

Courses of Instruction

Listed below are the courses of instruction to be offered at LSU at Alexandria during the 1968-69 academic year. Additional courses at the Freshman and Sophomore levels will be offered as the academic program is expanded when the need seems to justify.

The amount of credit given for the completion of a course generally is based on the number of lectures or recitations per week for one semester; for example, one credit represents one hour of lecture or recitation per week for one semester. Two hours of laboratory work (in certain professional courses, three hours) are considered the equivalent of one lecture or recitation hour. When a course consists entirely or partly of laboratory, the fact is stated in the description of the course. When not otherwise specified, the course consists of lectures and recitations entirely. Courses numbered below 50 are for freshmen and courses from 50 through 99 are for sophomores.

ACCOUNTING

- 61-62. Elementary Accounting. 3 cr. each semester. An introductory course intended to familiarize student with fundamental principles and methods. Three hours of lecture and two hours of laboratory for students requiring special instruction each week.
83. Intermediate Accounting. 3 cr. Prerequisite: Accounting 61-62. An intensive study of accounting concepts and principles underlying the preparation of financial statements. Special attention is given to their application in the measurement and reporting of selected balance sheet items and related revenue and expense recognition.
84. Intermediate Accounting. 3 cr. Prerequisite: Accounting 83. A continuation of Course 83, including the study of the preparation and analysis of comparative statements, cash-flow and funds statements, preparation of financial statements from incomplete data, and correction of statements.
91. Accounting Information Systems for Management Control. 3 cr. Prerequisite: Accounting 61-62 or equivalent. An introduction to the areas of computer use in contemporary business, with emphasis on the adaptation of the accounting information system to managerial requirements for planning and control.

AGRONOMY

21. Farm Crops. 3 cr. Fundamental principles of crop production. Two hours of lecture and two hours of laboratory each week.

51. Soils. 4 cr. Prerequisites: Chemistry 2 and 3. Fundamental principles of soil science and the properties of soils as related to plant growth. Three hours of lecture and two hours of laboratory each week.

ANIMAL SCIENCE

11. Fundamentals of Animal Husbandry. 3 cr. An introductory course dealing with beef cattle, sheep, swine, and horses and their role in American agriculture. Two hours of lecture and two hours of laboratory each week.
71. The Breeds of Farm Animals. 3 cr. The origin and characteristics of the leading breeds of beef cattle, sheep, swine, and horses; development, adaptability, and distribution; breed types, organizations, and publications; comparative judging of representative animals. Two hours of lecture and two hours of laboratory each week.

BIOLOGY

- 1-2. General Biology. 6 cr. A unit course. A basic course in principals of biology. Not open for credit to students who have had Zoology 1-2.
- 3-4. General Biology Laboratory. 1 cr. each semester. Prerequisites: Credit or registration in General Biology 1-2. Two hours of laboratory each to accompany General Biology 1, 2.

BOOKS AND LIBRARIES

1. An Introduction to the Use of the Library. 1 cr. Lectures and recitations, with work designed to facilitate the use of the most generally used reference books, periodical indexes, and the card catalog through investigation and a term bibliography. One hour each week.

BOTANY

51. General Botany. 4 cr. Prerequisites: General Biology 1-2 and 3-4 or a course with laboratory covering plant organization and function, simple physiology and life cycles of algae, fungi, mosses, ferns, and seed plants. Experience in microscopy is understood. Not open to students who have had Botany 1-2. Two hours of lecture and 4 hours of Laboratory each week.

BUSINESS ADMINISTRATION

1. Introduction to Business. 3 cr. Required in all curricula in College of Business Administration except Industrial Management and Secretarial Administration. A descriptive

survey of the operation of business with special attention to types of business organization, financing, personnel, location, production, distribution, selling and the relationship of government and business. Designed to acquaint the student with all phases of business organizations and operations and guide him in his occupational choice. Three hours of lecture each week.

