advanced Pharmacology.—

- 352-1. **Advanced Pharmacology-Toxicology** (1-9 qtr hrs cr) Mr. Wetherell, Mr. Humoller

Prereq Physiology and Pharmacology 350

The recognition of poisons in the body. The quantitative determination of toxic substances in necropsy materials and excreta; Polarigraphic quantitative determination of metallic ions present in tissues. Qualitative and quantitative tests for alkaloids by polarographic and other methods.

- 352-2. **Advanced Pharmacology-Bioassay** (1-9 qtr hrs cr) Mr. Humoller, Dr. McIntyre

Prereq Physiology and Pharmacology 350

The assay of drugs and hormones and so-called vitamins by biometric methods, including standardization of drugs and biologically active substances.

- 353-1. **Vitamin and Endocrine Studies**—The "Deficient State" (1-9 qtr hrs cr) Staff

Prereq Physiology and Pharmacology 350

Animal experiments on diets deficient in accessory food factors; avitaminosis; physico-chemical properties of accessory food factors; isolation and purification of accessory food factors.

- 353-2. **Vitamin and Endocrine Studies**—The Endocrine System (1-9 qtr hrs cr) Dr. McIntyre

Prereq Physiology and Pharmacology 350

Studies in hypo- and hyper-normal hormonal activity; techniques for extirpation of glands of internal secretion.

354. **Application of Physiology and Pharmacology to Clinical Problems** (1-9 qtr hrs cr) Drs. Bennett, McIntyre

Prereq Physiology and Pharmacology 350

Electrocardiography, electrostethoscopy, metabolic rates. Study of neuro-muscular lesions by physiological methods; application of endocrinology to obstetrics and gynecology and medicine; special use of drugs and their diagnostic and therapeutic use in clinical problems.

355. **Special Application of Physiology and Pharmacology to Industrial Medicine and Surgery** (1-9 cr) Drs. Bennett, McIntyre, Sievers, Mr. Humoller

Prereq Physiology and Pharmacology 350

Physiological principles in shock therapy due to trauma; low pressure, low oxygen tension encountered in high altitude aviation. Physiological effects of high pressure. Caisson disease; noxious gases and toxic industrial poisons.

356. **Biophysics and Biochemistry of the Cell** (4-15 cr) Dr. McIntyre, Mr. Humoller and Staff

This course places special emphasis on the physiology and biochemistry of the anatomical units of the neuro-muscular system, and the effects of drugs, poisons and physical agents upon their functions and enzyme systems.

357. **Seminar** (1 or 2 qtr hrs credit per quarter) Staff

358. **Research in Physiology and Pharmacology** (cr arr) Staff

Preventive Medicine

Associate Professors Potthoff, *Chairman*, Rogers; Instructor Kutler; Lecturers Crabill, DuBois, McArdle.

These courses aim to give the students basic orientation and preparation related to physicians' increasingly important responsibilities in preventing disease, promoting efficiency, acting as health counsellors and serving as community leaders in health matters. The field work of the junior year is carried on through cooperative agreement with the Omaha-Douglas County Health Department.

- 310. The Accident Problem and Field Emergency Care** (2 hrs weekly, total 16 hrs, III)
This course is offered cooperatively with the Department of Surgery. Includes study of the epidemiology of accidents and with methods of immediate care under field conditions.
- 320. Principles of Preventive Medicine** (2 hrs weekly, I; 1 hr weekly for four wks, II, total 28 hrs)
Considers our major health problems and the organization and programming principles in our society at local, state and national levels to promote good health; biostatistics; occupational health.
- 321. Principles of Preventive Medicine** (2 hrs weekly, total 24 hrs, III)
Includes epidemiology, with emphasis upon the preventive aspects of medical practice.
- 330. Clerkship in Preventive Medicine** (Total 35 hrs, I, II, III)
Field trips to facilities and agencies of public health importance; topic and case studies embodying aspects of disease prevention, use of community resources and comprehensive care.

Radiology

Professors Hunt, *Chairman*, Moore; Associate Professor E. S. Pederson; Clinical Associate Professor Fraser; Assistant Professors A. L. Dunn, S. Gunderson, R. Ogborn, Waggener; Clinical Assistant Professor Neely; Clinical Associate Ellsworth; Instructor Tuma; Clinical Instructors Bradley, James, Saichek, Skoog-Smith.

The curriculum in radiology aims to relate the physical and biological principles of radiation effects to the basic sciences and to the diagnosis, prevention and treatment of disease.

The principles of radiology presented during the third quarter of the second year relate to radiation physics, radiobiology, principles of radiographic technique and the interpretation of roentgenograms.

During the third year radiologic interpretation is continued by lectures and diagnostic conferences during the first quarter. The principles of radiotherapy are presented during the second quarter. Sectional teaching to groups of four to eight students is conducted by demonstrations, ward rounds, film reading sessions, group conferences and tumor clinics.

Radiological Anatomy

Taught as part of gross anatomy.

- 320. Principles of Radiology** (1 hr weekly, total 12 hrs, III)
- 330. Principles of Radiology** (1 hr weekly, total 28 hrs, I, II)
- 331. Clinical Radiology** (total 16 hrs) Staff
Assignment of a group of 4 to 8 students who, during 4 weeks, observe and participate in radiographic technique, fluoroscopy, radiographic interpretation, radioisotope clinic, cancer follow-up clinics and ward rounds on radiotherapy service.
- 341. Radiologic Conference and Clinic** (1 hr weekly, 20 hrs, I, II, III. September through May at the Nebraska Methodist Hospital.) Drs. Hunt and Moore
Clinical presentation correlating clinical and radiologic findings in selected cases with participation by radiology, pathology and involved clinical specialties.

