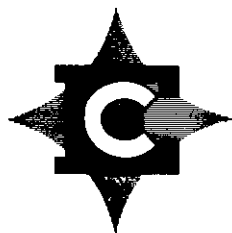


east central junior college



1973-1975 Catalog

**EAST CENTRAL JUNIOR COLLEGE
P. O. BOX 529 — UNION, MISSOURI 63084
TELEPHONE: 314-583-5193**

THE CURRICULUM: COURSES OF INSTRUCTION

The first digit of a course number refers to academic level of the course; courses numbered 100 are designated primarily for freshmen; courses numbered 200 for sophomores.

The third digit of a course number refers to the number of semester hours credit given for that course. Thus, History 133 earns for the student three hours credit.

The College reserves the privilege of withdrawing any course for which there is not sufficient enrollment.

COURSE DESCRIPTIONS

ART

- Art 102 CRAFTS 2 hours
Course is designed to allow the student to explore a number of different craft areas such as: mosaics, basketry, printmaking, etc. Individual projects will be developed in those areas in which the student has special interests. The course is especially well suited to teachers, parents, and other non-art majors who are interested in developing creative hobbies.

Prerequisite: none
- Art 103 COMPOSITION 3 hours
Representational, abstract, non-objective drawings and paintings; space and volume relations; movement and direction of planes in development of visual units of design and their integration in the whole organization; introduction to perspective and light and shade.

Prerequisite: none
- Art 113 ART APPRECIATION I 3 hours
A general survey of the artistic activities of man from pre-historic to modern times. Slides and 16mm films are used in conjunction with the course.

Prerequisite: none
- Art 123 ART APPRECIATION II 3 hours
A survey of art history from 1900 to the present, with some studio applications. Selected art movements and techniques will be discussed.

Prerequisite: none

Art 133 INTRODUCTION TO ART 3 hours
An introduction to art through various media and techniques such as design, drawing, printmaking, color, shading, sculpture, space relationship. Media include ink, cray-pas, plaster, and watercolor. This is a survey course and not recommended for art majors.

Prerequisite: none

Art 143 SCULPTURE I 3 hours
An introduction to sculpture through the use of various media: cardboard sculpture, plastic sculpture, and wood or stone sculpture. Some drawing and research of sculptors and sculpture techniques is required.

Prerequisite: none

Art 153 DRAWING I 3 hours
An introduction to drawing as an approach to space and form through a variety of methods, both traditional and contemporary. Emphasis will be placed upon analytical seeing as well as familiarization with and control of drawing material. Introduction to perspective and light and dark shades, some texture and other methods will be used for creative drawings.

Prerequisite: Art 103 or consent of the instructor.

Art 163 DRAWING II 3 hours
Drawing of the human figure in charcoal, crayon, ink, and other media. Representational, abstract, and non-objective drawings, space and volume relations; movement and direction of planes in space; development of visual units of design and their integration in the whole organization.

Prerequisite: Art 153 or consent of the instructor.

Art 173 PAINTING I 3 hours
Introduction to the material and techniques of oil and acrylic painting. Intended to develop technical and expressive abilities. Forms, colors, line, texture, and organization of painting will be studied. Practical application of framing techniques.

Prerequisite: Art 153 or 163 or consent of the instructor.

Art 183 PAINTING II 3 hours
Theory and practice of painting using oil and acrylics. Development of form through color and appropriate emphasis.

on texture. Objective appearance conditioned to meet the requirements of a controlled composition and aesthetic concept. While working with a variety of media, the student will be encouraged to emphasize individual expression.

Prerequisite: Art 173

Art 193 COMMERCIAL ART 3 hours
Exploration of the basic elements of design as related to commercial art. The application of elements is stimulated by a wide variety of projects. Projects will stress the development of ideas rather than execution of media.

Prerequisite: none

Art 213 SCULPTURE II 3 hours
Examination and analysis of traditional and contemporary sculpture. Sculptural design is related to material and techniques such as clay, wood, stone, plaster, and metal.

Prerequisite: Art 143 or consent of the instructor.



Art 223 DESIGN 3 hours
Exploration of space, line, color, shape, and texture as the basic elements in visual expression. The application of elements is stimulated by a wide variety of projects stressing creative ability.

Prerequisite: Art 103 or consent of the instructor

Art 233 **WATERCOLOR** 3 hours
The study of watercolor painting with emphasis upon color and composition and pictorial expression; experimentation with varied methods of watercolor painting. Studies will include washes and brush control

Prerequisite: Art 103 or 133 or consent of the instructor.

Art 243 **PRINTMAKING I** 3 hours
Lecture and laboratory exercises dealing with history and techniques of printmaking, including the making of prints from material such as wood blocks, cardboard, and linoleum by using surface printing techniques.

Prerequisite: Art 133 or consent of the instructor

Art 263 **PRINTMAKING II** 3 hours
Laboratory exercises dealing with the techniques of lithography, silkscreen and dry point as a fine printing medium. Emphasis is on individual exploration with materials.

Prerequisite: Art 133, or Art 243, or consent of the instructor

Art 271 **DIRECTED STUDIES (HONORS) IN ART** 1 hour
The opportunity provides two alternatives. An exceptional art student may pursue (1) studying or developing independently a specifically prearranged topic or project, within the field of art, (2) develop experience in procedures, processes, and actual presentations of gallery displays.

Prerequisite: Consent of the instructor

AUTO MECHANICS

Auto 103 **ELECTRICAL SYSTEMS** 3 hours
An advanced study of the automobile electrical systems. Beginning with a comprehensive study of direct-current theory, the module directs itself to application of the theory to the understanding of the automobile starting, charging, and ignition systems. Lab and shop work in this module concentrates on trouble-shooting and repair of auto electrical systems and components

Prerequisite: none

Auto 112 **FUEL SYSTEMS** 2 hours
A detailed study of the principles and theory of carburetion and fuel systems on the modern automobile. Includes shop work on overhauling, servicing, and adjustment of fuel system components. Special emphasis is placed on recent changes in fuel system design, manufacture, and servicing due to federal and state air pollution legislation.

Prerequisite: none

Auto 131 **FEDERAL & STATE VEHICLE LEGAL STANDARDS** 1 hour
A thorough presentation of the latest federal and state standards as they apply to safety and emissions standards and requirements, including current state inspection requirements. Shop work will concentrate on devices and designs presently being installed to reduce harmful emissions, as well as the servicing of these systems. Additionally state inspections will be performed according to law on many vehicles, giving the student practical exercises in performing such inspections. Discussion will include future standards and the devices now being designed to meet them.

Prerequisite: none

Auto 141 **SUSPENSION SYSTEMS** 1 hour
A comprehensive study of coil and leaf-spring type suspension systems and the various configurations of each. Steering and shock absorber designs will also be covered in this module, along with the diagnosis and repair of common steering and suspension components.

Prerequisite: none

Auto 152 **WHEEL ALIGNMENT AND BALANCE** 2 hours
Study in this module will concentrate on tire and tread design, tire and wheel assembly balance, and front-end alignment procedures. Shop work will include tire repair, diagnosis of wheel alignment and balance problems from tire wear patterns, and adjustment and repair of suspension systems steering systems, and operation of wheel alignment and balancing equipment.

Prerequisite: Auto 141

Auto 182 **BRAKES** 2 hours
The study of hydraulic brake systems, both power-assisted and non-power assisted. Disc and drum brake systems will both be covered in detail, along with brake repair procedures. Shop



work will include brake servicing and replacement procedures, disc and drum service to hydraulic master and wheel cylinder assemblies.