CHEMISTRY

1. General Chemistry. 3 cr. Prerequisite: a sufficiently high score on the mathematics placement examination to indicate that the likelihood for success in this course will not be prohibited by a deficiency in mathematics. A course in the fundamentals of chemistry. Students whose curricula require only one year of chemistry will normally take the 1-2 series. Three hours of lecture and demonstration each week.
- 1B. Inorganic Chemistry. 3 cr. Prerequisite: a sufficiently high score on the mathematics placement examination to indicate that the likelihood for success in this course will not be prohibited by a deficiency in mathematics. A course in the fundamentals of inorganic chemistry. Students who plan to pursue curricula which require more than one year of college chemistry must take 1B and 2B. Three hours of lecture and demonstration each week.
2. Inorganic Chemistry and Chemical Equilibrium. 3 cr. Prerequisite: Course 1 or 1B; continuation of Course 1. Inorganic chemistry with selected topics in organic chemistry. Three hours of lecture and demonstration each week.
- 2B. Inorganic Chemistry and Chemical Equilibrium. 3 cr. Prerequisite: Course 1B or demonstrated ability in Course 1. A continuation of Course 1B. Inorganic chemistry and Chemical equilibrium with associated calculations. Three hours of lecture and demonstration each week.
3. General Chemistry Laboratory. 1 cr. Prerequisite: Credit or registration in Course 1 or 1B. Students who plan to take any chemistry beyond Chemistry 2 or 2B must show credit in Chemistry 3. Degree credit will not be allowed in this course until Course 1 or 1B has been completed satisfactorily. A laboratory course in fundamental chemical operations. Three hours of instruction and laboratory each week.
4. General Chemistry Laboratory. 1 cr. Prerequisite: Course 3 and credit or registration in Course 2 or 2B. A laboratory course in inorganic chemistry, including basic elements of cation analysis and some organic reactions. Degree credit will not be allowed in this course until Course 2 or 2B has been completed satisfactorily. Three hours of instruction and laboratory each week.
12. Inorganic Qualitative Analysis. 2 cr. Prerequisite: Chemistry 3 and credit or registration in Chemistry 2B or credit in Chemistry 2 and 4. Degree credit will not be allowed in this course until Course 2 or 2B has been completed satisfactorily. Six hours of instruction and laboratory each week.
55. Quantitative Analysis. 3 cr. Prerequisite: Course 12. A course in the theory of gravimetric, titrimetric, and colorimetric chemical analysis. Credit for this course will not be allowed until corresponding laboratory work has been completed satisfactorily. Three hours of lecture and demonstration each week.
56. Quantitative Analysis Laboratory. 2 cr. Prerequisites: credit or registration in Course 55. The fundamental techniques of quantitative analysis. Six hours of instruction and laboratory each week.
61. Organic Chemistry. 3 cr. Prerequisite: Course 4 or 12. A study of representative classes of organic compounds. Three hours of lecture and demonstration each week.
62. Organic Chemistry. 3 cr. Prerequisite: Course 61. A study of representative classes of organic compounds. A continuation of Course 61. Three hours of lecture and demonstration each week.
65. Organic Chemistry. 3 cr. Prerequisite: Chemistry 4 or 12. A fundamental course intended primarily for Premedical students and majors in the biological sciences. Three hours of lecture and demonstration each week.
66. Organic Chemistry. 3 cr. Prerequisite: Chemistry 65. A continuation of Course 65. Three hours of lecture and demonstration each week. Credit will not be allowed until the corresponding laboratory work has been satisfactorily completed.
67. Organic Chemistry Laboratory. 2 cr. Prerequisite: credit or registration in Course 62 or 66. The fundamental laboratory operations of organic chemistry. Six hours of instruction and laboratory each week.
- 69 A, B. 1 cr. Organic Chemistry Seminar.

CIVIL ENGINEERING

61. Elementary Surveying. 2 cr. Theory, use, and application of tape, level, and transit. Two hours of lecture each week.
65. Elementary Surveying Laboratory. 1 cr. Prerequisite: Registration or credit in Course 61. Field work in plane surveying to accompany Course 61. Three hours of instruction and laboratory each week.

