EN 131 English Composition   3 sem. hr.

This course is an attempt to strengthen the individual's ability to express himself in the use of the English language, and to improve upon the fundamentals learned. The student investigates essays and in turn applies the research and knowledge gained in fashioning for himself a series of written assignments, investigating the methods of description, exposition, argumentation and narration. This course gives an overall review of the mechanics of English usage and emphasis is placed on effective writing.
    Prerequisite: None. Hours of class per week: 3. Lab Fee: None.

EN 132 Speech   3 sem. hr.

The course is an attempt to introduce the student to the forms of public speaking and the opportunity to train himself in both the formal and informal deliveries of speech. Individual expression and creativity are still the main tenets of this course. The course aims to enrich the student's ability to communicate, with emphasis placed on the spoken word. Various forms of discourse are studied and put into practice.
    Prerequisite: None. Hours of class per week: 3. Lab Fee: None.

EN 231 Literature I   3 sem. hr.

The course will survey World Literature from the Greek Classics to, but not including, 20th Century materials.
    Prerequisite: All courses in Literature may be taken without regard to sequence, though it would be advisable for the student to complete Composition and Speech before taking either of the Literature courses. Hours of class per week: 3. Lab Fee: None.

EN 232 Literature II   3 sem. hr.

The course will survey World Literature of the 20th Century.
    Prerequisite: All courses in Literature may be taken without regard to sequence, though it would be advisable for the student to complete Composition and Speech before taking either of the Literature courses. Hours of class per week: 3. Lab Fee: None.

SS 183 Modern Western Civilizations I   3 sem. hr.

An introductory course in Western Civilizations beginning around the tenth century. The course examines major social, political, and economic ideas and their contributions to the western heritage.
    Prerequisite: None. Hours of class per week: 3. Lab Fee: None.

SS 184 Modern Western Civilizations II   3 sem. hr.

Follows the same basic plan as Modern Western Civilizations I and is a continuation of that course to modern time. The course enables the student to identify the contributions and changing patterns of power in the western world and their implications for the future.
    Prerequisite: None. Hours of class per week: 3. Lab Fee: None.

SS 181 Economics I   3 sem. hr.

A required course. Required for business majors with the exception of those majoring in secretarial science. Fundamental principles and concepts of economics in production, exchange and distribution. Study of basic institutions and major problems of our economy.

SS 181 Economics I (continued)

Prerequisite: Modern Western Civilizations I and II. Hours of class per week: 3. Lab Fee: None.

SS 182   Economics II   3 sem. hr.

A continuation of Economics I. Required of business majors with the exception of those majoring in secretarial science. Analysis of national income, banking, government finance, labor relations, agricultural problems, and international trade.
Prerequisite: Economics I. Hours of class per week: 3. Lab Fee: None.

SS 185   History of Ancient Civilizations   3 sem. hr.

A study of ancient peoples with special emphasis upon the cultures developed in the Near East, Rome, and Greece.
Prerequisite: (Extension.) Hours of class per week: 3. Lab Fee: None.

SS 281   Introduction to Sociology   3 sem. hr.

An introductory course designed to acquaint the student with the study of sociology as one of the sciences that deals with man in his relationships with the members of his society and the world in which he lives. The methods and objectives of sociological research, the varying patterns of social organization and the study of society in relation to individual and group behavior are major areas of study.
Prerequisite: Modern Western Civilizations I and II. Hours of class per week: 3. Lab Fee: None.

SS 282   Introduction to American Government   3 sem. hr.

This introductory course supplies the factual information about the structure and procedures of American government. The course gives the student an opportunity to examine the effectiveness of the American political record as tested by democratic principles.
Prerequisite: Permission of instructor. Hours of class per week: 3, Lab Fee: None.

SS 283   Survey of American History I   3 sem. hr.

A survey of the political, social, and intellectual development of the United States from the colonial period to post-Reconstruction.
Prerequisite: Modern Western Civilizations I and II. Hours class: 3 LABFEE: None

SS 284   Survey of American History II   3 sem. hr.

A continuation of American History I from Reconstruction to the present. Emphasis is placed on the changing character of the American society and its role in international affairs.
Prerequisite: Modern Western Civilizations I and II. Hours of class per week: 3. Lab Fee: None.

SS 285   The Soviet Union   3 sem. hr.

A study is made of the social, political, and economic conditions in Czarist Russia prior to the 1917 Revolution to establish a common background. Emphasis is placed on a study of the Soviet Union since the Bolshevik Revolution with special examination of Marxism, the Soviet government, the Communist Party, and the Soviet Union in international affairs.

SS 285   The Soviet Union   (continued)

Prerequisite: Modern Western Civilizations I and II. Hours of class per week: 3. Lab Fee: None.

SS 286   Twentieth Century Europe   3 sem. hr.