Radiology Electives.—

- 350. Advanced Diagnostic Radiology** (4 to 8 cr) Dr. Moore, Dr. Pederson
Prereq Radiol. 320, 330, 331, 341
Responsible analyses of the status of the various tissues, organs, regions and systems of the body through correlation of radiographic and fluoroscopic observations with anatomy, physiology and pathology.
- 352. Advanced Therapeutic Radiology** (4 to 8 cr) Drs. Hunt, Waggener
Prereq Radiol. 320, 330, 350, 354, 355
Systematic consideration and responsible application of roentgen rays, radium and radioisotopes in the treatment of benign and malignant diseases involving the various organs and regions of the body.
- 353. Seminar** (1 cr each semester) Staff

354. **Radiological Dosimetry** (3 to 8 cr) Drs. Tuma and Waggener
Prereq Radiol. 320, and consent of department.
 Analysis of factors controlling the intensity, quality, distribution, absorption and effects of radiation in phantoms, barriers and tissues.
355. **Radiobiology** (3 to 8 cr) Drs. Latta, Pederson, Waggener
Prereq Anat. 314, 315, Radiol. 320, 354 (may be concurrent)
 Assigned laboratory projects and reading for analysis of basic biologic effects of radiation on cells, tissues and organisms.
356. **Medical Instrumentation and Biophysics** (3 to 8 cr) Drs. McIntyre, Tuma, Dunn, Ogborn
Prereq Physiol. 320, 321, Radiol. 320, 354
 Assigned laboratory projects, practice and correlated reading referable to special applications of physics in medical instrumentation and biophysical analyses.
357. **Thesis** (cr arr) Staff

Surgery

Professors Musselman, *Chairman*, R. R. Best, Bisgard, Finlayson, McLaughlin; Associate Professors Barmore, Kennedy, Waggener; Clinical Associate Professor Morton; Associate Research Professor H. L. Davis; Assistant Professors Browne, Brush, Coe, Dailey, J. B. Davis, G. N. Johnson, Kleitsch, McMurtrey, D. M. Miller, Neis, Pester, Potter, Rasmussen, Swenson, Therien, D. H. Thompson, C. Wilson; Clinical Assistant Professors Cherry, Davies, Robert Garlinghouse, Gogela, Hilton, W. W. Webster; Associates L. L. Anderson, Brauer, Cochran, Frank, Latenser, Rees, L. W. Thompson; Clinical Associate Cole; Instructors Bruce, Carter, Hachiya, Kimball, Kutler, Landry, Marshall, Porter, Stroy, Watland; Clinical Instructors Ehrlich, Hill-eyer, LeWorthy, Moessner, Wiedman; Assistant Instructors Chleborad, Farhat; Clinical Assistant Brinkman.

The courses in surgery are given in the junior and senior years. However, the student is introduced to surgery in his freshman year in the Correlation Hour of the Department of Anatomy. The student has further work in surgery in the sophomore year as a part of the courses in Physical Diagnosis. In the clinical years the student is encouraged by direction and by precept to review the basic sciences as related to each disease which he encounters and to apply this knowledge in learning and understanding the principles of surgery.

The courses in surgery are planned to give the student a thorough understanding of the principles of surgical pathology, surgical diagnosis and surgical treatment. The undergraduate courses do not include instruction in major operative technic. Minor operative technic is taught in the Clinical Clerkship and Dispensary and includes practical exercises. The technic for performing such major operations as would come to the practitioner in the course of general work or as emergencies is taught during the internship. Preparation for the practice of surgery requires additional postgraduate training as a resident in surgery. Surgery includes a section of general surgery, a section of neurosurgery, a section of thoracic and cardiac surgery, a section of plastic, maxillo-facial and dental surgery, and a section of anesthesiology.

- Surgery.—**
 330. **Fundamentals of Surgery for Juniors** (2 hrs weekly I and III; 1 hr weekly II, total 68 hrs)

A presentation of the principles of surgery by assigned reading and by lectures, demonstrations and quizzes supplementary to the text.

335. **Clinical Clerkship for Juniors** (12 wks, total 374 hrs, I, II, III)
 Students spend eight weeks on surgery, during which time they are assigned patients in the University Hospital, the Veterans Administration Hospital or Douglas County Hospital. They follow these patients under close supervision. The students have responsibility for the history, physical examination, routine laboratory work, differential diagnosis, progress notes, operative report, pathology report and case summary on patients assigned to them. Progress notes include discussion of pathogenesis, explanation of symptoms, rationale of treatment and prognosis. Instructors review the cases with the students individually and on ward rounds. The students receive training and practical experience in asepsis and operating room technic, and in gross surgical pathology by assisting at operations on their own patients. Total hours include clerkship in anesthesiology and urology. Students spend four weeks on anesthesiology, during which time they are assigned to Immanuel Hospital, Lutheran Hospital, Methodist Hospital, Clarkson Hospital or University Hospital. They participate with their instructors in the administration of anesthetics to patients in these hospitals. The students are assigned case reports which are reviewed for all of the clerks on anesthesiology at daily conferences. Pertinent topics related to the patients are discussed by the staff at these conferences. Also, the students have lectures and demonstrations in the theory and practice of anesthesiology.