67. Advanced Surveying. 4 cr. Prerequisite: Course 65. Principles and field applications of route and geodetic surveying. Curves, earthwork, calculations of geodetic position, state coordinates, astronomical observations and aerial mapping. Two hours of lecture and six hours of laboratory each week.

ECONOMICS

6. Development of the Economic System in the United States. 3 cr. Required in all curricula in the College of Business Administration. A study and an analysis of the major forces of the American economic system from colonial times to present times. Attention will be given to forces leading the U. S. into internationalism. Three hours of lecture each week.
- 51-52. Economic Principles and Problems. 6 cr. A unit course. Credit will not be given for both courses 51-52 and 55. A study of the factors entering into production, distribution, and exchange; how value and prices are determined under competition, monopoly, and partial monopoly. Special problems studied deal with money and banking, labor problems, taxation and public debt, tariffs, and business fluctuations. All principles are tested by applications to economic problems current at the time. Three hours of lecture each week.
55. Economic Principles. 3 cr. Credit will not be given for both Courses 51-52 and 55. This course is open to students who desire a one-semester survey course in economic principles and problems and is specifically designed to develop economic understandings. In addition to the theoretical treatment of economics, attention is given to an analysis of economic problems, such as money and banking, public finance, taxation, fiscal policy, business fluctuations, government and business, labor problems, international trade, economic growth and development, and comparative economic systems. Three hours of lecture each week.
64. Money and Banking. 3 cr. Prerequisites: Courses 51-52 or 55. A treatment of monetary standards and monetary systems; the relationship of commercial banks to the Federal Reserve System and the Treasury; the relationship of money to income, employment and prices. Three hours of lecture each week.

EDUCATION

51. Introduction to the Study of Education. 3 cr. Three hours of lecture each week.

ENGINEERING GRAPHICS

1. Engineering Graphics. 2 cr. Vertical freehand lettering, care and use of drawing instruments and equipment, graphi-

cal construction, shape description and making and reading drawings, auxiliaries, sections and conventions, pictorials, fastenings, graphic charts, engineering sketching, space studies of the determination of planes, dimensioning, working drawings. Six hours of instruction and laboratory each week.

54. Engineering Graphics. 2 cr. Prerequisite: Course 1. Inclined freehand lettering, theory of points, lines, and planes. Bearings and slopes of lines and planes. Contours, cuts, fills, and profiles. Strike and dip. Successive auxiliary view applications. Revolution about an axis and true length diagrams. Intersections, developments, and graphical solutions of engineering problems. Six hours of instruction and laboratory each week.

ENGINEERING MECHANICS

52. Statics. 3 cr. Prerequisites: Physics 61 and registration or credit in Mathematics 51. A vectorial treatment of resultants and equilibrium of force systems. Virtual work, stationary potential energy, stability, friction. Three hours of lecture each week.

ENGLISH

- 1A, 1B, 1C English Composition. 3-9 cr. (Each course offered both semesters). An introductory course in writing, largely expository, accompanied by selected readings. Three hours of lecture each week.

NOTE: On the basis of a diagnostic test, previous college English (if any), and proficiency in writing, students will be grouped and required to take one, two, or three semesters of freshman composition. The required courses must be taken progressively, but in rare cases of exceptional progress students completing 1A may be permitted to skip 1B. Every student must complete 1C, which is also prerequisite to all other English courses. Students who enter 1C initially and thus take only one semester of freshman composition may proceed to 51-52 or 55-56.

- 51-52. A survey of English Literature from the Beginning to the Present. 3 cr. each semester. Three hours of lecture each week.
- 55-56. Introduction to Fiction, Drama, and Poetry. 3 cr. each semester. A general introduction to the study and appreciation of these types of literature. Three hours of lecture each week.