Prerequisite: none

Auto 191

STANDARD TRANSMISSIONS

1 hour

A study of three and four speed standard transmissions including clutches and clutch designs. Shop work will concentrate on clutch replacement, shift linkage design and adjustments, and transmissions disassembly and repair procedures. The theory of gear design and ratios will be studied in great detail.

Prerequisite: none

Auto 192

AUTOMATIC TRANSMISSIONS

2 hours

A detailed study of the theory, operation, and repair of automatic transmissions. This module will begin with a complete study of planetary gear trains and their operation, hydraulic theory as applied to fluid couplings, and clutch theory and operation. Subsequent shop work will concentrate on removal, disassembly, overhaul, and replacement of automatic transmission assemblies. Special emphasis will be placed on diagnosis of automatic transmission problems.

Prerequisite: none

Auto 201 **AUTO MECHANICS PLACEMENT** 1 hour
A course designed to assist auto mechanics students in obtaining jobs suitable to their training and interests.

Prerequisite: none

Auto 202 **ENGINES** 2 hours
A detailed study of the gasoline-powered internal-combustion engine. Emphasis will be placed on procedures for repair and replacement of engine parts and components, engine cooling systems, and valve train assemblies. Engine overhaul and machine procedures will be discussed in detail, and shop work will include the disassembly, measuring, and reassembly of engine components.

Prerequisite: Auto 103 and Auto 112

Auto 211 **AIR CONDITIONING** 1 hour
Beginning with a study of refrigeration and cooling theory, this module will concentrate on the diagnosis and repair of common automotive air-conditioning problems. Shop work will include the checking and charging of air-conditioning systems, as well as leak-detection procedures and correction of common compressor problems.

Prerequisite: none

Auto 221 **DRIVE LINES AND DIFFERENTIAL** 1 hour
A study of the transmission of power from the transmission to the wheels of the modern vehicle. Shop work will concentrate on drive shaft service, adjustment and replacement of differential bearings and parts (including limited slip differentials), and diagnosis of vibration and axle noise problems.

Prerequisite: none

BIOLOGICAL SCIENCE

Bio 102 **PERSONAL AND COMMUNITY HYGIENE** 2 hours
A general course designed to develop proper attitudes and practices which will contribute to the fine art of living. Health problems which require community action are given consideration

Prerequisite: none

- Bio 115** **GENERAL BIOLOGY** **5 hours**
 An introductory course involving fundamental biological principles of both plant and animal life. It is designed to be used as a general education requirement. Not open to students with credit in botany or zoology or students expecting to major in the biological sciences. Three hours of lecture and two two-hour laboratory periods per week.
This course is intended as a general education course and not recommended for a life science majors.
 Prerequisite: none
- Bio 145** **GENERAL ZOOLOGY** **5 hours**
 A survey of the animal kingdom, animal structure, life processes, development, ecology, and the evolution of animals. Laboratory will include structure and taxonomic relationships as shown by dissection of representatives of the various animal groups. Three one-hour lecture recitation periods and two two-hour laboratory periods per week.
This course should be taken by people majoring in the life sciences.
 Prerequisite: none
- Bio 155** **GENERAL BOTANY** **5 hours**
 An introduction to the plant kingdom, structure, physiology, life histories, economic importances, and the evolution of plants. Laboratory will include dissection and observation to verify and enhance classroom lecture and recitation. Three one-hour lecture recitation periods and two two-hour laboratory periods per week
 Prerequisite: Bio 115 or Bio 145
- Bio 202** **GENETICS** **2 hours**
 A study of the principles of heredity and biological evolution as applied to plants and animals.
 Prerequisite: either Bio 115, Bio 145 or Bio 155.
- Bio 225** **FIELD BIOLOGY** **5 hours**
 An introduction to ecology and other field courses in biology. Provides a background in field techniques, field and laboratory identification of plants and animals. Three one-hour lecture recitation periods and two two-hour laboratory periods per week.
 Prerequisite: none (Bio 115 or Bio 145 is recommended.)

Bio 235

COMPARATIVE ANATOMY

5 hour

The comparative anatomy of vertebrate animals, including both embryological development and adult structure. Dissection includes a representative from each major vertebrate class. Includes classification of vertebrates, embryology, skeleton, muscles, coelome, digestive and respiratory systems, circulatory system, uninogenital system, and nervous system. Two lectures and six hours of laboratory per week.

Prerequisite: Bio 145 or consent of the instructor.

Bio 271,
281, 291

**DIRECTED STUDIES (HONORS)
IN BIOLOGY**

1 hour

The biology internship provides two alternatives. A student may pursue: (1) investigation or studying independently a specific prearranged topic, within the field of biological science, (2) assisting primarily in the laboratory, or in lecture when peer groupings are being utilized.

Prerequisite: Consent of the instructor.

BUILDING AND SITE MAINTENANCE

B & SM 100

BUILDING AND SITE MAINTENANCE 1100 Contact Hours

The Building and Site Maintenance program at East Central Junior College is designed to train regular students and adults for positions with many agencies. The program is intended to develop the necessary skills to develop the site, maintain the building and its equipment, diagnose basic systems and equipment malfunctions, accomplish normal repairs and initiate routine alteration or modification of the building and its systems.



The student will spend nearly 1100 hours in the program over an eleven month period. The final month will be spent in actually performing maintenance duties in a designated training station. The student will spend five hours a day, five days per week in the training program. All classes are scheduled in the morning so the student may hold down an afternoon or evening job.

BUSINESS

Bus 103 **INTRODUCTION TO BUSINESS** 3 hours
A survey course designed to give the student a general knowledge of the modern business world, and a better basis for choosing concentrated business offerings.

Prerequisite: none

Bus 213 **ACCOUNTING I** 3 hours
Basic principles and procedures of business accounting, including debits and credits, journals and ledgers, the balance sheet, and income statements.

Prerequisite: none

Bus 223 **ACCOUNTING II** 3 hours
A continuation of the study of accounting principles, including cash and investments, receivables, inventory, fixed assets, liabilities, accounting principles, manufacturing operations, and the analysis of financial data.

Prerequisite: Business 213

Bus 233 **INTRODUCTION TO COMPUTERS** 3 hours
An introduction to basic theory and methodology of electronic data processing.

Prerequisite: Sophomore standing

BUSINESS MID-MANAGEMENT

Bus M 103 **APPLIED ACCOUNTING** 3 hours
This course is designed to give the student extensive practice in working with basic accounts, records, and statements.

Prerequisite: none

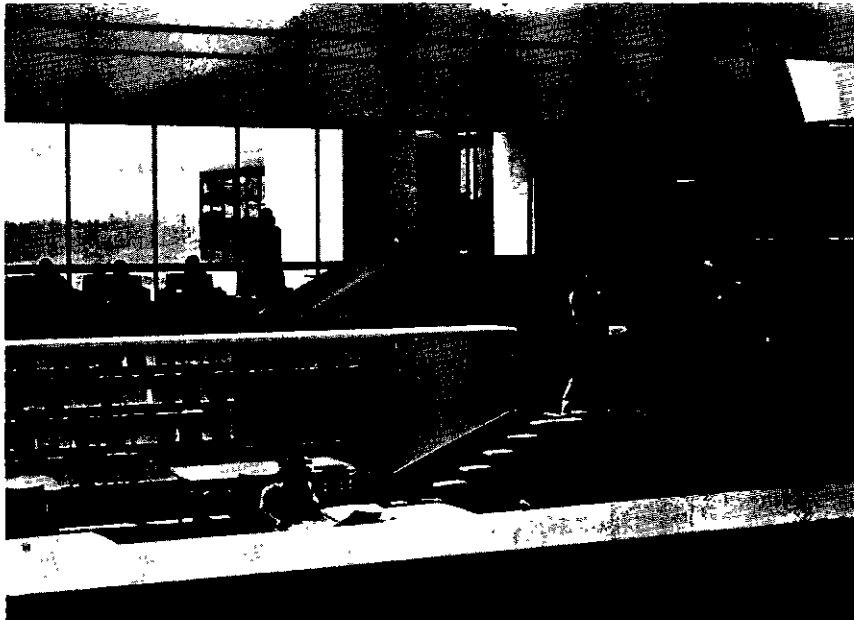
Bus M 201

BUSINESS MANAGEMENT PLACEMENT

1 hour

A course designed to assist business management students in obtaining jobs suitable to their training and interests.