- 340. Neuro-Surgery** (16 wks, 1 hr per wk, I)
Lectures in fundamentals of neuro-surgery.
- 341. Clinical Clerkship for Seniors** (6 wks, 216 hrs, SS, I, II, III)
Students are assigned as clinical clerks to the several hospitals associated with the Medical College: the Bishop Clarkson Memorial Hospital, the Douglas County Hospital, the Immanuel Deaconness Hospital, the Nebraska Methodist Hospital, the University Hospital and the Veterans Administration Hospital of Omaha; and Bryan Memorial Hospital and Lincoln General Hospital of Lincoln. The students serve four weeks on general surgery and two weeks on neuro-surgery. Senior clerks work under the close supervision of members of the faculty. The course includes teaching conferences but no didactic work. Senior clerks have similar but greater responsibilities than those described for junior clerks.
- 342. Dispensary** (16 hrs per wk; total 64 hrs, SS, I, II, III)
Students are given practical experience in diagnosis and treatment of ambulant patients and experience in local anesthesia.

Surgery, General Exercises.—

Introduction to Clinical Medicine (Total 12 hrs, III)

This course for sophomores is held weekly, jointly with the Department of Medicine. A member of each department is present, and together they discuss such subjects as Ageing and Involution, Diseases of Medical Progress, Shock, Fever, Reaction to Injury and Stress.

Medical-Surgical Conference (First Tuesday each month, September through June, 8:00 to 9:15 a.m., Medical Amphitheater)

A joint effort of the Departments of Medicine and Surgery, at which patients with problems of common interest are presented and discussed by members of both departments. This conference is directed to both undergraduate and post-graduate students and is attended by junior students, senior students and the faculties of the Departments of Surgery and Medicine. Physicians in practice are cordially invited to attend.

Surgery Grand Rounds (Every Thursday 8:00 a.m., surgical wards and Staff Dining Room)

All patients on the surgical service are presented and their problems discussed. The patients are then seen on the wards. These rounds are attended by junior students, senior students and the attending staff of surgeons. Physicians in practice are cordially invited to attend.

Surgery Seminar (Thursday 7:15 p.m., September through June, Conference Room)

Presentation and discussion of subjects and articles related to Surgery. Staff, residents, interns and senior students.

Urology

Professors L. W. Lee, *Chairman*, P. S. Adams; Assistant Professors H. Kammandel, Malashock; Clinical Assistant Professor Munger; Clinical Instructors Gilbert, Pfeifer; Instructor N. Davis.

The fundamental principles of this surgical specialty are taught in close coordination with the general surgical teaching program. The educational experience is geared to the type of knowledge which is of value to the general physician. Proficiency in a general knowledge of urology is accomplished by coordinated study, including lectures, clinical clerkship, dispensary and operative clinics. Emphasis at all times is on methods of diagnosis and management of the patient with urological disease.

Aside from the undergraduate teaching, the members of this department provide instruction to internes, surgical residents and nurses. They also provide specialized urological care to patients in the University Hospital and conduct investigative research in various subjects of urological interest.

- 330. Fundamentals of Urology** (1 hr weekly, total 16 hrs, I)
Lectures on diseases of the urogenital system.
Ward Clinics (2 hrs weekly when on Surgery Clerkship)
Students are given ward clinics using patients at the University Hospital to illustrate major disease entities encountered in the medical practice.
- 341. Dispensary** (3 hrs weekly, total 12 hrs, SS, I, II, III)
One clinic is held each week to which students are assigned for practical experience in the diagnosis and treatment of urogenital diseases.

Senior Preceptorship Program

An extramural teaching program, consisting of having each senior student serve a period of eight weeks with an experienced practitioner of medicine, has been established. It affords the student an opportunity to learn much of the art and science of medical practice. Preceptors have been selected by a Preceptorship Committee of the Faculty of the College, and are outstanding leaders in medical practice in the rural communities of Nebraska. Preceptors are regularly appointed members of the College of Medicine faculty, subject to the same rules and regulations as all other faculty members.

The student is assigned a preceptor whom he closely follows in all of his medical activities, including hospital work, office practice and home calls. Students are allowed to participate in the various aspects of medical practice as they become familiar with the preceptor's method of practice, and as the preceptor feels they are capable of handling the work. The various aspects of general practice and community life are made known to the student during his preceptorship.

TRAINING COURSE FOR RADIOLOGICAL TECHNOLOGISTS

HOWARD B. HUNT, M.A., M.D.

Professor of Radiology and Chairman of Department

RONALD E. WAGGENER, M.D., Ph.D.

Assistant Professor of Radiology

JANET P. NIESS, B.Sc., R.T.

Assistant Instructor in Radiologic Technology

ALYCE MCCOY, R.T.

Radiotherapy Technician

DOROTHY DAVID, R.T.

Chief Radiographic Technician

Organization.—The course for radiological technologists has been established by authority of the Board of Regents in connection with the Department of Radiology, College of Medicine, and extends over a two-year period. The first year consists of lectures and demonstrations with supervised experience. The second year consists of an apprenticeship in an accredited Department of Radiology. The course has been approved by the American Registry of X-ray Technicians which is sponsored by the American College of Radiology.

Students who have satisfactorily completed the course of training in radiological technology at the University of Nebraska, College of Medicine, including at least a second year of experience in an accredited department of radiology for which they are usually paid a salary, are accepted for examination by the American Registry of X-ray Technicians. A certificate in X-ray Technique is issued by the American Registry of X-ray Technicians upon successful completion of the examination.