- 62. Exposition. 3 cr. A course in expository writing designed for students in science, engineering and agriculture; the various kinds of exposition with special emphasis on the preparation of reports, technical papers, and memoranda. Three hours of lecture each week.
- 64. English grammar. 3 cr. A review of English grammar to syntax and usage. Not a remedial course. Three hours of lecture each week.
- 66. Advanced English Composition. 3 cr. The theory and practice of exposition, description and narration.
- 90. Major American Writers. 3 cr. A study of important authors from Irving to Hemingway. Three hours of lecture each week.
- 95. Shakespeare. The more popular plays. Three hours of lecture each week.

FINE ARTS

- 1. Introduction to Fine Arts. 3 cr. An introduction to the fundamental problems and concepts of art in the fields of design, sculpture, graphics, painting, and ceramics as they relate to the home, community, religion, commerce, and industry. Discussions, lectures, outside readings. Three hours of lecture a week.
- 71-72. Art Education for Elementary Schools. 3 cr. each. Course 71 is prerequisite to Course 72. A critical analysis and evaluation of past and present concepts of art education with a view toward developing a functional art program for the elementary schools of Louisiana. Art materials, techniques, and art activities recommended for use in the elementary school grades. Readings, discussions, and studio activities. One hour of lecture and four hours of studio work each week.
- 85-86. Sketch Class. 1 cr. each. Open to all students. Three hours of sketching in various media.

FRENCH

- 1. Elementary French. 5 cr. An oral approach to the language, with a minimum of formal grammar and special emphasis on conversation, supplemented by oral-aural drill in the language laboratory. Five hours each week.
- 51. Intermediate French. 5 cr. The oral approach to the language is continued, supplemented by aural-oral drill in the language laboratory. Reading material of moderate difficulty is introduced. Five hours each week.

- 52. Intermediate French. 3 cr. Continued reading and oral work, vocabulary building, and review of the basic principles of grammar. Three hours each week.
- 55. Reading in French Literature. 3 cr. Readings in contemporary French prose. Special emphasis on comprehension as well as oral and written expression in the language. Three hours each week.

GEOGRAPHY

- 1-2. Human Geography. 3 cr. each semester. The earth's surface from the standpoint of its physical and cultural regions; emphasis on the distribution of peoples and on the origin and development of civilization. Three hours of lecture each week.

GERMAN

- 1. Elementary German. 5 cr. Intensive drill in German speech habits. Conversation, aural comprehension, dictation, functional grammar. Five hours each week.
- 51. Intermediate German. 5 cr. Continuation of Oral-Aural practice, systematic grammar review. Readings in modern German prose. Five hours each week.
- 52. Intermediate German. 3 cr. Extensive and rapid reading of German prose, continued oral work, vocabulary building, and review of grammar. Three hours each week.

GOVERNMENT

- 51. American Government. 3 cr. A survey of the principles, structure, processes, and functions of American government with emphasis on the national government. Three hours lecture each week.
- 52. Democratic Governments of Europe. 3 cr. A survey of the political traditions and institutions of the major democratic powers of Europe. Three hours lecture each week.

ACTIVITY COURSES IN PHYSICAL EDUCATION

- 9. Basic Course in Sports and Dance. 1 cr. each. Activities that are combined are for nine weeks each. 9K—Fencing and American Folk and Square Dance; 9P—Fencing and Volleyball; 9N—Fencing; 9V—Judo. Three hours each week.
- 10. Basic Courses in Sports, Gymnastics, Aquatics and Dance. 1 cr. each. One activity for eighteen weeks. 10A—Archery; 10B—Tennis; 10C—Golf; 10D—Gymnastics; 10E—Modern

dance; 10G—Badminton; 10H—Bowling; 10J—Ballet; 10K—Ballroom dance; 10M—International folk dance; 10P—Swimming; 10Q—Senior Lifesaving; 10R—Water Safety Instruction; 10Z—Weightlifting. Three hours each week.