Prerequisite: none



Bus M 213

PRINCIPLES OF MARKETING

3 hours

This course is designed to introduce the student to the managerial area of marketing. Although consumer and institutional behavior patterns and the overall role of marketing in the economy are covered, the major emphasis will be concerned with the types of problems confronting those involved in marketing management.

Prerequisite: none

Bus M 223

SALESMANSHIP

3 hours

A study of proper sales techniques for presenting and selling merchandise to the consumer. Methods of organization, training, and management of the sales force.

Prerequisite: none

- Bus M 233** **ADVERTISING AND DISPLAY** 3 hours
 Aspects of advertising with emphasis on the development of a proper marketing mix, the planning of advertising strategy, the management of personnel, the control of advertising operations, advertising research, and the development of display plans. Each student will be assigned an advertising project concerned with a marketing plan, advertising strategy, and an advertising budget.
 Prerequisite: none
- Bus M 243** **PRINCIPLES OF FINANCE** 3 hours
 Basic financial management of the business firm involving procurement, allocation, and control of funds according to objectives of profitability and liquidity. Corporate financial behavior and practice are studied relative to initial organization and structure, financial instruments and market; measurement, analysis, and interpretation of investment and profit performance
 Prerequisite: none
- Bus M 251** **DISPLAY PROJECT** 1 hour
 A study of the types and the role of visual merchandising in the retail store including creation, color and principles of design, incorporating actual experience in preparing retail displays.
 Prerequisite: none
- Bus M 273** **PERSONNEL MANAGEMENT** 3 hours
 An evaluation and comparison of private and public personnel practices and techniques of recruiting, selecting, transferring, promoting, classifying, and training workers.
 Prerequisite: none
- Bus M 283** **BUSINESS LAW** 3 hours
 A study of those areas of the law which affect most businesses; sales and credit, contracts, insurance, agency and employment, commercial paper, and personal property and bailments.
 Prerequisite: none.
- Bus M 291, 292, 293** **INTERNSHIP** 1-3 hours
 This phase of the student's business management training will include actual work experience in a retail business with periodic discussions of the problems involved in applying classroom principles to the job
 Prerequisite: Enrollment in Business Management Program and consent of the instructor

CHEMISTRY

- Chem 105 **INTRODUCTION TO CHEMISTRY** 5 hours
Introduction to the basic principles of chemistry, including inorganic, analytical, physical, and organic chemistry. Environmental and practical applications are emphasized with one lab session per week being used for small group discussions of current topics. Three hours of lecture and two two-hour laboratories per week.
This course is designed for the student with no background in chemistry.
Prerequisite: none
- Chem 115 **GENERAL CHEMISTRY I** 5 hours
Topics of study include slide rule, atomic and molecular structure, bonding, chemical equations, gases, solutions, and an introduction to organic chemistry. Three one-hour lecture periods and two two-hour laboratory periods per week.

Prerequisite: A satisfactory score on the MMPT and either Chem 105 or high school chemistry.
- Chem 125 **GENERAL CHEMISTRY II** 5 hours
A continuation of Chem 115, including chemical equilibria, complexions, thermodynamics, oxidation-reduction reactions, and qualitative analysis. Three one-hour lecture and recitation periods and two two-hour laboratory periods per week.

Prerequisite: Chem 115
- Chem 234, 235 **QUANTITATIVE ANALYSIS** 4-5 hours
A study of the fundamental principles of quantitative analytical chemistry, including gravimetric volumetric and spectrophotometric determinations. Two hours lecture and two or three three-hour laboratory periods per week.

Prerequisite: Chem 125
- Chem 245 **INTRODUCTORY ORGANIC AND BIOLOGICAL CHEMISTRY** 5 hours
A survey of major topics of organic and biological chemistry, including aliphatic and aromatic hydrocarbons, carbohydrates, lipids, amino acids, the vitamins, and steroids. The course relates chemical applications to human metabolism, agriculture, home economics, and medical technology programs. Four hours lecture and three hours laboratory each week.

Prerequisite: Chem 105 or Chem 115

**DIRECTED STUDIES IN
CHEMISTRY (HONORS)**

1 hour

The student enrolled for directed studies has two alternatives:
(1) investigate a specific topic within the field of chemistry. (2)
Assist in the laboratory, stock room, or with individualized
instruction under the supervision of an instructor.

Prerequisite: Consent of the Instructor.

DRAFTING AND DESIGN TECHNOLOGY

Draft 115

**ENGINEERING DRAWING AND
DESCRIPTIVE GEOMETRY**

5 hours

This course is designed to give the student a working knowledge
of fundamental drawing practices and the geometric
relationships of points, lines and planes in space. Areas covered
include the techniques of lettering, sketching, instrumental
drawing of mechanical parts, sectional and auxiliary views and
conventional drafting practices.

Prerequisite: none

Draft 133

ARCHITECTURAL DRAWING

3 hours

This course introduces the fundamental principles of residential
design. It includes instruction on materials and methods of
construction, design standards and room arrangement. Course
emphasis will be given to the development of complete
residential plans.

Prerequisite: Draft 115

Draft 143

MACHINE DRAWING

3 hours

The student will work in problem solving situations involving
the development of drawings of castings, forgings, machinings
and sheet metal layout. Also, the methods of making working
and assembly drawings will be included, providing depth in the
area of machine drawing. Dimensioning will be of primary
importance.

Prerequisite: Draft 115

Draft 152

MODERN DRAFTING TECHNIQUES

2 hours

This is an exploratory course which has major emphasis on
photography, film processing, model building and their in-
dustrial applications. Students will participate in development
of projects utilizing the latest available industrial techniques.

Prerequisite: Draft 115

Draft 163 **MATERIALS AND PROCESSES** 3 hours
A survey of current engineering materials and the various processes used to shape them. Materials studied include a review of ferrous and nonferrous metals, plastics, rubbers, and ceramics. Emphasis is placed on the advantages and limitations of the various casting, forging, machining, grinding, forming, molding, welding, heat treating and powder metallurgy processes used to shape materials.

Prerequisite: none

Draft 173 **PRINCIPLES OF POWER** 3 hours
Principles of hydraulics and pneumatics fundamental to fluid power design are presented. Other topics include principles of mechanical and electrical powered systems and power system schematics

Prerequisite: Math 100 or consent of the instructor.

Draft 201 **DRAFTING PLACEMENT** 1 hour
A course designed to assist drafting students in obtaining jobs suitable to their training and interests.

Prerequisite: none

Draft 202 **TECHNICAL ILLUSTRATION** 2 hours
A course to develop the understanding and skills to produce technical illustrations in the many forms required by industry. Included will be an intensive study of the pictorial forms of



isometric, dimetric, trimetric, oblique and perspective drawing, and the methods and media used in creating illustration.