The course begins with a study of the Treaty of Versailles and stresses the major political, social, economic, and intellectual movements and reactions to them in England, France, Germany, Italy, and the Soviet Union.
Prerequisite: Modern Western Civilizations I and II. Hours of class per week: 3. Lab Fee: None.

SS 287   International Organizations   3 sem. hr.

Emphasis is on an examination of international organizations with primary consideration on the United Nations. This involves a study of the major crises which have and are confronting the United Nations since its establishment, the use of the veto, the specialized agencies, and the constitutional and political issues involved in the question of Chinese membership. A one-day field trip to the United Nations in New York City is required.
Prerequisite: Modern Western Civilizations I and II. Hours of class per week: 3. Lab Fee: None.

SS 291   General Psychology   3 sem. hr.

Provides a basic orientation in the psychology of human behavior. A study of the aims and methods of psychological investigation, the inter-relationships of heredity and environment as determiners of behavior, and the structure and function of the human nervous system. The course also includes an investigation of learning, motivation, and the nature of emotion.
Prerequisite: Modern Western Civilizations I and II, (extension.) Hours of class per week: 3. Lab Fee: None.

SS 292   Clinical and Abnormal Psychology   3 sem. hr.

Focus is on the elucidation of nosology and symptomotology of the more common psychiatric and psychosomatic disorders. Clinical case material will be presented to illustrate the psychopathological principles of the everyday life of children and adults.
Prerequisite: (Extension.) Hours of class per week: _____   Lab Fee: _____

FL 141   Beginning French I   3 sem. hr.

A beginner's course covering the fundamentals of oral comprehension, oral expression and grammar. Simplified French readers read first and second semester familiarize the student with the civilization of France. Tapes supplement the text.
Prerequisite: None. Hours of class per week: 3. Lab Fee: None.

FL 142   Beginning French II   3 sem. hr.

A beginner's course covering the fundamentals of oral comprehension, oral expression and grammar. Simplified French readers read first and second semester familiarize the student with the civilization of France. Tapes supplement the text.
Prerequisite: Beginning French I. Hours of class per week: 3. Lab Fee: None.

FL 241 Intermediate French I   3 sem. hr.

In this intermediate course the comprehension and use of the spoken language are studied. Reading texts are chosen to enable the student to converse in idiomatic French and to awaken this interest in French literature.
Prerequisite: Beginning French II or the equivalent. Hours of class per week: 3. Lab Fee: None.

FL 242 Intermediate French II   3 sem. hr.

In this intermediate course the comprehension and use of the spoken language is further developed. Grammar, composition and the cultural aspects of the language are studied. Reading texts are chosen to enable the student to converse in idiomatic French and to awaken his interest in French literature.
Prerequisite: Intermediate French I. Hours of class per week: 3. Lab Fee: None.

FL 143 Beginning Spanish I   3 sem. hr.

A beginner's course using the audio-lingual approach. The course gives the student working knowledge to the essential of grammar and the ability to read with reasonable facility. Graded readings supplement the text and serve as a basis for conversation.
Prerequisite: None. Hours of class per week: 3. Lab Fee: None.

FL 144 Beginning Spanish II   3 sem. hr.

A beginner's course using the audio-lingual approach. The course gives the student a working knowledge of the essentials of grammar and the ability to read with reasonable facility. Graded readings supplement the text and serve as a basis for conversation.
Prerequisite: Beginning Spanish I. Hours of class per week: 3. Lab Fee: None.

FL 243 Intermediate Spanish I   3 sem. hr.

In this second year language course the comprehension and use of the spoken language is further developed. Grammar, composition and the cultural aspects of the language are studied. The reading texts introduce the student to Hispanic life and literature.
Prerequisite: Beginning Spanish II or the equivalent. Hours of class per week: 3. Lab Fee: None.

FL 244 Intermediate Spanish II   3 sem. hr.

In this second year language course the comprehension and use of the spoken language is further developed. Grammar, composition and the cultural aspects of the language are studied. The reading texts introduce the student to Hispanic life and literature.
Prerequisite: Intermediate Spanish I. Hours of class per week: 3. Lab Fee: None.

FL 251 Advanced French I   3 sem. hr.

A rapid review of grammar. Various types of French literature from the works of important authors; oral expression is stressed.
Prerequisite: Intermediate French II or the equivalent. Hours of class per week: 3. Lab Fee: None.

FL 252 Advanced French II   3 sem. hr.

A rapid review of grammar. Various types of French literature from the works of important authors; oral expression is stressed.
Prerequisite: Advanced French I. Hours of class per week: 3. Lab Fee: None.

ED 162 Electrical Graphics I   2 sem. hr.

Course covers basic drafting including orthograph projection geometrics, cross sections, axonometric projection, electrical symbols, and schematic drawings.
Prerequisite: None. Hours of class per week: 3. Lab Fee: None, but the cost of instruments and book is approximately $30.