20. Intermediate Courses in Sports, Gymnastics, Aquatics and Dance. 1 cr. each. 20A—Archery; 20B—Tennis; 20C—Golf; 20D—Gymnastics; 20E—Modern dance; 20F—Swimming. Three hours each week.
30. Advanced Courses in Sports, Gymnastics, Aquatics and Dance. 1 cr. each. 30A—Archery; 30B—Tennis; 30C—Golf; 30D—Gymnastics; 30E—Modern dance; 30F—Swimming. Three hours each week.

Professional Courses

Women students majoring or minoring in health, physical and recreation education are expected to pass satisfactorily skill tests in the following activities prior to graduation: Basketball, speedball or soccer; football; volley ball; folk, social, and modern dance; archery, badminton or golf; tennis; body mechanics; swimming; tumbling; and minor recreational games.

- 6-7. Introduction to Health, Physical and Recreation Education. 1 cr. each. A course designed to orient the prospective health and physical education major or minor in health and physical education. Three hours each week.
8. Ballroom Dance. 1 cr. A course designed for those interested in a beginning course in social dance. Elective, cannot be substituted for required activity courses. Three hours each week.
- 16-17. Second year course for majors and minors in Health and Physical Education. 1 cr. each. Three hours each week.
40. Introduction to Health and Physical Education for Men. 1 cr. A course designed to assess the level of skills and abilities in various activities of prospective majors and minors in health and physical education and orient the students to their field. Three hours of laboratory each week.
41. Personal and Community Health Problems. 2 cr. Problems of nutrition, fatigue, disease prevention, mental hygiene, and sex to which the student must adjust as an individual and as one who has responsibilities to the group. Two hours each week.
42. Gymnastics and Swimming for Men. 1 cr. For prospective majors and minors in health and physical education. Designed to develop skills in gymnastics and to introduce the students to the theory and practice of teaching and coaching swimming. Three hours of laboratory each week.

43. Human Anatomy. 3 cr. Prerequisite: Sophomore standing. For Health and Physical Education majors and minors. Structural human anatomy and its application basic to an understanding of problems in athletic and corrective physical therapy. Two hours of lecture and two hours of laboratory each week.
44. Individual Sports for Men. 2 cr. Theory and practice of tennis, golf, handball, boxing, and badminton. Attention is given to techniques of teaching these activities as well as the acquisition of skill. Six hours of laboratory.
45. Individual and Team Sports for Men. 2 cr. Prerequisite: Course 42. Theory, practice, and teaching techniques of wrestling, softball, gymnastics, track, and field. Six hours of laboratory.
52. Principles and History of Physical Education. 2 cr. Study of the foundations upon which modern physical education is based. Two hours of lecture each week.
63. Methods and Materials in Health and Physical Education for the Elementary School. 2 cr. Preparation of the elementary school teacher in skills, attitudes, and knowledges requisite to health education of children. Two hours of lecture each week.
70. First Aid. 1 cr. A course for men and women dealing with procedures to be employed in first-aid treatment of wounds, shock, poisoning, fractures and unconsciousness. American Red Cross certificates will be granted to those who satisfactorily complete the course. One hour of lecture and one hour of laboratory each week.
73. Methods and Materials in Physical Education for the Elementary School. 2 cr. A course designed for the elementary school classroom teacher. Two hours of lecture and two hours of laboratory each week.

HISTORY

- 1-2. History of Western Civilization. 6 cr. A unit course. Survey of movements and institutions that contributed most to present-day civilization. First semester: ancient and medieval periods; second semester: modern period. Course 1 is prerequisite for Course 2. Prerequisite for all advanced courses in European History. Three hours of lecture each week.
55. American History. 3 cr. Survey of American history from the earliest times to 1860. Prerequisite for all advanced courses in American history. Three hours of lecture each week.

- 56. American History. 3 cr. Survey of American History from 1860 to the present. Prerequisite for all advanced courses in American History. Three hours of lecture each week.
- 71. History of Louisiana. 3 cr. General survey of the political, economic, social, and cultural development of Louisiana. Three hours of lecture each week.