Prerequisite: Draft 115 and 143

Draft 233 **CIVIL DRAWING** 3 hours
A course encompassing the methods and conventions of engineering graphics as they are practiced in the civil engineering field and its allied industries. Primary focus will be on drawing and detailing civil projects such as highway projects, bridges, land division and subdivision, and municipal utility facilities.

Prerequisite: Draft 115

Draft 243 **MACHINE DESIGN** 3 hours
This course is designed to bring together in practical applications the skill and knowledge developed in courses covering mechanics and drafting. Instruction provided will permit logical organization of facts for economical solution of machine design problems. Emphasis is placed on standardization, use of stock parts, and using manufacturers' catalogs.

Prerequisite: Draft 143

Draft 253 **STATICS AND STRENGTH
OF MATERIALS** 3 hours
A study of statics and strength of materials as applied to structures, beam theory, beam design, and theory of column formulae. Includes study of stress and strain experienced by machine parts and structural members. Emphasis is placed on applications and problem solving.

Prerequisite: Math 143 or consent of the instructor.

Draft 263 **TOOL AND DIE DESIGN** 3 hours
Lectures, classroom discussions and actual drawing board work are combined to give the student knowledge necessary to design the less complicated tools used in modern manufacturing. The work consists of laying out simple jigs, fixtures, cutting tools, gauges, and dies. Mass production methods are discussed so that this knowledge may be applied in the practical work of tool designing.

Prerequisite: Draft 143

Draft 271 **DIRECTED STUDIES IN
DRAFTING DESIGN** 1 hour
Investigation in depth of a specific industrial problem or actual
experience in related office practices.

Prerequisite: consent of the instructor.

Draft 273 **STRUCTURAL DRAWING** 3 hours
The course concentrates on detailing and delineating the
structural systems encountered in architectural and civil
construction. Systems included will be those based on materials
including wood, steel and concrete components. Shop drawings
and erection drawings will be covered.

Prerequisite: Draft 115 and 253

ECONOMICS

Econ 213 **PRINCIPLES OF
MACRO-ECONOMICS** 3 hours
The social control of the economic system by means of
monetary, fiscal and regulatory policies of the government and
by the market process.

Prerequisite: none

Econ 223 **PRINCIPLES OF
MICRO-ECONOMICS** 3 hours
An intensive study of the tools of economic analysis and their
application to problems of business and public policy, with an
emphasis on firms, households, and markets

Prerequisite: none

EDUCATION

Ed 101 **CAREER DECISIONS** 1 hour
A course designed to assist students in self inventory, to help the
student see and understand his interests, aspirations, needs,
personal assets and liabilities. Students will gain experience in
exploring the world of work, finding information on jobs, and
learning to use that information. Students will learn how to
make decisions regarding themselves and their relationship to
the world of work

Prerequisite: none

Ed 113

INTRODUCTION TO EDUCATION

3 hours

An introduction to the many facets of American education designed to give the student accurate information about education and to provide him with opportunities to determine his interest and aptitude for pursuing an educational profession.

Prerequisite: none

Ed 223

EDUCATIONAL PSYCHOLOGY

3 hours

A study of theories and facts concerning human behavior in such areas as motivation, learning, and social development, as applied to the educational process.

Prerequisite: Psychology 113 or consent of the instructor.

ENGINEERING

Engr 113

**ENGINEERING DRAWING AND
DESCRIPTIVE GEOMETRY**

3 hours

A course in orthographic projections (multiview, sections, auxiliaries), isometric and oblique drawing and simple dimensioning. Emphasis is given to interpretation of drawings, technique of sketching, care and use of drafting instruments, and preparation and interpretation of graphs and charts.

Prerequisite: Satisfactory score on pre-test.

Engr 203

ENGINEERING MECHANICS—STATICS

3 hours

Application of the principles of mechanics to engineering problems of equilibrium. Topics include resultants, equilibrium, friction, trusses, center of gravity, and moment of inertia.

Prerequisite: Phys 215

Corequisite: Math 225

ENGLISH

Eng 103

BASIC FUNDAMENTALS OF ENGLISH

3 hours

A course dealing with the fundamentals of grammar and language usage. This course will partially fulfill the English requirement for the technical education student or may prepare a student to enter English 123, but does not carry credit applicable toward the Associate of Arts degree.

Prerequisite: none

Eng 123

ENGLISH COMPOSITION I

3 hours

A course dealing with the principles of composition including rhetoric, grammar, and usage. The course emphasizes the adequate development of ideas through the use of various rhetorical patterns. Research techniques are taught.

Prerequisite: Eng 103 or demonstrated proficiency on the MCET and on a writing sample.



Eng 123H

ENGLISH COMPOSITION (HONORS)

3-6 hours

An intensified composition course open to freshmen who qualify as evidenced by their high school ranks, placement test scores, and a writing sample. The student who receives a grade of A or B will not be required to take English 133. This student will receive six hours credit in composition but will be required to take a literature course to fulfill the English graduation requirement.

Prerequisite: Demonstrated high proficiency on the MCET and on a writing sample.

Eng 133

ENGLISH COMPOSITION II

3 hours

A continuation of the study of English composition which provides practice in writing longer units of exposition including argumentation and critical papers.

Prerequisite: Eng 123

Eng 143 TECHNICAL WRITING 3 hours
Introduction to the practical aspects of preparing reports. The emphasis is on the techniques of collecting and presenting scientific data by means of formal and informal reports. Also included are other elements of communication concerning science and industry.

Prerequisite: One previous English course.

Eng 163 FICTION 3 hours
A study of literature concentrating on the forms and themes of prose fiction. The course includes the study of novels as well as short stories.

Prerequisite: Eng 103 or Eng 123

Eng 173 POETRY AND DRAMA 3 hours
A study of literature concentrating on the forms and themes of poetry and drama. The course emphasizes the study and analysis of poems and plays.

Prerequisite: Eng 103 or Eng 123

Corequisite: Eng 123

Eng 183 FILM 3 hours
Film is a humanities course which will deal with the motion picture as a serious art form and social force in society. Selected films will be analyzed with respect to aesthetics, production methods and social significance.

Prerequisite: Eng 103 or Eng 123 or consent of the instructor.

Eng 193 CHILDREN'S LITERATURE 3 hours
A study of children's literature from pre-school to sixth grade to acquaint the students with the best forms of literature for children and to develop standards of judgment in the selection of reading materials for children.

Recommended for elementary education majors.

Prerequisite: Eng 123

Eng 213 ENGLISH LIFE AND LITERATURE I 3 hours
A survey of English literature from the Anglo-Saxon period through the Age of Reason.

Prerequisite: Eng 123 and sophomore standing, or consent of the instructor.

Eng 223 ENGLISH LIFE AND LITERATURE II 3 hours
A survey of English literature from the Romantic Period to the Twentieth Century.

Prerequisite: Eng 123 and sophomore standing, or consent of the instructor.

Eng 233 AMERICAN LITERATURE I 3 hours
A survey of American Literature from the colonial period up to the Civil War.

Prerequisite: Eng 123 and sophomore standing, or consent of the instructor.

Eng 243 AMERICAN LITERATURE II 3 hours
A survey of American Literature from the Civil War to the present.

Prerequisite: Eng 123 and sophomore standing, or consent of the instructor.

Eng 271 DIRECTED STUDIES IN LITERATURE 1 hour
Intensive study of various movements, themes, genres, or authors in American or English literature, the study to be determined by instructor and student. The study will include extensive reading, discussion, and an in-depth paper.

Prerequisite: Consent of the instructor and a grade point average of 3.0 or better in the department.