Facilities for Instruction.—Ample opportunity for experience in making roentgenograms of patients is provided. During a period of 12 months about 15,000 X-ray examinations are done at the University of Nebraska Hospital, including all usual and most special procedures. The radiographic work is supervised by the radiologists and the senior radiological technicians. Facilities are provided for experience in X-ray therapy, loading of radium applicators and radioisotopic procedures. All students and staff members are carefully protected against exposure to radiation. The library of the College of Medicine is maintained in the hospital.

Requirements for Admission.—An applicant for admission to the course in radiological technology may be between 18 and 35 years of age and must be a graduate from an accredited high school. It is recommended that the preparatory work include English, chemistry, physics, zoology, typing and secretarial work, although applicants are considered who do not present credits in all these subjects. One year of collegiate study including English, physics, biology, chemistry, typing, shorthand and secretarial work is recommended. In the case of those students who have completed 90 semester hours of college work, including English 6 hours, Physics 8 hours, Chemistry 12 hours and Biology 8 hours, the University of Nebraska College of Medicine will grant the degree of Bachelor of Science in Radiological Technology upon completion of the prescribed course

including intermediate radioisotopic technology and the additional year of approved preceptor training. Applicants must be in good health with no disabilities. The application should be accompanied by a complete transcript of high school and college credits, a photograph and the names of two people from whom references can be obtained. Admission is allowed in January, July and September, and only six students can be accepted annually. Applications should be sent to the Chairman of the Department of Radiology, University of Nebraska College of Medicine, 42nd and Dewey Avenue, Omaha 5, Nebraska. Application forms will be provided upon request.

Fees and Expenses.—A tuition fee of \$120.00 for a resident student and \$200.00 for a nonresident is charged at the time of enrollment. This fee covers tuition, registration, student health and diploma fees. Students must maintain themselves and provide their own uniforms. The cost of textbooks is about \$15. Board may be obtained for about \$10 a week in the vicinity of the hospital and rooms for approximately \$7 to \$10 a week. A student may elect to spend the required second year in training at the University of Nebraska Hospital for which no tuition is charged.

Through the generosity of the W. K. Kellogg Foundation there are loan funds available for students taking training as technicians. Information concerning loans can be secured by applying to the Director.

General Information.—The course of study covers a period of one year. Students are accepted on a probationary basis during the first month. Students are in class or on duty in the Department of Radiology from 8 a.m. until 5 p.m. with a free hour for lunch. Students are not on duty during Saturday afternoon or Sunday. A vacation of two weeks is allowed at the Christmas holiday or in the summer. Immunization against diphtheria, typhoid fever and smallpox is advised.

Curriculum.—The course of training for students in radiological technology consists primarily of an apprenticeship and demonstrations under the technician and of conferences with the radiologist. The apprenticeship comprises 90 per cent of the period of training. The student works with the technician in the making of all types of X-ray studies. Gradually increasing independent responsibilities are given over to the student as experience increases. The student must become familiar with transcription of the reports of the radiologist covering the X-ray studies made of patients and his reports on patients treated with X-ray and radioactive agents.

The following courses are required of students in radiological technology. The courses in Anatomy and Medical Science are provided through the courtesy of the School of Nursing by the College of Medicine. Credits are expressed in semester hours.

(1) **ANATOMY.**—Lectures, class recitations, demonstrations and laboratory work dealing with the structure of the human body. Preserved specimens and fresh animal specimens are used for study. 3 cr. hr.

(2) **MEDICAL SCIENCE.**—Causes and general features of disease processes. Lectures. 1 cr. hr.

(3) **PRINCIPLES OF RADIOLOGY.**—The general principles of radiation, technique, contrast media and various diagnostic procedures are presented together with the basic principles of X-ray and radium therapy. Lectures include professional ethics. 1 cr. hr.

(4) **SECRETARIAL OFFICE PRACTICE.**—Supervised experience covering filing, cross indexing of diagnoses according to the Standard Nomenclature of Disease, vocabulary training and transcription of radiological reports. 2 cr. hr.

(5) **RADIATION PHYSICS.**—The production, characteristics and control of X-rays applicable to radiographic technique, radiotherapy and protection of personnel. Lectures. 2 cr. hr.

(6) a. **ELEMENTARY RADIOGRAPHIC TECHNOLOGY.**—Demonstration of anatomical positioning and adaptation of radiographic exposure to the more common radiographic examinations. 6 cr. hr.

b. **INTERMEDIATE RADIOGRAPHIC TECHNOLOGY.**—Supervised application of above principles by the student in the conduct of routine radiographic procedures. 6 cr. hr.

(7) **RADIOTHERAPEUTIC TECHNOLOGY.**—Demonstration of types of diseases to which radiotherapy is applicable and of their treatment by X-ray and radioactive agents. 3 cr. hr.

(8) **ELEMENTARY RADIOISOTOPIC TECHNOLOGY.**—Supervised experience in instrumentation and laboratory procedure. 3 cr. hr.

(9) **INTERMEDIATE RADIOISOTOPIC TECHNOLOGY.**—Conduct of radicassay, monitoring and special laboratory determinations. Required of all candidates for B.Sc. in Radiological Technology. 9 cr. hrs.

(10) **FIRST AID.**—A course in first aid as prescribed by The American Red Cross with award of First Aid Certificate by The American Red Cross upon satisfactory completion of course.