ED 163 Electrical Graphics II   2 sem. hr.

Course covers intersections, development, detail and assembly drawings, screw threads, piping diagrams, graphs and charts and gears.
Prerequisite: Electrical Graphics I. Hours of class per week: 3. Lab Fee: None.

PH 175 Technical Physics I   4 sem. hr.

Mechanics of particles, rigid bodies, sound and wave mtion, fluids and atomic and molecular structure.
Prerequisite: Elementary Algebra. Hours of class per week: 3. Hours of lab per week: 2. Lab Fee: $10.

PH 176 Technical Physics II   4 sem. hr.

Heat and thermodynamics, electricity and magnetism, optics and modern physics.
Prerequisite: Technical Physics I. Hours of class per week: 3. Hours of lab per week: 2. Lab Fee: $10.

EL 121 Electricity I   4 sem. hr.

The first semester includes basics of electricity and magnetism, DC circuits and networks to acquaint students with Thevenin's and Norton's Theorems and Kirchhoff's laws.
Prerequisite: Elementary Algebra. Hours of class per week: 3. Hours of lab per week: 2. Lab Fee: $10.

EL 122 Electricity II   4 sem. hr.

Course will investigate sine and complex waves, current voltage and power relations in resistance, inductive, capacitive series and parallel circuits. Resonance, voltage current and poser relations indelta and wye connected three phase circuits. AC circuits and networks to acquaint students with Thevenin's and Norton's Theorems and Kirchhoff's laws.
Prerequisite: Electricity I. Hours of class per week: 3. Hours of lab per week: 2. Lab Fee: $10.

EL 221 Electronics I   4 sem. hr.

Course contains electron tubes and semi-conductors, including static and dynamic characteristics of vacuum tube, cathode ray tubes, semi-conductor electron theory, crystal diodes, semi-conductor power rectifiers, transistor types, silicon controlled rectifiers, power transistors, single phase rectifiers circuits, power supply filters, class A amplifiers, RC and transformer coupling, direct-coupled, push-pull and feed back amplifiers, paraphase amplifiers, magnetic amplifiers and controlled rectifers.
Prerequisite: Electricity II. Hours of class per week: 3. Hours of lab per week: 2. Lab Fee: $10.

EL 222 Electronics II   4 sem. hr.

Course contains series and parallel resistance, coupled circuits, RF amplifiers, detectors and oscillators, AVC, TRF and superhet receivers, frequency converters, and multipliers, amplitude moderation, AM transmitter, antennas, transmission lines, FM receiver circuitry; synchronizing and sweep magnetron amplifiers, wave guides and cavities.
Prerequisite: Electronics I. Hours of class per week: 3. Hours of lab per week: 2. Lab Fee: $10.

EL 223 Electric Machines I   3 sem. hr.

Construction, principles and characteristics of D.C. generators and motors, losses, efficiency and three wire system. Single phase and polyphase transformers, alternators, polyphase induction and synchronous motors, single phase motors and rotary converts.
Prerequisite: Electricity I. Hours of class per week: 3.

EL 224 Electric Machines II   3 sem. hr.

Construction, principles and characteristics of D.C. generators and motors, losses, efficiency and three wire system. Single phase and polyphase transformers, alternators, polyphase induction and synchronous motors, single phase motors and rotary converts.
Prerequisite: Electric Machines I. Hours of class instruction per week: 3.

PH 177 Physics I   4 sem. hr.

Properties of matter: specific gravity, density; kinematics; dynamics: force, mass, work, energy and power; electricity: electrostatics; magnetism, inductions, capacitance, simple D.C. and A.C. circuits; statics : concurrent, parallel and general forces.
Prerequisite: High School Physics and Math (Algebra Thru Trigonometry)
Hours of class per week: 3. Hours of lab per week: 2. Lab Fee: $10.

PH 178 Physics II   4 sem. hr.

Heat: thermometry, calorimetry, heat transfer, gas laws. Simple harmonic motion. Sound and light: geometric optics, interference, diffraction, polarization. Modern physics; Bohr's theory, atomic physics.
Prerequisite: Physics I. Hours of class per week: 3. Hours of lab per week: 2. Lab Fee: $10.

CH 221 Organic Chemistry I   4 sem. hr.

An integrated course treating aliphatic and aromatic organic compounds from structural approach. Reaction mechanisms are stressed. The laboratory is designed to familiarize the student with basic techniques and classical organic sythesis.
Prerequisite: Fundamentals of Chemistry I and II or College Chemistry with Qualitative Analysis I and II. Hours of class per week: 3. Hours of lab per week: 3. Lab Fee: $10.

CH 222 Organic Chemistry II   4 sem. hr.