JOURNALISM

- 51-52. Newspaper Reporting. 4 cr. A unit course. A foundation course in news gathering and news writing. Two hours of lecture each week.

MANAGEMENT

- 59. Management Principles and Policies. 3 cr. Prerequisites: credit for or registration in Economics 51-52 or 55 and Accounting 61-62. A study of the nature and principles of management. Problems of policies, organizations, operations, and external relationships are studied. Three hours of lecture each week.
- 71-72. Business Correspondence. 2 cr. each. Prerequisite: English 1C and credit for or registration in Course 59; Course 71 is prerequisite for 72. Study and practice in composing the basic types of business communications. Course 71 introduces communication theory and covers the technique of effective business correspondence. Course 72 covers report preparation including the rudiments of business research methodology. Two hours of lecture each week.

MARKETING

- 60. Principles of Marketing. 3 cr. Prerequisite: credit for or registration in Economics 51 or 55. Historical development of trade centers and trade routes in relation to resources and business opportunities. Channels involved in the distribution of merchandise. Services performed by retailers, wholesalers and other middle men. Marketing costs and efficiency. Three hours of lecture each week.

MATHEMATICS

On the basis of a diagnostic test and previous college mathematics (if any), and the student's major, he is assigned to the proper level mathematics course. No student may receive more than nine hours credit in mathematics courses numbered below 50. The student whose major is chemistry, engineering, mathematics, or physics will not receive degree credit for any mathematics course

numbered below 50. A student selecting mathematics as his field of concentration must take a minimum of thirty-one hours in mathematics courses numbered 50 or higher.

- 1. Algebra. 3 cr. Prerequisite: Course 7 or assignment on basis of placement test. Three hours of lecture each week.
- 2. Plane Trigonometry. 3 cr. Prerequisite: Course 1 or assignment on basis of placement test. Three hours of lecture each week.
- 6. Mathematics of Business and Measurements. 3 cr. Prerequisites: Course 1, 7 or 11. Primarily for students of business administration and agriculture. Three hours of lecture each week.
- 9-10. Introductory College Mathematics. 3 cr. each semester. A course in modern mathematics designed primarily for elementary education majors and others whose curricula require six semester hours survey of modern mathematics. Three hours lecture each week.
- 11-12. Algebra and Trigonometry. 3 cr. each semester. Course 11 or permission of math faculty as prerequisite for course 12. Topics from college algebra and trigonometry primarily for students not intending to continue into calculus. Three hours of lecture each week.
- 50. Analytic Geometry and Calculus. 5 cr. Prerequisite: Course 2 or approval of the mathematics faculty. Five hours of lecture each week.
- 51. Analytic Geometry and Calculus. 5 cr. Prerequisite: Course 50. Five hours lecture each week.
- 54. Linear Algebra. 3 cr. Prerequisite: Course 51. Systems of linear equations, vector spaces, linear transformations, matrices and determinants. Three hours of lecture each week.
- 57. Differential Equations and Multidimensional Calculus. 3 cr. Prerequisite: Course 54. Ordinary linear differential equations, partial derivatives, and multiple integrals. Three hours of lecture each week.

MICROBIOLOGY

- 51. General Microbiology. 4 cr. A general course covering techniques, classification, morphology and physiology of important non-pathogenic and pathogenic bacteria, algae, fungi, and viruses. A detailed study is made of diseases caused by pathogenic organisms. Two hours lecture and four hours of laboratory each week.