FRENCH

Fren 115 ELEMENTARY FRENCH 5 hours
Elementary French is an introductory French course designed to give the student facility in understanding, speaking, reading, and writing the new language so that he may communicate in a variety of situations.

Prerequisite: none

Fren 125 INTERMEDIATE FRENCH 5 hours
Intermediate French is a continuation of French 125. Emphasis is placed upon reading selections to give the students exposure to modern French prose on a variety of subjects.

Prerequisite: Fren 115

Fren 213

FRENCH READINGS

3 hours

Further grammar and vocabulary building.

Prerequisite: Fren 125

GEOGRAPHY

Geog 113

GEOGRAPHY OF THE NEW WORLD

3 hours

A regional study of North America, South America, and Australia, with emphasis on the natural resources, political conditions, economy, population, and cultural patterns of each area.

Prerequisite: none

Geog 123

GEOGRAPHY OF THE OLD WORLD

3 hours

A regional study of Europe, Africa, and Asia with emphasis on the natural resources, political conditions, economy, population, and cultural patterns of each area.

Prerequisite: none

GEOLOGY

Geol 115

**INTRODUCTION TO
PHYSICAL GEOLOGY**

5 hours

An introductory course in physical geology in which materials of the earth's crust, structures, and geologic features of the surface are studied. Field trips and the laboratory study of common minerals and rocks will be included in the five-hour section. Three lecture and four hours laboratory per week.

Prerequisite: none

GERMAN

Germ 115

ELEMENTARY GERMAN

5 hours

Study of the fundamentals of the German language, including grammar, pronunciation, and idioms. Emphasis is placed upon reading simple German prose and development of sightreading skill.

Prerequisite: none.

Germ 125 **INTERMEDIATE GERMAN** 5 hours
Continuation of German 115. Emphasis is placed upon reading simple prose, conversation, and grammar review.

Prerequisite: German 115

Germ 213 **GERMAN READINGS** 3 hours
Review of grammar and further vocabulary building through a concentration on selected readings in 19th and 20th century prose and poetry. Students will increase both spoken and written comprehension.

Prerequisite: Germ 115 and Germ 125

HISTORY

Hist 113 **AMERICAN HISTORY I** 3 hours
A survey of the cultural, economic, institutional, political, and social forces and events which have shaped the United States through the Civil War.

Prerequisite: none.

Hist 123 **AMERICAN HISTORY II** 3 hours
A survey of the cultural, economic, institutional, political, and social forces and events which have shaped the United States from the Civil War to the present.

Prerequisite: none

Hist 213 **FOUNDATIONS OF WORLD
CIVILIZATION I (EUROPE)** 3 hours
An interdisciplinary study of the European people up to the French Revolution—1789. Attention will be given to cultural, intellectual, diplomatic and political movements. The course is designed for students of history and others desiring elective courses in the humanities.

Prerequisite: none

Hist 223 **FOUNDATIONS OF WORLD
CIVILIZATION II (EUROPE)** 3 hours
An interdisciplinary study of European nations from the French Revolution to the present. Attention will be given to cultural, intellectual, social, diplomatic and political movements of recent and contemporary Europe. The course is designed for

students of history and others who desire an elective course in the humanities

Prerequisite: none

Hist 233 **FOUNDATIONS OF WORLD
CIVILIZATION III (LATIN AMERICA)** 3 hours
An interdisciplinary topical study of the social, economic, political, cultural and intellectual conditions of modern Latin America from 1800 to the present. The course is designed for students of history and others who desire an elective course in the humanities.

Prerequisite: Sophomore standing or consent of the instructor

Hist 243 **FOUNDATIONS OF WORLD
CIVILIZATION IV (AFRICA AND ASIA)** 3 hours
An interdisciplinary study of Africa and Asia from 1800, including studies of the politics, culture and people of both recent and contemporary Africa, China, Japan, India, and other selected nations of Asia. The course is designed for students of history and others who desire an elective course in the humanities.

Prerequisite: Sophomore standing or consent of the instructor

Hist 271 **DIRECTED STUDIES
IN HISTORY (HONORS)** 1 hour
The student enrolled for directed studies has two alternatives: (1) investigate a specific topic within the field of history (2) assist with tutorial history instruction under the supervision of an instructor.

Prerequisite: consent of the instructor

JOURNALISM

Jour 102 **PUBLICATIONS PRACTICUM I-YEARBOOK** 2 hours
Students enrolled in this course produce the college yearbook. The course includes instruction and practical experience in copy writing, editing, layout and design, and photography.

Prerequisite: none

Jour 112 **PUBLICATIONS PRACTICUM II-NEWSPAPER** 2 hours
Practice in news reporting, newspaper layout and design, and

pasteup. The course is open to all students who want practical experience working on the college newspaper **Cornerstone**.

Prerequisite: none

MATHEMATICS

Math 100

BASIC MATHEMATICS

3 hours

A beginning course which will satisfy certain terminal program requirements but does not satisfy Associate of Arts degree requirements. Topics covered include the following: basic principles of arithmetic, positive and negative numbers, exponents, fractions, decimals, combining like terms, order of operations and symbols of grouping, working with formulas, linear equations, word problems, ratio and proportion, units of measure, area and volume formulas, multiplying polynomials, factoring polynomials, fractions containing variables, radicals, graphing and quadratic equations.

Prerequisite: none



Math 103**BUSINESS MATHEMATICS****3 hours**

Commercial and financial applications of basic arithmetic and algebraic processes. This course is intended for students in office and business career A.A.S. degree programs.

Corequisite: All students who enroll in Math 103 will be tested to see if they have adequate skills in basic mathematics. Those students who do not possess such skills will be required to take additional laboratory instruction in their weak areas.

Math 113**MODERN MATHEMATICS I****3 hours**

This course is designed for students who are potential elementary teachers or for general education students. Topics are presented in such a manner that they can be mastered by the student without previous training in set theory. Topics covered include the following: sets, logic, venn diagrams, systems of numeration, system of whole numbers, system of integers, system of rational numbers, field properties, algorithms for whole numbers, and terminology of modern math. As these topics are mastered, modern methods of teaching these topics will be investigated.

Prerequisite: Math 100 or satisfactory score on MMPT.

Math 123**MODERN MATHEMATICS II****3 hours**

This course is designed to make the potential elementary teacher or general education student familiar with all topics which are taught in the math curriculum in grades K-10 and the modern approach of teaching these topics. Topics covered include the following: review of topics covered in Math 113, number theory, decimals and real numbers, nonmetric metric geometry, metric geometry, statistics and probability, and modern methods of teaching the above mentioned topics.

Prerequisite: Math 113 or consent of the instructor.

Math 133**TECHNICAL MATHEMATICS I****3 hours**

Treatment of measured data, significant figures, applications in geometry, basic algebra, use of the slide rule, linear equations.

Prerequisite: Math 100 or satisfactory score on MMPT.

Math 143**TECHNICAL MATHEMATICS II****3 hours**

Numerical trigonometry of the right angle, analytic trigonometry, oblique triangles, functions and graphs, logarithms, and application of numerical trigonometry and vectors.