An integrated course treating aliphatic and aromatic organic compounds from a structural approach. Reaction mechanisms are stressed. The laboratory is designed to familiarize the student with basic techniques and classical organic synthesis.
Prerequisite: Organic Chemistry I. Hours of class per week: 3. Hours

CH 222 Organic Chemistry II (continued)
of lab per week: 3. Lab Fee: $10.

SC 165   Physical Science I   3 sem. hr.

A course designed primarily for students who are non-science majors.   The
course provides the student with a basic knowledge of the physical sciences.
Chemistry and physics are emphasized, along with selected topics from meteo-
rology, astronomy, and geology.
Prerequisite: None. Hours of class per week: 3. Hours of lab per week:
1. Lab Fee: $5.

SC 166   Physical Science II   3 sem. hr.

A course designed primarily for students who are non-science majors.   The
course provides the student with a basic knowledge of the physical sciences.
Chemistry and physics are emphasized, along with selected topics from meteo-
rology, astronomy, and geology.
Prerequisite: Physical Science I. Hours of class per week: 3. Hours of
lab per week: 1. Lab Fee: $5.

CH 175   College Chemistry with Qualitative Analysis I   4 sem. hr.

A first course in the fundamentals of chemistry with qualitative analysis in-
cluded in the laboratory the second semester. A rigorous approach to thermo-
dynamics included, closely following the recommendations of the American
Chemical Society's Advisory Council on College Chemistry.
Prerequisite: Admission to Engineering Science Program. Hours of class
per week: 3. Hours of lab per week: 3. Lab Fee: $7.50.

CH 176   College Chemistry with Qualitative Analysis II   4 sem. hr.

A second course in the fundamentals of chemistry with qualitative analysis in-
cluded in the laboratory the second semester. A rigouous approach to thermo-
dynamics included, closely following the recommendations of the American
Chemical Society's Advisory Council on College Chemistry.
Prerequisite: College Chemistry with Qualitative Analysis I. Hours of
class per week: 3. Hours of lab per week: 3. Lab Fee: $7.50.

CH 273   Qualitative Analysis   3 sem. hr.

An integrated discussion of the concepts, theories, and laws relating to
solutions. Particular emphasis is directed toward the principles of chemical
equilibrium. The lab offers systematic schemes for the analysis of cations
and anions.
Prerequisite: Fundamentals of Chemistry I and II. Those students with
credit for College Chemistry with Qualitative Analysis I and II are excluded.
Hours of class per week: 2. Hours of lab per week: 2-3hr. Lab Fee: $10.

CH 274   Quantitative Analysis   4 sem. hr.

Principles which underlie analytical procedures(i.e. ionic theory and re-
actions, quantitative ionic equilibria, and the theory of coordination com-
pounds) are treated in detail. Typical volumetric and gravimetric determina-
tions are conducted in the laboratory.
Prerequisite: College Chemistry with Qualitative Analysis I and II or
Fundamentals of Chemistry I and II and Qualitative Analysis. Hours of class
per week: 2. Hours of lab per week: 2-3. Lab Fee: $10.

CH 173   Fundamentals of Chemistry I   4 sem. hr.

A course in general chemistry designed for the liberal arts student; stressing a "principles" approach to such topics as chemical bonding, states of matter, thermodynamics, and periodic classification in laboratory and lecture.
Prerequisite: 3 yrs. high school math or College Algebra or equivalent, high school chemistry and/or physics helpful. Hours of lab per week: 2. Hours of class per week: 3. Lab Fee: $7.50.

CH 174   Fundamentals of Chemistry II   4 sme. hr.

A course in general chemistry designed for the liberal arts student, stressing a "principles" approach to such topics as chemical bonding, states of matter, thermodynamics, and periodic classification in laboratory and lecture.
Prerequisite: 3 yrs. high school math or College Algebra or equivalent, high school chemistry and/or physics helpful. Hours of class per week: 3. Hours of lab per week: 2. Lab Fee: $7.50.

BI 171   Biology I   4 sem. hr.

A comprehensive course for science majors stressing the molecular approach to the study of origin of life, cells, physiology, heredity and groups of organisms. The laboratory provides the students with tangible evidence of scientific principles.
Prerequisite: None. Hours of class per week: 3. Hours of lab per week: 3. Lab Fee: $7.50.

BI 172   Biology II   4 sem. hr.

A continuation of Biology I.
Prerequisite: Biology I. Hours of class per week: 3. Hours of lab per week: 3. Lab Fee: $7.50.

BI 271   Zoology I   4 sem. hr.

An integrated course which probes the morphological and physiological relationship of animals by discussing the basic principles of anatomy, ecology, genetics, embryology and taxonomy. Included is a resume of organ systems with particular reference to man with emphasis on anatomy and physiology. Laboratory investigations will supplement class work through dissection and physiological experiments.
Prerequisite: None. Hours of class per week: 3. Hours of lab per week: 3. Lab Fee: $10.

BI 272   Zoology II   4 sem. hr.