NURSING

- 20A. Fundamentals of Nursing. 4 credits. The course is designed to introduce basic concepts and principles of nursing care. Professional ethics, personal and community health, normal nutrition, mental health concepts, and simple nursing techniques are included. Fundamental human needs and their relationship to basic nursing are emphasized. Clinical laboratory experiences in the hospital under supervision provide the opportunity to develop nursing skills by giving patient care. Two hours of lecture and six hours of laboratory each week.
- 21A. Fundamentals of Nursing. 6 credits. This course is a continuation of Nursing 20A. A study of specific pathological states or certain symptoms that modify basic nursing. Emphasis will be placed on the nursing needs of individuals as affected by age, cultural background, physical and intellectual capacities, and emotional balance. Clinical laboratory experience is provided to develop skill in individualized nursing care. Three hours of lecture and nine hours of laboratory each week.
- 42A. Nursing in the Psychiatric Setting. 6 credits. (Summer) A study of emotional disturbance of the adult and child. Consideration is given to normal development and personality and behavioral deviations in illness. Emphasis is placed on the therapeutic role of the nurse. Clinical laboratory experiences with children and adults are planned to demonstrate the concepts of behavior. Six hours of lecture and eighteen hours of laboratory each week.
- 50A. Maternal and Child Care. 7 credits. The course is oriented to family concepts beginning with discussion of the adolescent and progressing in sequence to marriage and the family unit. Emphasis is placed on the role of the nurse in maternal and child care—pregnancy, labor, post-delivery, infancy, and childhood. Clinical laboratory experiences in the maternity setting are augmented by observations in the antepartum, post-partum, and well-baby clinics with particular attention being directed toward the preventive aspects of care. Three hours of lecture and twelve hours of laboratory each week.
- 54A. Nursing in the Pediatric and/or the Medical Surgical Setting. 8 credits. This course is related to the care of the physically ill child and adult utilizing the patient centered approach. Major health problems and nursing problems peculiar to each age group will be identified and studied. Normal child growth and development will serve as a basis in caring for the sick child. Clinical laboratory experience in the care of children and adults is provided. Three hours of lecture and fifteen hours of laboratory each week.

- 55A. Nursing Seminar. 2 cr. A lecture and discussion course designed to aid the student in her period of transition from student to graduate. Attention is given to increasing the students' understanding of the opportunities and responsibilities of the general duty nurse. Two hours of lecture and discussions each week.
- 70A. Nursing in the Medical-Surgical Setting. 6 cr. (Summer). This course is planned to assist the student in continued development of knowledge, skills, and attitudes relating to comprehensive care of adults with medical-surgical conditions. Emphasis is placed on planning, implementing, and evaluating nursing care. Consideration is given to the care of patients with complex nursing problems, the critically ill, and groups of patients. Six hours of lecture and eighteen hours of laboratory each week.

PHYSICAL SCIENCE

- 1-2. Physical Science. 3 cr. each semester. A survey course covering the field of physical science. The course follows the order of the development of the sciences and surveys of the fields of astronomy, physics, chemistry, and geology. It is not intended for students who wish to pursue further work in any of the physical sciences, and it may not be substituted for the basic science courses in these fields. Three hours of lecture each week.

PHYSICS

- 51-52. General Physics. 3 cr. each semester. Prerequisite: Mathematics 2. For pre-medical students and arts and science students. A study of mechanics, heat, light, sound, electricity and magnetism and modern physics. Three hours of lecture and demonstration each week.
- 53-54. General Physics Laboratory. 1 cr. each semester. Prerequisite: Credit or registration in Physics 51-52. Laboratory to accompany 51-52. Two hours of laboratory each week.
- 61-62. General Physics for Technical Students. 4 cr. each semester. Prerequisite: Credit or registration in Mathematics 50, 51. For students in engineering, mathematics, chemistry and physics. Basic principles and application of mechanics, heat, sound, light, electricity and magnetism, and modern physics. Three hours of lecture and demonstration and one-hour of recitation each week.
- 63-64. Laboratory work in Technical Physics. 1 cr. each semester. Prerequisite: Credit or registration in courses 61-62. Laboratory work to accompany 61-62. Two hours of laboratory each week.