Prerequisite: Math 133

- Math 153** **INTERMEDIATE ALGEBRA** 3 hours
 A preparatory course covering the fundamental principles of algebra designed to prepare the student to take college algebra and in the case of certain degrees to satisfy the mathematics requirement. This course is recommended for those students who have only one or two years of high school algebra. Topics covered include the following: sets, factoring, linear and quadratic equations, fractions and fractional equations, exponents and radicals, simple analytical geometry and systems of equations.
- Prerequisite: Math 100 or satisfactory score on MMPT.
- Math 162** **TRIGONOMETRY** 2 hours
 This course designed to provide the student with a study of the trigonometric functions and their applications. Topics covered include the following: angles, length of arc, tables of trigonometric functions, interpolation, reference angles, graphic representation of trigonometric functions, law of cosines, law of sines, identities, trigonometric equations, inverse functions, complex numbers, logarithms, and polar coordinates.
- Prerequisite or corequisite: Math 153 or 163.
- Math 163** **COLLEGE ALGEBRA** 3 hours
 This course is designed to meet the needs of the student in a transfer program. Topics covered include the following: sets, factoring, exponents, radicals, linear and quadratic equations, theory of equations, inequalities, logarithms, complex numbers, field properties, systems of equations, simple linear programming, and applications of these topics.
- Prerequisite: Three years of high school mathematics and/or satisfactory score on the MMPT or Math 153.
- Math 165** **ANALYTIC GEOMETRY AND CALCULUS I** 5 hours
 A first course in a sequence of courses including analytic geometry, differential calculus, and integral calculus. This series is recommended for majors in engineering, the physical sciences, and mathematics. Topics include the following: properties of real numbers, introduction to analytic geometry, functions, limits, continuity, the derivative, differentiation of algebraic functions, applications of the derivative, antidifferentiation, and the definite integral.
- Prerequisite: Math 163 and Math 162 or satisfactory score on the MMPT

Math 175 **ANALYTIC GEOMETRY AND CALCULUS II** **5 hours**
A continuation of Math 165 including the following topics: applications of the definite integral, logarithmic and exponential functions, trigonometric functions, techniques of integration, approximate integration, polar coordinates, conic sections, and vectors, and parametric equations.

Prerequisite: Math 165.

Math 203 **FINITE MATH** **3 hours**
An introduction to matrices and linear programming. Designed primarily for non-physical science majors.

Prerequisite: Math 163 or equivalent.

Math 213 **STATISTICS** **3 hours**
This is an introductory course in statistics with an emphasis upon the collection and presentation of the following data: averages, dispersion, introduction to statistical inference, index numbers, time series, correlation and linear regression.

Prerequisite: Math 153

Math 225 **ANALYTIC GEOMETRY AND CALCULUS III** **5 hours**
A continuation of Math 175 including the following topics: hyperbolic functions, indeterminate forms, improper integrals, vectors in three-dimensional space, solid analytic geometry, differential calculus of functions of several variables, multiple integration, infinite series.

Prerequisite: Math 175

Math 233 **DIFFERENTIAL EQUATIONS** **3 hours**
Topics include separable variables, homogenous equations, exact equations, integrating factors, linear differential equations. LaPlace transform, and applications.

Prerequisite: Math 225.

Math 271 **DIRECTED STUDIES**
IN MATHEMATICS (HONORS) **1 hour**
The student enrolled for directed studies has two alternatives:
(1) investigate a specific topic within the field of mathematics
(2) assist with tutorial mathematics instruction under the supervision of an instructor.

Prerequisite: consent of the instructor

MUSIC

- Mus 103** **FUNDAMENTALS OF MUSIC** 3 hours
 A basic study of music, including notation, scales, intervals, chords, and rhythms; intended for the elementary education major and those not majoring in music. Summer offering intended as a pre-music theory survey.
 Prerequisite: none.
- Mus 111, 211** **COLLEGE CHOIR** 1 hour
 Prerequisite: Open to all students with consent of instructor who have had previous chorus or choir experience. Credit will be given for participation each semester.
- Mus 111, 211** **COLLEGE CONCERT BAND** 1 hour
 Prerequisite: Open to all students with consent of instructor who have had previous experience. Credit will be given for participation each semester.
- Mus 111, 211** **STAGE BAND** 1 hour
 The stage band is a studio band and will prepare and present concerts, while dealing primarily with music of the jazz idiom. Credit will be given for participation each semester.
 Prerequisite: Open to all college students who are qualified instrumentalists by consent of the director.
- Mus 111, 211** **ECJC SINGERS** 1 hour
 A select singing and dancing ensemble which performs popular music incorporating choreography the fall semester. The spring semester the ensemble will present music of the Medieval church-an early worship service by candlelight, known as Compline.
 Prerequisite: Consent of the instructor.
- Mus 112, 222** **APPLIED MUSIC** 2 hours
 Applied music (private lessons) is offered in the following areas: piano, voice, brass, woodwind, and string instruments.
 Prerequisite: none.
- Mus 113** **MUSIC APPRECIATION** 3 hours
 A historical survey of the development of music, intended to provide a background for the understanding and appreciation of music. Recommended for music majors and minors as well as non-music majors.
 Prerequisite: none.
- Mus 115** **MUSIC THEORY I** 5 hours
 A beginning course in music theory, study of intervals, triads, four part diatonic harmony, connection of triads and their in-

versions Sight singing, dictation, and elements of music; aural recognition of all diatonic intervals; melodic phrases and rhythms. Two hours laboratory.

Prerequisite: none.

Mus 123 MUSIC HISTORY I 3 hours
A chronological survey of the development of music in western civilization from the Greek period to the nineteenth century. Emphasis will be placed on the growth of musical form and style as illustrated in the musical masterpieces from the various phases of musical beauty and a consideration of the extra-musical factors bearing upon the lives and works of major composers.

Prerequisite: None

Mus 125 MUSIC THEORY II 5 hours
A second course in music theory, extending into areas of seventh chords and non-harmonic tones. Two hours laboratory.

Prerequisite: Music 115

Mus 133 MUSIC HISTORY II 3 hours
A continuation of Music History II surveying the development of music in western civilization from the nineteenth century to the present.

Prerequisite: None

Mus 202 MUSIC FOR ELEMENTARY TEACHERS 2 hours
An activities approach to classroom music for elementary teachers. The activities are approached through the ideas of Orff and Kodaly.

Prerequisite: Mus 103

Mus 215 MUSIC THEORY III 5 hours
A third course in music theory A study of chromatic harmony including secondary dominants, modulation, and altered chords. Two hours laboratory.

Prerequisite: Music 125

Mus 225 MUSIC THEORY IV 5 hours
A continuation of Music 215 to more complex areas of chromatic borrowed and altered chords, and finally to the vigorous appearance of complex modern techniques. Two hours laboratory.

Prerequisite: Music 215.



Mus 271 **BEGINNING GUITAR** 1 hour
A basic course in the elementary skills playing guitar, including chord and melody playing. No previous musical training required.

Prerequisite: none.

PHYSICAL EDUCATION

PE 101 **PHYSICAL EDUCATION
FOR MEN AND WOMEN** 1 hour
One hour credit granted per course. Four courses are generally required. (See degree requirements.)

PE 101 **CO-ED BOWLING** 1 hour
Emphasis on better performance of skills and techniques. Understanding of form, timing, and coordination. Team competition in league play.

Prerequisite: none

PE 101 **CO-ED CANOEING** 1 hour
Fundamental techniques, skills and courtesies of canoeing. Actual canoeing trips a part of class sessions.