A continuation of Zoology I.
Prerequisite: Zoology I. Hours of class per week: 3. Hours of lab per week: 3. Lab Fee: $10.

SC 141   Life Science I   3 sem. hr.

The course investigates such topics as origin of life, metabolism and cellular structure. The laboratory emphasis derivation of scientific theory.
Prerequisite: None. Hours of class per week: 3. Hours of lab per week: 1. Lab Fee: $5.

SC 182 Life Science II   3 sem. hr.

A continuation of Life Science I.
Prerequisite: Life Science I. Hours of class per week: 3. Hours of
lab per week: 1. Lab Fee: $5.

BI 181 Anatomy and Physiology I   3 sem. hr.

A course designed for nurses with emphasis on human anatomy and physiology
The laboratory stresses physiological experiments along with location of all
involved systems.
Prerequisite: None. Hours of class per week: 2. Hours of lab per week:
2. Lab Fee: $7.50.

BI 182 Anatomy and Physiology II   3 sem. hr.

A continuation of Anatomy and Physiology I.
Prerequisite: Anatomy and Physiology I. Hours of class per week: 2.
Hours of lab per week: 2. Lab Fee: $7.50.

SC 183 Personal Health   3 sem. hr.

The course with emphasis on human anatomy and physiology through a detailed
discussion of organ systems.
Prerequisite: None. Hours of class per week: 3. Hours of lab per week:
1. Lab Fee: $5.

SC 168 Descriptive Astronomy   2 sem. hr.

The course is primarily descriptive with reference to earth, moon, eclipses
and the solar system including planets, stars, and galaxies.
Prerequisite: None. Hours of class per week: 2 Lab Fee: None.

SC 179 Physical Geology I   2 sem. hr.

The course includes a thorough study of topographic maps, glaciation, ero-
sion and vulcanism.
Prerequisite: None. Hours of class per week: 3. Hours of lab per week:
1. Lab Fee: $7.50.

MD 161 Engineering Graphics I   3 sem. hr.

Course covers drafting work in lettering, use of drawing instruments in-
cluding the drafting machine and parallel straight edge, geometrics, ortho-
graphic projection, cross sections, axonometric projection, intersections and
sketching.
Prerequisite: None. Hours of class per week: 3. Lab Fee: None, but
the cost of instruments and book in approximately $30.

MD 164 Engineering Graphics II   3 sem. hr.

Course covers development, detail and assembly drawings, screw thread work,
production dimensioning, charts and graphs and gearing.
Prerequisite: Engineering Graphics I. Hours of class per week: 3.

PH 131 Engineering Physics I (mechanics)   4 sem. hr.

   Vectors; forces; equilibrium; analysis; centroid; kinematics; kinetics;
centrifugal force; work and energy; impulse and momentum; rotation; elasticity;
hydrostatics; pressure; hydrodynamics.
   Prerequisite: high school chemistry, physics, math(algebra thru trigonometry)
Hours of class per week: 3. Hours of lab per week: 2. Lab Fee: $10.

PH 132 Engineering Physics II (heat, light and sound)   4 sem. hr.

   Thermometry; calorimetry; heat transfer; thermodynamics; Carnot cycle; gas
laws; Dalton's principle; wave theory; sound ranging; strings; Melde's Law;
elastic-mediums; harmonics; pipes; bars; illumination; reflection; refraction;
lenses; optical instruments; color; interference; diffraction;polarization.
   Prerequisite: Engineering Physics I. Hours of class per week: 3. Hours
of lab per week: 2. Lab Fee: $10.

PH 231 Engineering Physics III (electricity and magnetism)   4 sem. hr.

   Electrostatics; Coulomb's Law; field strength; potential; potential dif-
ference; capacitance; current and resistance; Ohm's Law; direct current
circuits; electrochemistry; instruments; induction and capacitance; alternating
current; electronics.
   Prerequisite: Engineering Physics II. Hours of class per week: 3. Hours
of lab per week: 2. Lab Fee: $10.

PH 232 Engineering Physics IV (modern)   4 sem.hr.

   Introduction to atomic physics; radioactivity; electron andnuclear masses;
quantum physics; photoelectric and Compton effects; Bohr theory of atomic
structures; X-rays; neutrons; electron and ion accelerators; nuclear reaction;
nuclear fission; atomic energy.

   Prerequisite: Engineering Physics III. Hours of class per week: 3. Hours
of lab per week: 2. Lab Fee: $10.

PH 235 Engineering Mechanics (statics)   3 sem.hr.

   Analytical and graphical analysis of force systems, moments, couples,
resultants, simple structure; and trusses. Equilibrium of force systems;
friction; kinematics of particles and rigid bodies; displacement, velocity,
acceleration, rectilinear motion.
   Prerequisite: Engineering Physics I or equivalent. Hours ofclass per
week: 3. Lab Fee: None.