Opportunities.—There is an increasing demand for qualified technicians. These opportunities are primarily in the departments of radiology in hospitals and in the offices of doctors specializing in radiology. There is no opportunity for independent operation of a laboratory by the technologist since the use of X-ray in the diagnosis and treatment of diseases is legally the practice of medicine and in the interest of public welfare and safety must be carried out under the supervision of a licensed physician.

TRAINING COURSE FOR MEDICAL TECHNOLOGISTS

Department of Pathology

JOHN R. SCHENKEN, B.Sc., M.D.

Professor of Pathology and Director

MORTON HOWARD KULESH, A.B., M.D.

Assistant Director and Assistant Professor of Pathology

Knowledge in the fields of biochemistry, hematology, serology, parasitology, bacteriology, immunology, and mycology has been increased greatly during the last twenty or thirty years. This knowledge is now being routinely applied in medical science by means of laboratory tests in the diagnosis and treatment of all patients, both those who enter hospitals and those who are cared for in physicians' offices.

Performing these laboratory tests and interpreting their results have become so important and complicated that this is now a special field of medicine in itself. The volume of laboratory work has led to the training of medical technologists for the assistance of the physicians in this and other specialties, and in the general practice of medicine.

The demand for well-trained medical technologists has been increasing steadily. Most technicians are employed in hospital laboratories, although many of them work in physicians' offices and in clinics. There are some openings for medical technologists in research laboratories, and a number of opportunities have appeared in industrial laboratories with work related to or similar to medical techniques.

Organization.—The course for medical technologists has been established by authority of The Board of Regents, in connection with the Department of Pathology, College of Medicine. It has been accredited by the Council on Medical Education and Hospitals of the American Medical Association and the American Society of Clinical Pathologists as being equipped and organized to furnish adequate training in laboratory technic. Graduates of the Training Course for Medical Technologists are expected to take the examination for certification by the Registry of Medical Technologists maintained by the American Society of Clinical Pathologists.

Facilities for Instruction.—The course is given in the University Hospital, and facilities of the University of Nebraska College of Medicine are available for instruction.

The University Hospital is organized primarily for teaching and is under the control of The Board of Regents, through the administration of the College of Medicine. It has a capacity of 202 beds, and patients are accepted from all over the state. All types of diseases are treated. Approximately 4,000 patients are admitted each year.

The laboratory of the University Dispensary is also used for instruction. Approximately 35,000 visits are made each year by patients of the University Dispensary. The treatment of patients in the hospital and dispensary is directed by the faculty of the College of Medicine. The laboratory work that is done includes all routine procedures, and many specialized tests that are required for unusual diseases.

The Library of the College of Medicine is maintained in the hospital. These books and periodicals are available for study, and for keeping in touch with current work in the field of laboratory diagnosis.

REQUIREMENTS FOR ADMISSION



High School.—Sixteen high school units are required for admission and must include three units in English, two units in one foreign language (ancient or modern), two units in mathematics (one each of algebra and geometry or an equivalent), and one in science (biology, botany, chemistry, physics or zoology).

College or University.—To insure adequate background and training for entering a recognized course in medical technology, the following minimum requirements have been established in accordance with the Registry of Medical Technologists:

BIOLOGY.—Twelve semester hours, of which are required at least 4 semester hours of zoology, and 3 semester hours of bacteriology if offered at the college where preliminary work is taken. If bacteriology is not available other branches of biology may be substituted.

CHEMISTRY: General Inorganic Chemistry.—At least 8 semester hours including 4 semester hours of laboratory. Organic Chemistry.—A complete course, at least 4 semester hours with not less than 2 semester hours of laboratory. Quantitative Analysis.—A semester course is recommended.

PHYSICS.—A lecture and laboratory course in physics is recommended.

ENGLISH.—Six semester hours in English.

ELECTIVES.—Sufficient to give a total of 60 semester hours of college credit. Sociology and psychology are recommended for electives.

After completion of the training course in Medical Technology, those students who have at least 90 semester hours of previous college work may obtain the degree of Bachelor of Science in Medical Technology, granted by the University of Nebraska College of Medicine. Those students taking the Training Course in Medical Technology with less than 90 semester hours of previous college work may be granted the Certificate of Medical Technologist.

Effective January 1, 1962, the pre-technical educational requirements for admission will be increased from two years (60 semester or 90 quarter hours) to three years (90 semester hours or 135 quarter hours).

Through the generosity of the W. K. Kellogg Foundation there are loan funds available for students taking training as technologists. Information concerning loans can be secured by applying to the Director.

Starting Dates.—Students begin their training during the summer months, on a somewhat staggered schedule.

Applications.—Forms for application may be obtained from the Director. These forms, with transcripts of both high school and college work, accompanied by a small recent photograph or snapshot, should be submitted several months prior to the date for which application is being made.

Fees and Expenses.—A tuition fee of \$120.00 a year for a resident student and \$200.00 a year for a non-resident student is charged at the time of enrollment. This fee covers tuition, registration, student health and diploma fees. Other than uniform laundry, students are responsible for their own maintenance, uniforms, laundry, etc. Housing facilities are available on the campus. Adequate facilities for lodging and/

or board are available near the campus. Allowance should be made for the purchase of books.

Plan of Instruction.—The course of training is 12 months in length. *No part of the course is offered separately.* Lectures covering background material are taken with the students of the College of Medicine. Other lectures are designed especially for the needs of the medical technologists. Conferences are held at frequent intervals for consideration of technics, their relation to disease processes and possible sources of error. Oral and written examinations are given at intervals. Demonstrations are used to introduce new subject matter, to emphasize important points and to familiarize the student with unusual problems.