PSYCHOLOGY

51. Introduction to Psychology. 3 cr. An introduction to the understanding, prediction and control of human behavior. Three hours of lecture each week.
56. Educational Psychology. 3 cr. Applications of psychology to the educative process. Three hours of lecture each week.
57. Child Psychology. 3 cr. Prerequisite: Course 51 or 56 or consent of the instructor. Study of the physical, social, and psychological development of the child. Three hours of lecture each week.
58. Adolescent Psychology. 3 cr. Prerequisite: Course 51 or 56 or consent of instructor. Consideration of adolescent behavior in the light of information available on social, physical and psychological development. Three hours of lecture each week.
59. Psychology of Adjustment. 3 cr. Prerequisite: Course 51 or 56 or consent of instructor. An introduction to the study of adjustment mechanisms in normal adults. Emphasis is upon vocational, personal, and social adjustment. Three hours of lecture each week.

SECRETARIAL ADMINISTRATION

51. Typewriting. 2 cr. An introductory course. Five hours of lecture, demonstration and practice each week.
52. Typewriting Continued. 2 cr. Five hours of lecture, demonstration and practice each week.
53. Advanced Typewriting. 2 cr. A continuation of courses 51 and 52. Five hours of lecture, demonstration and practice each week.
55. Shorthand. 3 cr. The basic principles of reading and writing shorthand. Dictation of practiced material. Five hours of lecture, demonstration and practice each week.
56. Shorthand Continued. 3 cr. Continuation of course 55. Building dictation speed with unpracticed material and a review of shorthand principles. Five hours of lecture.
62. Filing Systems, Procedures and Practice. 2 cr. Prerequisite: Sophomore standing. Two hours of lecture, demonstration and practice each week.

SOCIOLOGY

51. Introductory Sociology. 3 cr. A survey of major subject areas and principles of sociology.

SPEECH

- 1-2. Speech Fundamentals. 3 cr. each semester. Study in practice in the basic elements of speech applicable in daily life, such as voice articulation, pronunciation, bodily activity; habituation in good oral usage; practice in the adaption of the student to more common types of speaking situations; foundation work for those who wish to study the more advanced forms of speech; special attention for those with special disabilities. Three hours of lecture, demonstration and recitation each week.
6. Speech for Business and Professional People. 3 cr. Prerequisite: Course 1. A course designed for students in business or preprofessional curricula. Attention is given to instructional and report presentation, promotional and sales talks, policy speeches, speech for special occasions, use of visual aids in explanation and demonstration, and planning and conducting meetings. Three hours of lecture and recitation each week.
51. Public Speaking. 3 cr. Credit will not be given for this course and course 1 and 2, or 1 and 6, or 75. An introductory course in public speaking. Chief emphasis is placed upon the delivery of carefully prepared speeches, and major attention is given to such principles of public speaking as audience analysis, collection of materials, and outlining. Three hours of lecture and recitation each week.
63. Interpretative Reading. 3 cr. A course designed to aid the student to read literature aloud intelligently and with naturalness and individuality. Three hours of lecture, demonstration and recitation each week.
65. Argumentation and Debate. 3 cr. Prerequisite: Course 51 or consent of instructor. A study of the principles of argumentation and debate, including analysis, briefing, evidence, reasoning, and refutation. Class debating on vital questions. Three hours of lecture, demonstration and recitation each week.

ZOOLOGY

51. General Zoology. 4 cr. Prerequisites: General Biology 1-2 and 3-4 or a course in laboratory covering the general plan of anatomy of vertebrates and major groups of invertebrates. Not open for credit to students who have had Zoology 1-2. Two hours of lecture and four hours of laboratory each week.

53. Principles of Genetics. 3 cr. Prerequisites: Six hours of biology or permission of instructor. Fundamental laws of heredity as applied to both plants and animals. A basic course for students concentrating in biology, medicine, agriculture, liberal arts, or general education. Three hours of lecture each week.

57. Elementary Physiology. 3 cr. For students in Zoology, pre-medicine, nursing and home economics. Two hours of lecture and three hours of laboratory each week.