PH 236 Engineering Mechanics (dynamics)   3 sem. hr.

   Motions of particles and rigid bodies and the force systems causing these
motions; force, mass, and acceleration; work and energy; impulse and momentum.
   Prerequisite: Engineering Mechanics (statics). Hours of class per week:
3. Lab Fee: None.

BU 132 Typewriting I 3 sem. hr.

Development of basic skills and techniques. Introduction to the use of carbon paper, simple tabulation, business and personal letters, manuscripts, and business forms.
Prerequisite: None. Hours of class per week: 3.

BU 133 Typewriting II 3 sem. hr.

Emphasis on the development of speed and accuracy. Extensive work in the production of business letter, reports, business forms, tabulations, and manuscripts.
Prerequisite: Typewriting I or equivalent. Hours of class per week: 3.

BU 234 Advanced Typewriting 3 sem. hr.

Development of increased speed and accuracy. Special emphasis on integrated office problems. Preparation of masters and stencils for duplication. Instruction in the use of the electric typewriter.
Prerequisite: Typewriting II or equivalent. Hours of class per week: 3.

BU 130 Shorthand I 3 sem. hr.

Basic principles of Gregg Shorthand, Diamond Jubilee Series, including mastery of brief forms. Development of skill in reading and writing shorthand.
Prerequisite: None. Hours of class per week: 5.

BU 131 Shorthand II 3 sem. hr.

Further emphasis on skill in reading and writing shorthand at progressively higher rates of speed for sustained periods of time. Spelling, punctuation, grammar, and the development of a business vocabulary are included.
Prerequisite: Shorthand I or one year of high school shorthand. Hours of class per week: 5.

BU 230 Advanced Shorthand and Transcription I 3 sem. hr.

Continued study of shorthand by integrating shorthand and typing skills. Further mastery of Gregg shorthand theory. Dictation and transcription of shorthand notes on the typewriter with emphasis on mailability.
Prerequisite: Shorthand II or two years of high school shorthand. Hours of class per week: 5.

BU 231 Advanced Shorthand and Transcription II 3 sem. hr.

Increased emphasis on the development of speed and accuracy in transcribing business correspondence, articles, and reports. Improvement of transcription techniques. Stress on spelling, punctuation, grammar, and a good business vocabulary. Use of dictation equipment.
Prerequisite: Shorthand I and Transcription. Hours of class per week: 5.

BU 144 Office Machines 3 sem. hr.

Development of proficiency in the use of the ten-key and full keyboard adding-listing machines, printing calculator, rotary calculator, and duplicating machines. Emphasis on correct technique in operating machines. Practical application of these machines by use of special office projects.
Prerequisite: None. Hours of class per week: 3.

BU 232 Secretarial Practice I   3 sem. hr.

Part I of a two semester course in general secretarial procedure. Empha
sis on fundamental secretarial skills, including filing procedures, reception-
ist and telephone techniques, secretarial duties, and preparation of reports.
Simulates experience related to the functions of the business office.
Prerequisite: None. Hours of class per week: 3.

BU 233 Secretarial Practice II   3 sem. hr.

Part II of a two semester course.
Prerequisite: Secretarial Practice I. Hours of class per week: 3.

BU 238 Secretarial Seminar   1 sem. hr.

A course designed to provide a broad knowledge of the business world and
the responsibilities of the secretary. Included in the course are visits to
business offices, panel discussions, speakers, secretarial social graces,
rules of office etiquette, and consideration of the qualities and skills
needed to obtain a position in the business world.
Prerequisite:
Hours of class per week: average about 1 hour per week.

BU 120 Accounting I   3 sem. hr.

First half of a one-year course introducing accounting theory. Theory of
debit and credit; accounts and special journals; the accounting cycle; accounting
for notes and interest, accrued items, receivables, inventories, and plant
assets; preparation of financial statements. Emphasis is on sole proprie-
torship.
Prerequisite: None. Hours of class per week: 3.

BU 121 Accounting II   3 sem.hr.

Second half of the basic course. Accounting for partnerships and corpora-
tions; control systems for departments, manufacturing, job costs and cost
control; analysis of statements and data.
Prerequisite: Accounting I. Hours of class per week: 3.

BU 125 Secretarial Accounting   3 sem. hr.

Introductory course for secretarial students to familiarize them with the
elements accounting dealing with cash, banking, petty cash transactions,
payroll procedures, simple notes and securities, and financial statements.
Prerequisite: None. Hours of class per week: 3.

BU 220 Intermediate Accounting I   3 sem. hr.

Emphasis on corporate accounting. Analysis of major classification items
found in financial statements. Cash and investments, receivables, inventories,
liabilities, plant and equipment.
Prerequisite: Accounting II. Hours of class per week: 3.

BU 221 Intermediate Accounting II   3 sem. hr.