The hours credit are arranged as follows:

Introduction to Medical Science.....	1	Biochemistry Laboratory	3
Bacteriology	4	Hematology	3
Bacteriology Laboratory	3	Hematology Laboratory	3
Parasitology	1	Histologic Technic	3
Serology	3	Blood Bank Technic.....	2
Biochemistry	3	Special determinations	3
Method in Chemistry.....	3		

The following formally arranged lecture courses are given:

INTRODUCTION TO MEDICAL SCIENCE.—This course covers a general survey of disease processes and their effect upon the individual. The relation of laboratory determinations and alterations in these tests associated with disease states is stressed.

MEDICAL MICROBIOLOGY.—This course is taken with the students of the College of Medicine. The medical aspects of bacteriology, immunology, mycology and parasitology are discussed.

BACTERIOLOGY AND SEROLOGY LABORATORY PROBLEMS.—Particular attention is given to laboratory technics, their control and interpretation.

HISTOLOGIC TECHNIC.—A series of lectures covering the basic principles of processing tissue and other materials for microscopic examination is given.

BIOCHEMISTRY.—This course embodies a study of the chemical reactions occurring within the human body. Particular attention is given to the way in which laboratory tests can give information about normal and abnormal chemical functions in the body.

HEMATOLOGY AND CLINICAL LABORATORY TECHNIQUES.—This course covers the general principles of blood examination for alterations in the cellular elements, including a discussion of abnormal conditions which are reflected in the laboratory results. In addition, the general aspects of urinalysis, gastric analysis, basal metabolic rates and electrocardiography are discussed.

SEMINARS.—Periodic seminars are held during which time pertinent problems regarding the laboratory are discussed. Periodic reviews of the recent literature are conducted.

In addition to the formal lecture material, the student is assigned to various services, as follows:

CHEMISTRY—three months. This service includes examination of blood and other body materials for chemical constituents. Such tests usually are quantitative. The student learns the use of proper equipment and the application of careful technics to the performance of a wide variety of tests. Over 30,000 tests in the chemistry section are performed annually, allowing thorough training in this field.

HEMATOLOGY—three months. The various tests for enumeration and detection of abnormality of the formed elements of the blood, and the tests for alterations in the coagulation mechanism of the blood are done. Over 35,000 such tests are performed in the hospital laboratory yearly.

BACTERIOLOGY, SEROLOGY AND PARASITOLOGY—three months. The identification of microorganisms, particularly pathogenic, by morphologic and cultural characteristics is undertaken in bacteriology. Serology involves primarily immunologic procedures in laboratory tests. Parasitology includes the study of technics for isolation and identification of small animal forms capable of causing disease in man. Adequate demonstration material is maintained in the laboratory. This section of training is under the direction and supervision of the bacteriology staff of the College of Medicine. Over 35,000 procedures are done yearly in this field.

BLOOD BANK TECHNIC—one month. Here the student is instructed in methods for handling and storage of blood, as well as preparation of blood for transfusion. Methods for detection of incompatibilities between bloods are emphasized. Over 5,000 tests are made in this section yearly.

HISTOLOGIC TECHNIC—one month. The student becomes familiar with the methods for processing tissues for microscopic examination. A variety of methods is presented, and there are approximately 8,000 tissue sections made yearly.

MISCELLANEOUS—one month. On this service, the student performs routine examinations of urine, gastric contents and other body fluids. In addition, the performance of basal metabolic rate determinations is accomplished. Approximately 10,000 such tests are made yearly.