Prerequisite: none

- PE 101** **CO-ED GOLF** **1 hour**
Fundamental techniques and skills, rules, terminology, playing courtesies, and etiquette.
- Prerequisite: none
- PE 101** **CO-ED GYMNASTICS** **1 hour**
Fundamentals of gymnastics, including an introduction to various apparatus such as the trampoline, side horse, uneven parallel bars, mats, and free exercise. An introduction to weight training may also be received.
- Prerequisite: none
- PE 101** **CO-ED KARATE** **1 hour**
Techniques of basic empty hand fighting in form, practice, and sparring.
- Prerequisite: none
- PE 101** **CO-ED ROLLER SKATING** **1 hour**
An introduction to the skills of roller dancing. Three skate dances are taught each semester to include skating to music, timing, and basic coordination.
- Prerequisite: none
- PE 101** **CO-ED SKEET AND TRAP SHOOTING** **1 hour**
Techniques, skills, and safety uses of shooting clay birds
- Prerequisite: none
- PE 101** **CO-ED TENNIS** **1 hour**
Fundamental skills, rules, strategy, and courtesies of tennis. Tournament play during class sessions.
- Prerequisite: none
- PE 101** **PHYSICAL EDUCATION FOR MEN** **1 hour**
An introduction to the fundamentals of flag football, including rules, playing skills, and coordination. An introduction to the fundamentals of volleyball, basketball and softball.
- Prerequisite: none
- PE 101** **VARSITY SPORTS** **1 hour**
One hour of credit is given for participation each semester in the

following varsity sports: cross-country, basketball, golf, and tennis

Prerequisite: none

- PE 101** **PHYSICAL EDUCATION FOR WOMEN** 1 hour
An introduction to the fundamentals and skills of volleyball, softball, soccer, badminton, table tennis, and shuffle board.

Prerequisite: none

- PE 102** **PERSONAL AND COMMUNITY HYGIENE** 2 hours
A general course designed to develop proper attitudes and practices which will contribute to the fine art of living. Health problems which will require community action are given consideration

- PE 112** **INTRODUCTION TO PHYSICAL EDUCATION** 2 hours
A consideration of the principles of the basic theories of physical education. Course is designed for physical education majors and minors.

Prerequisite: none.



PE 122

COMMUNITY RECREATION

2 hours

Study and practice of sports adaptable to junior and senior high school facilities and recreational centers. Course designed for physical education and recreation majors and minors.

Prerequisite: none.

PE 212

FIRST AID AND ATHLETIC TRAINING

2 hours

Treatment of wounds, shock, poisoning, fractures, unconsciousness, and stoppage of breathing, the care and prevention of athletic injuries. Red Cross certificate will be earned.

Prerequisite: none.

PHILOSOPHY

Phil 113

INTRODUCTION TO LOGIC

3 hours

Logic is the study of techniques for distinguishing between adequate and inadequate arguments. This course is designed to introduce several techniques that may be used to evaluate arguments. The primary emphasis will be becoming able to use the techniques of propositional and monadic predicate calculi in evaluating arguments. A second emphasis will be upon learning several criteria for distinguishing between adequate and inadequate arguments in science. The final emphasis of the course will be upon learning some elementary decision making procedures, e.g. two-person zero sum games and the use of decision tables

Prerequisite: none.

Phil 213

CONTEMPORARY ETHICAL PROBLEMS

3 hours

This course is a survey course in philosophy. It is designed to be problem oriented, using the writings of the philosophers as a resource in understanding the issues raised by the contemporary ethical problems.

Prerequisite: none

PHYSICS

Phy 105

PHYSICAL SCIENCE

5 hours

A demonstration, lecture, reading course in physical science designed for students who do not expect to take the traditional

courses in laboratory science. This course covers some of the fundamental concepts from the areas of physics, chemistry and geology. It is not recommended as a course for majors or minors in the fields of science. Three hours of lecture and two two-hour laboratory periods per week.

Prerequisite: none

Phy 115 INTRODUCTORY PHYSICS 5 hours
Three hours of lecture and two lab periods per week. A study of mechanics, heat, sound, light electricity, and physical properties of matter. This is a non-calculus course which features problem solving and laboratory work.

Prerequisite: either Math 143, 153, or satisfactory score on the MMPT.

Phy 175 COLLEGE PHYSICS I 5 hours
A study of mechanics, properties of matter and thermodynamics. Not recommended for math, physical science or engineering students.

Prerequisite: Math 162 and 163 or equivalent.

Phy 185 COLLEGE PHYSICS II 5 hours
A continuation of Phy 175 including a study of electricity, magnetism, light, and atomic physics. Not recommended for math, physical science, or engineering students.

Prerequisite: Phy 175

Phy 215 GENERAL PHYSICS I 5 hours
Four hours lecture and one lab per week. A study of the mechanics of solids, liquids, and gases; study of heat and sound. This course is intended for the student who plans to major in mathematics, the physical sciences, or engineering.

Corequisite: Math 175

Phy 225 GENERAL PHYSICS II 5 hours
Four hours lecture and one lab per week. A study of electricity, magnetism, light and modern physics.

Prerequisite: Phy 215

Corequisite or prerequisite: Math 225

Phy 271

DIRECTED STUDIES

IN PHYSICS (HONORS)

1 hour

The student enrolled for directed studies has two alternatives:
(1) investigate a specific topic within the field of physics (2)
assist in the laboratory, stockroom, or with individualized in-
struction under the supervision of an instructor.

Prerequisite: consent of the instructor

POLITICAL SCIENCE

Pol S 113

AMERICAN NATIONAL GOVERNMENT

3 hours

An introduction to the basic principles and structures of American national government. Emphasis will be placed on constitutional development and interpretation, the place of government in the social process, the nature of political organization, the processes of the machinery of popular control in the exercise of authority and freedom, and the function of the executive, legislative, and judicial branches. Successful completion of Political Science 113 and 123 meets the State of Missouri requirements in American history and institutions and state and national constitutions.

Prerequisite: none.

Pol S 123

AMERICAN STATE AND LOCAL GOVERNMENTS

3 hours

An introductory survey of state constitutions, legislative, executive and judicial organization, and powers and principal activities of the states. Emphasis will be upon state-local relations, county-municipal governments, and the growth and problems of metropolitan areas.

Prerequisite: Pol S113 or consent of the instructor

Pol S 213

INTERNATIONAL RELATIONS

3 hours

A study of the major factors underlying international relations: climate and geography, national concepts and institutions, the development of foreign policy. Today's problems of developing nations, East vs. West, and nuclear potentials are considered.

Prerequisite: Pol S 113 or consent of the instructor.

Pol S 271

DIRECTED STUDIES

IN POLITICAL SCIENCE (HONORS)

1 hour

The student enrolled for directed studies has two alternatives:
(1) investigate a specific topic with the field of political science
(2) assist with tutorial political science instruction under the
supervision of an instructor.

PSYCHOLOGY

Psyc 113 **GENERAL PSYCHOLOGY** 3 hours
A survey of theories and facts dealing with various aspects of human behavior, such as development, perception, motivation, and emotion, learning, and personal adjustment.

Prerequisite: none.

Psyc 213 **PERSONAL AND SOCIAL ADJUSTMENT** 3 hours
A study of personality structure and successful and unsuccessful processes of adjustment and human effectiveness.

Prerequisite: Psyc 113 or consent of the instructor.

Psyc 223 **EDUCATIONAL PSYCHOLOGY** 3 hours
A study of theories and facts concerning human behavior in such areas as motivation, learning, and social development, as applied to the educational process.

Prerequisite: Psychology 113 or consent of the instructor.

SECRETARIAL SCIENCE

ScS 113 **ELEMENTARY TYPEWRITING** 3 hours
The keyboard and techniques of touch typewriting, development of basic skills, and a study of the arrangement of typewritten material.

Prerequisite: none.

ScS 123 **INTERMEDIATE TYPEWRITING** 3 hours
Further development of typewriting skills with special attention given to improving accuracy and increasing speed. Continued instruction in letter styles, tabulations, reports, and forms.

Prerequisite: ScS 113 or speed of at least 40 wpm for five minutes with a maximum of five errors.