Problems in valuation of assets. Corporate formation; paid-in capital,
retained earnings, analysis of single entry systems, corrections of errors,
use of data in financial statements.
Prerequisite: Accounting II. Hours of class per week: 3.

BU 225 Income Tax Procedures   3 sem. hr.

A study of the Federal income tax law and regulations. Covering taxable income, inclusions and exclusion, capital gains and losses, deductions and other topics. Practice in preparation of income tax returns.
Prerequisite: Accounting II. Hours of class per week: 3.

BU 245 Business Law I   3 sem. hr.

An introduction to the laws applicable to business with major emphasis on contracts, agency and employment, negotiable instruments, personal property and bailments, and sales of goods. Text and case studies of legal precedents will be used extensively.
Prerequisite: Elements of Business. Hours of class per week: 3.

BU 246 Business Law II   3 sem. hr.

A continuation of the legal aspects of business, covering partnerships, corporations and related business organizations, real property and leases, insurance, suretyship, trusts and estates.
Prerequisites: Business Law I. Hours of class per week: 3.

BU 248 Money & Banking   3 sem. hr.

A study of the history of money and monetary systems; the evolution of commercial banking generally and in the United States specifically; the Federal Reserve and its functions. In addition to the text emphasis will be placed on supplementary outside reading.
Prerequisite: Economics I or Business Economics. Hours of class per week: 3.

BU 241 Marketing

An analysis of the principles, methods, trends and problems existing in marketing. A study of the distribution function of middlemen, their movement of goods and marketing policies with some discussion of marketing research. Text and case studies.
Prerequisite: Elements of Business/Business Organization and Management. Hours of class per week: 3.

BU 242 Personnel Management   3 sem. hr.

The principles of personnel administration, its objectives and management. Emphasis centered on manpower management, recruitment, selection and placement, job analysis and evaluation and other major factors in personnel problems and labor relations. Test plus case studies.
Prerequisite: Elements of Business/ Business Organization and Management. Hours of class per week: 3.

BU 110 Business Mathematics   3 sem. hr.

Review of arithmetic operations. Preparation and use of shortcut operations. Instruction and drill in percentage, cash and trade discounts, markup, payroll sales, property and other taxes. Simple and compound interest, bank discounts, interest, investments, annuities. Stocks, Bonds and other securities. Principles of Life insurance and Fire insurance, liabilities and coinsurance.
Prerequisite: None. Hours of class per week: 3.

BU 141 Business Organization and Management　　　　　　　　3 sem. hr.

Advantages, limitations and financing of basic forms of business organization. Management problems of organization, policy formation, communication and efficiency with particular reference to personnel and their superfision, budgets and automation.
Prerequisite: Elements of Business. Hours of class per week: 3.

BU 224 Cost Accounting　　　　　　　　3ssem.hr.

Accounting for direct labor, materials, and factory overhead with emphasis on job order costing. Process cost system, standard cost principles and procedures, budgets and direct decision making.
Prerequisite: Accounting I and II. Hours of class per week: 3.

BU 140 Elements of Business　　　　　　　　3 sem. hr.

An introductory survey of the functions and problems of business management giving the student an overview of the interrelationships among the functional areas of business which he will study in more detail in later courses.
Prerequisite: None. Hours of class per week: 3.

BU 249 Business Economics　　　　　　　　3 sem. hr.

Capital investment and theory of planning. Capital planning and budgeting. Determination of minimum cost and maximum profit. Elements of economic measurement, analysis of risk.
Prerequisite: None. Hours of class per week: 3.

MA 151 Essentials of Mathematics　　　　　　　　3 sem. hr.

Designed for student who do not have a sufficient background to pursue courses in college mathematics. Materials in areas such as the structure of the number system, mathematical operations, equation solving, variation and logic.
Prerequisite: None. Hours of class per week: 3.

MA 152 Trigonometry　　　　　　　　3 sem. hr.

Angles and angle measurement; trigonometric functions; radian measure; identities; solution of plane triangles; logarithms; inverse function; complex numbers; reduction formulas; sum, difference and product formulas.
Prerequisite: Essentials of Mathematics or Elementary Algebra. Hours of class per week: 3.

MA 153 College Algebra　　　　　　　　3 sem. hr.

Logic; sets; induction; graphs of functions; partial fractions; systems of first and second degree equations; determinants; transcendental functions; sequences and series.
Prerequisite: Essentials of Mathematics, one year of Algebra or equivalent. Hours of class per week: 3.

MA 154 Analytic Geometry　　　　　　　　3 sem. hr.

The straight line, the circle, the ellipse, hyperbola, parabola, higher plane curves, parametric equations and curve fitting, polar coordinates and empirical equations.
Prerequisite: College Algebra or equivalent. Hours of class per week: 3.

MA 155 Technical Mathematics I   3 sem. hr.