Graduating Class of 1959

Internship Appointments

Aftonomos, Lefkos Thrasos, B.Sc., Jamestown, M.Sc., Nebraska	Limassol, Cyprus
Bishop Clarkson Memorial Hospital, Omaha, Nebraska	
Anderson, Allen Byford, Jr., B.Sc., Nebraska	Pawnee City
Bishop Clarkson Memorial Hospital, Omaha, Nebraska	
Axelrod, Ephriam I., B.A., Chicago	Omaha
Maimonides Hospital, Brooklyn, New York	
Bannister, Gary Lee, B.Sc., Nebraska	Aurora
Womack Army Hospital, Fort Bragg, North Carolina	
Barber, Jergen Leroy	Omaha
Kansas City General Hospital, No. 1, Kansas City, Missouri	
Bass, Dale Vernon, B.Sc., Bethany-Peniel	Dixon
San Bernardino County General Hospital, San Bernardino, California	
Bass, Dwight Russell, B.Sc., Bethany-Peniel	Dixon
Orange County General Hospital, Orange, California	
Beshore, Robert Lee, B.Sc., Nebraska	Kearney
Deaconess Hospital, Spokane, Washington	
Blacker, Harry Martin, A.B., Omaha	Omaha
Johns Hopkins Hospital, Baltimore, Maryland	
Blease, Ernest Basil, Jr.	Omaha
Thomas D. Dee Memorial Hospital, Ogden, Utah	
Blue, Earl Robert, A.B., Nebraska	Russell, Iowa
Wesley Hospital, Wichita, Kansas	
Bohi, Daniel Gerald, B.A., Doane	Geneva
Nebraska Methodist Hospital, Omaha, Nebraska	
Bookhardt, John Frank, A.B., Union (Lincoln) M.Sc., Nebraska	Omaha
Lincoln General Hospital, Lincoln, Nebraska	
Bridges, James Edward, A.B., Nebraska Wesleyan	O'Neill
Bishop Clarkson Memorial Hospital, Omaha, Nebraska	
Carlson, James Gilbert, A.B., Midland	Valley
Lincoln General Hospital, Lincoln, Nebraska	
Carson, James Stanford, A.B., Nebraska	Norfolk
Nebraska Methodist Hospital, Omaha, Nebraska	
Cirksena, William John, B.A., Hastings	Hastings
Letterman Army Hospital, San Francisco, California	
Clemens, Richard Paul, B.Sc. in Med., Nebraska	Omaha
St. Catherines Hospital, Omaha, Nebraska	
Cottingham, Richard Allan, A.B., Hastings	Hastings
Nebraska Methodist Hospital, Omaha, Nebraska	
Davis, Donald Andrew, B.Sc., Nebraska	Plattsmouth
Maricopa County General Hospital, Phoenix, Arizona	
Denker, John Carl, B.Sc., Nebraska	Valley
Bishop Clarkson Memorial Hospital, Omaha, Nebraska	
Donelan, James Spelbring, A.B., Nebraska	Omaha
Bishop Clarkson Memorial Hospital, Omaha, Nebraska	
Dresher, Charles Severeid, B.A., Omaha	Omaha
St. Lukes Hospital, Cleveland, Ohio	
Dumler, Martin Paulsen, B.Sc., Midland	Davenport
Denver General Hospital, Denver, Colorado	
Engelsjerd, Gerald Leonard, B.Sc. in Med., Nebraska	Alliance
Nebraska Methodist Hospital, Omaha, Nebraska	
Everett, Eugene Tarlton, B.A., Hastings	Omaha
Santa Barbara Cottage Hospital, Santa Barbara, California	
Foulk, Arnold Raymond, Jr., B.Sc., Texas A. & M.	Beatrice
Bishop Clarkson Memorial Hospital, Omaha, Nebraska	
Fredrickson, Gordon Eric, B.Sc. in Med., Nebraska	Wakefield
Nebraska Methodist Hospital, Omaha, Nebraska	
Gothard, Al Walton	Omaha
Baptist Memorial Hospital, Memphis, Tennessee	

Haag, Robert LeRoy, B.A., Nebraska	Bartley Deaconness Hospital, Spokane, Washington
Hamed, Sayed Kadry, M.A., Ohio State, B.Sc. in Med., South Dakota	Cairo, Egypt Seaside Memorial Hospital, Long Beach, California
Hinman, John Stuart, B.Sc., M.Sc., Nebraska	Newman Grove U. S. Naval Hospital, Bremerton, Washington
Hoff, Ronald Paul, B.A., Omaha	Omaha Deaconness Hospital, Spokane, Washington
Hook, Robert Lee	Rushville Emanuel Hospital, Portland, Oregon
Johnson, Kenneth Lee	Gering Sacramento County Hospital, Sacramento, California
Jorgensen, Harlan	South Sioux City Bishop Clarkson Memorial Hospital, Omaha, Nebraska
Kramer, Frederic Carl, B.A., Chicago, M.A., Harvard	Columbus Maricopa County General Hospital, Phoenix, Arizona
Kuska, Harry Daniel	Oshkosh Maricopa County General Hospital, Phoenix, Arizona
Lamphere, Richard Lee, B.Sc., Midland	Omaha St. Marks Hospital, Salt Lake City, Utah
Landers, Roderick Rees	Gothenburg Nebraska Methodist Hospital, Omaha, Nebraska
Landholm, Wallace Marven, B.A., Nebraska	North Platte San Bernardino County Hospital, San Bernardino, California
Leonard, Paul Farquhar, B.A., Nebraska Wesleyan, B.Sc., E.E., Nebraska	Lincoln Charles T. Miller Hospital, St. Paul, Minnesota
Link, Rudolf Walter, B.Sc., Nebraska	Omaha University of Chicago Clinics, Chicago, Illinois
Mathews, Maurice Damon, A.B., Hastings	Omaha Nebraska Methodist Hospital, Omaha, Nebraska
McAndrew, John Burton, B.A., Hastings	Ainsworth Fitzsimmons Army Hospital, Denver, Colorado
Moor, Gordon Frank, B.A., Nebraska State Teachers, Kearney	Holdrege Montreal General Hospital, Montreal, Quebec
Myers, Marilyn Gladys, B.A., Omaha	Lyons Orange County General Hospital, Orange, California
Norton, Robert William, B.Sc., Nebraska	Omaha San Bernardino County Hospital, San Bernardino, California
Otteman, Merlin Glenn	Pender Philadelphia General Hospital, Philadelphia, Pennsylvania
Petereit, Martin Frank, B.A., Omaha	Omaha Thomas D. Dee Memorial Hospital, Ogden, Utah
Peterson, Margaret Hancock, A.B., M.A., Nebraska	Omaha Immanuel Hospital, Omaha, Nebraska
Peterson, Ronald Ivar, B.A., Omaha	Omaha Immanuel Hospital, Omaha, Nebraska
Poley, Brooks Joseph, A.B., Princeton	Omaha Bishop Clarkson Memorial Hospital, Omaha, Nebraska
Poynter, Joseph Hollis, B.Sc., Nebraska	Kearney Southern Pacific General Hospital, San Francisco, California
Prescher, Donald Adolph, B.Sc., Creighton	Omaha Bishop Clarkson Memorial Hospital, Omaha, Nebraska
Rogers, James Albert, B.Sc. in Med., Nebraska	Lincoln U. S. Naval Hospital, Bremerton, Washington
Rud, James Amos, B.A., Augustana, B.Sc. in Med.	Sioux Falls, South Dakota Thomas D. Dee Memorial Hospital, Ogden, Utah
Schlichtemier, James Paul, B.A., Nebraska Wesleyan	Scottsbluff Nebraska Methodist Hospital, Omaha, Nebraska