This is an integrated course designed to provide mathematical foundations for students of technology. Topics include; slide rule; linear and quadratic solutions. Graphing approximations. Trigonometry of right and oblique triangles. Prerequisite: High school alg b equivalent. Hours of class per week: 3.

MA 156 Technical Mathematics II   3 sem. hr.

A continutaion of MA 155. Topics include: exponentials, logarithms and cologarithms; graphs of the transadental functions. Vectors and the j-operator. Prerequisite: Technical Mathematics I. Hours of class per week: 3.

MA 157 Analytic Geometry and Calculus I   4 sem. hr.

This course is planned as the first course in a sequence of four courses in the calculus for the engineering students. Topics covered include basic concepts of analytic geometry; differentiation of algebraic functions; Rolle's Theorem; the definite Integral; applications of differentiation and integration. Prerequisite: 3 yrs. of high school math including 1½ yrs. of algebra. Hours of class per week: 4.

MA 158 Analytic Geometry and Calculus II   4 sem.hr.

A continuation of Mathematics 157. Topics include Conic sections: Derivations of the trigonom etric and inverse trigometric functions; logarithmetic, exponential and hyperbolic intregation and differentiation; methods of integration; plane vectors; the indeterminate forms. Prerequisite: Analytic Geometry and Calculus I. Hours of class per week: 4.

MA 159 Mathematics of Finance   3 sem. hr.

Available for Liberal Arts and selected Business students. Topics include: simple interest and discounts; partial payments; mark up; depreciation methods; negotiable instruments; stock and bonds; annuities; life insurance; Taxes; payroll mathematics. Prerequisite: College Algebra or 1½ yrs Algebra. Hours of class per week: 3.

MA 250 College Calculus with Analytic Geometry I   4 sem. hr.

The first course in a sequence of three courses primarily for Liberal A ts students. Topics include: relations; inequalities; limits and continuity, algebraic differentiation; definate integral; conics; applications. Prerequisite: College Algebra or 3 yrs of high school math including 1½ yrs. of algebra with above average achievement report. Hours of class per week: 4.

MA 251 College Calculus with Analytic Geometry II   4 sem. hr.

A continuation of MA 250, topics include: differentiation and integration of trigonometric and transadental functions; polars; techniques of integration solid analytic geometry; vectors in E_3; applications. Prerequistie: College Calculus with Analytic Geometry I. Hours of class per week: 4.

MA 252 College Calculus with Analytic Geometry III   4 sem. hr.

A continuation of MA 251. Topics include: infinite Series; partial differentiation; Taylors Theorem with remainder; multiple integration linear algebra matrices. Prerequisite: College Calculus with Analytic Geometry II. Hours of class

MA 252 College Calculus with Analytic Geometry III (continued).
per week: 4.

MA 253 Calculus I

4 sem. hr.

The derivative; differentiation of algebraic and transcendental functions; time-rate problems; maxima and minima; Rolle's Theorem; Theorem of the Mean; intergration of powers; curvilinear motion; L'Hoppital's Rule; indeterminate forms; applications.
Prerequisite: Analytic Geometry or equivalent. Hours of class per week: 4.

MA 254 Calculus II

4 sem. hr.

A continuation of Math 253. Methods of integration; moment; Taylor's Series; power series; infinite series; approximations; convergance; partial differentiation; multiple integration; elements of solid analytic geometry; applications.
Prerequisite: Calculus I. Hours of class per week: 4.

MA 255 Technical Mathematics III

4 sem. hr.

A continuation of Math 156. Review of Analytic Geometry of the straight line and conic sections; differentiation of algebraic functions; logarithmic and trigonometeric differentiation; curve sketching; maxima and minima; time rates; implicit functions; anti-differentiation; applications.
Prerequisite: Technical Mathematics II. Hours of class per week: 4.

MA 256 Technical Mathematics IV

4 sem. hr.

A continuation of Math 255. The definate integral; integration techniques; areas, volumes, moments of inertia, areas of surfaces of revolution; curve fitting; polar equations; parameteric equations; curvature; velocities and acceleration; Fourier Series; applications.
Prerequisite: Technical Mathematics III. Hours of class per week: 4.

MA 257 Analytic Geometry and Calculus III

4 sem. hr.

A continuation of Mathematics 258. Topics include: polar coordinate system; plane areas in the polar system; infinite series; power series; radius of convergance; vectors and solid analytic geometry; "Dot" and vector products; differentiation of vectors; moment of inertia; applications.
Prerequisite: Analytic Geometry and Calculus II. Hours of class per week: 4.

MA 258 Analytic Geometry and Calculus IV

4 sem. hr.

A continuation of Math 257. This course includes partial differentiation; the gradient; implicit functions; multiple integration; differential equations; non-homogeneous equation; applications.
Prerequisite: Analytic Geometry and Calculus III. Hours of class per week: 4.