Serbousek, Stanley Anthony	Hay Springs
Deaconess Hospital, Spokane, Washington	
Sloan, Dean Clair, B.Sc., Nebraska	North Platte
Deaconess Hospital, Spokane, Washington	
Smith, Harold Glenn, Jr., B.A., Nebraska Wesleyan	Auburn
Sacramento County Hospital, Sacramento, California	
Sorrell, Michael Floyd, B.Sc. in Med., Nebraska	Syracuse
Nebraska Methodist Hospital, Omaha, Nebraska	
Spitzer, Jerome Sheldon, B.Sc., Nebraska	Omaha
Kansas City General Hospital No. 1, Kansas City, Missouri	
Swanson, Leonard Alan, B.A., California, Los Angeles	Camarillo, California
Harbor General Hospital, Torrance, California	
Swarts, Carol Jean, B.Sc., Nebraska	Ashland
Swedish Hospital, Seattle, Washington	
Turner, Robert Williams, Jr., B.A., State University of Iowa	Omaha
Bishop Clarkson Memorial Hospital, Omaha, Nebraska	
Van Hove, Eugene Dennis, B.A., South Dakota	Parker, South Dakota
Kansas City General Hospital, No. 1, Kansas City, Missouri	
Wahl, Donald Hugh, A.B., Nebraska	Omaha
U. S. Naval Hospital, Camp Pendleton, California	
Wallace, Thomas Herbert, A.B., Nebraska Wesleyan	Wahoo
Nebraska Methodist Hospital, Omaha, Nebraska	
Weldon, Robert Clark, B.A., Omaha	Valley
Nebraska Methodist Hospital, Omaha, Nebraska	
Westmore, John Benjamin, B.Sc., Nebraska	St. Edward
Bishop Clarkson Memorial Hospital, Omaha, Nebraska	
Williams, David Eugene, A.B., Nebraska Wesleyan	Syracuse
San Bernardino County Hospital, San Bernardino, California	

THE UNIVERSITY OF NEBRASKA

Junior Division and Counseling Service

Registers and counsels all freshmen. Supervises the orientation of new students and conducts a special testing program for guidance purposes.

College of Agriculture

Leading to the degrees of Bachelor of Science in Agriculture and Bachelor of Science in Home Economics.

In addition to the resident teaching division, the College of Agriculture is comprised of the Agricultural Experiment Station with headquarters at the Lincoln campus and outlying stations at North Platte, Scottsbluff, Alliance, Crawford, Concord, and Union; the Agricultural Extension Service with headquarters at Lincoln and county or district extension offices at 83 locations in the state; and the University of Nebraska School of Agriculture at Curtis.

College of Arts and Sciences

Leading to the degrees of Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science.

School of Fine Arts

Leading to the degrees of Bachelor of Fine Arts, Bachelor of Music, Bachelor of Fine Arts in Education, Bachelor of Music in Education, Master of Music in the appropriate colleges.

School of Journalism

Leading to the degrees of Bachelor of Arts, Bachelor of Science in Agriculture, Bachelor of Science in Business Administration in the appropriate colleges, and to a certificate in journalism.

College of Business Administration

Leading to the degree of Bachelor of Science in Business Administration.

College of Dentistry

Leading to the degree of Doctor of Dental Surgery.

College of Engineering and Architecture

Leading to the degrees of Bachelor of Architecture, Bachelor of Science in Agricultural Engineering, Bachelor of Science in Chemical Engineering, Bachelor of Science in Civil Engineering, Bachelor of Science in Electrical Engineering, Bachelor of Science in Mechanical Engineering; and the professional degrees of Agricultural Engineer, Chemical Engineer, Civil Engineer, Electrical Engineer, Mechanical Engineer, and Architect.

Supervises Nebraska Engineering Experiment Station, Lincoln.

Graduate College

Leading to the degrees of Doctor of Philosophy, Master of Arts, Master of Architecture, Master of Music, Master of Science, Master of Science in Dentistry, Master of Physical Education, Master in Psychiatric Nursing and Master of Social Work.

Graduate School of Social Work

Leading to the degree of Master of Social Work and to a certificate in social work.

College of Law

Leading to the degrees of Bachelor of Science in Law and Bachelor of Laws.

College of Medicine

Leading to the degrees of Doctor of Medicine, Bachelor of Science in Medicine, Bachelor of Science in Medical Technology, Bachelor of Science in Radiological Technology, certificate in Medical Technology and certificate in Radiologic Technique.

School of Nursing

Leading to the degree of Bachelor of Science in Nursing.

College of Pharmacy

Leading to the degree of Bachelor of Science in Pharmacy.

Teachers College

Leading to the degrees of Bachelor of Science in Education, Bachelor of Arts in Education, Bachelor of Fine Arts in Education, Bachelor of Music in Education, Master of Education, Doctor of Education.

Supervises University High School, Lincoln.

Summer Sessions

Conservation and Survey Division

University Extension Division

Separate bulletins or information concerning any college, school or division may be obtained free by addressing the Registrar, University of Nebraska, Lincoln 8.