ScS 133 **ADVANCED TYPEWRITING** 3 hours
A continuation of ScS 123 with further development of accuracy and speed in typewritten work. Emphasis on handling office typing problems according to employment standards.

Prerequisite: ScS 123

ScS 143 **ELEMENTARY SHORTHAND** 3 hours
A study of Gregg shorthand theory and shorthand dictation at

moderate rates.

Prerequisite or Corequisite: ScS 113

ScS 153 **INTERMEDIATE SHORTHAND** 3 hours
Development of speed and accuracy in writing shorthand from dictation and development of ability to transcribe.

Prerequisite: ScS 113 and ScS 143

Corequisite: ScS 123

ScS 163 **ADVANCED SHORTHAND** 3 hours
Emphasis on ability to take dictation and transcribe available copy in conformity with occupational standards.

Prerequisite: ScS 123 and ScS 153

ScS 172 **OFFICE MACHINES** 2 hours
Basic training in the operation and use of adding machines and calculators. Acquaints students with machine terminology, office problems, and work standards.

Prerequisite: none



ScS 182 SECRETARIAL MACHINES 2 hours
Basic training in the operation and use of duplicating machines, transcribing machines, and typewriter with proportional spacing. Acquaintance given to the automatic typewriting process and to copy machines. Acquaints students with machine terminology, office problems, and work standards.

Prerequisite or Corequisite: ScS 123

ScS 192 FILING AND RECORDS MANAGEMENT 2 hours
Filing rules and their application to alphabetic, numeric, subject, and geographic filing. Attention is given to the selection and organization of filing system, equipment and supplies, retention and disposition of records, and administrative duties.

Prerequisite or Corequisite: ScS 123

ScS 201 SECRETARIAL SCIENCE PLACEMENT 1 hour
A course designed to assist secretarial science students in obtaining jobs suitable to their training and interests

Prerequisite: none

ScS 213 SECRETARIAL PROCEDURES 3 hours
Business information and office skills applicable to the secretarial or clerical profession. Special attention is given to human relations, maintenance of an office, work efficiency, employment standards, and job information and applications.

Prerequisite: ScS 123

ScS 223 BUSINESS COMMUNICATIONS 3 hours
A study of communication needs in the office, both oral and written, with emphasis on inter-office communication, letters, and reports. Special attention is given to organization, mechanics, and the business vocabulary.

Prerequisite: Either Eng 123 or Eng 103 and ScS 123

ScS 296 INTERNSHIP 6 hours
Supervised work experience in an actual office situation, putting to use the skills and related knowledge learned in previous courses. Supervision on the job will be by office personnel. Coordination of work experience to classroom learning will be done by the instructor. Time will be arranged.

Prerequisite: Enrollment in the Secretarial Science Program and consent of the instructor.

SOCIOLOGY

Soc 113 **GENERAL SOCIOLOGY** 3 hours
An introductory course in the field of sociology with special emphasis on the scientific study of social relations, social organizations, social institutions, and social dynamics as related to human behavior.

Prerequisite: none.

Soc 123 **AMERICAN SOCIAL PROBLEMS** 3 hours
A study of select social problems, including consideration of proposed lines of action in dealing with them. Problem areas include population, the affluent society, poverty, urban renewal, delinquency and crime, automation, the aging, ethnic and racial relations, and the role of the United States in the relationship to the underdeveloped areas of the world

Prerequisite: Soc 113

Soc 213 **HUMAN RELATIONS** 3 hours
This course is an introduction to the applied principles of sociology and psychology as they relate to human interaction in small groups. Major emphasis is placed on analysis of the interaction process with a view toward additional understanding of individual and group behavior and the problems attendant to leadership

Prerequisite: Psych 113

Soc 223 **THE FAMILY** 3 hours
The study of the family as an agency of personality development, and cultural transmission, including a study of the family in relation to the structure and function of wider forms of social organization.

Prerequisite: Consent of the instructor.

SOIL AND PLANT TECHNOLOGY

SPT 102 **HORTICULTURE ORIENTATION** 2 hours
An overview of various aspects of the horticulture industry including general and specialized nursery operations, floriculture, arboriculture, landscape design, etc., as well as an introduction to basic horticulture practices, propagation, plant identification, soil management etc. Class includes numerous field trips.

Prerequisite: none

- SPT 113** **SOILS** 3 hours
 A study of the soil from a plant's point of view. Physical structure, availability of nutrients, proper use of organic and chemical fertilizers are discussed and observed in the soils lab.
- Prerequisite: Chemistry 105
- SPT 123** **HORTICULTURE I** 3 hours
 An in-depth study of a variety of common ornamental plants, techniques for growing, maintenance, and proper application in design situations.
- Prerequisite: Biology 155
- SPT 201** **SOIL AND PLANT TECHNOLOGY PLACEMENT** 1 hour
 A course designed to assist soil and plant technology students in obtaining jobs suitable to their training and interests.
- Prerequisite: none
- SPT 233** **HORTICULTURE II** 3 hours
 An in-depth study of a variety of common ornamental plants, techniques for growing, maintenance, and proper application in design situations
- Prerequisite: SPT 123
- SPT 243** **PLANT PROPAGATION** 3 hours
 An introduction to the common methods of commercial plant reproduction including seeds, cuttings, layering, grafting, and division. This course will make use of the greenhouse propagation facilities.
- Prerequisite: Biology 155
- SPT 253** **LANDSCAPE DESIGN** 3 hours
 Theory of design of outdoor space for human use or enjoyment. The relation of site engineering to landscape planning and design of simple structures.
- Prerequisite: none
- SPT 263** **HORTICULTURE III** 3 hours
 Discussion, and when feasible, class use of special tools and machinery used in the horticulture trade, including the proper maintenance of the more common machines.
- Prerequisite: SPT 233

SPT 292 INTERNSHIP 2-4 hours
 293 On the site work opportunities at Shaw's Garden Arboretum at
 294 Gray Summit. Will include projects in the greenhouse as well as
 outside with the extensive plantings of ornamental woody
 plants.

Prerequisite: none

SPANISH

Span 115 ELEMENTARY SPANISH 5 hours
 Presentation of basic written and oral aspects of Spanish. Ad-
 ditional practice in aural comprehension through use of the
 language laboratory.

Prerequisite: none

Span 125 INTERMEDIATE SPANISH 5 hours
 Review of basic grammar, with increased practice in con-
 versation, reading and composition. Additional practice in aural
 comprehension through use of the language laboratory.

Prerequisite: Spanish 115 or two units of high school Spanish.

Span 213 SPANISH READING 3 hours
 Reading skill cultivated with an introduction to Spanish
 Literature.

Prerequisite: Spanish 125 or consent of the instructor.

Span 222 SPANISH COMPOSITION 2 hours
 A review of Spanish grammar with practice in composition.

Prerequisite: Spanish 125 or consent of the instructor.

Span 233 SPANISH CONVERSATION 3 hours
 Practice in conversation with emphasis on perfecting
 pronunciation.

Prerequisite: Spanish 125 or consent of the instructor.

SPEECH

Spe 103 ORAL COMMUNICATIONS 3 hours
 A fundamentals of speech course providing an introduction to
 the study of oral communication as rhetorical dialogue. The
 course is designed to develop student improvement in the

critical understanding of ideas about rhetorical communication as well as the critical issues of our time, and subsequently to improve individual communications skills.

Prerequisites: none.

Spe 113 PUBLIC SPEAKING 3 hours
An introduction to the basic elements of oral communication. Assignments include the presentation of speeches and the discussion of communication theories and techniques.

Prerequisite: Spe 103 or consent of the instructor.

Spe 123 ORAL INTERPRETATION 3 hours
Study in the basic techniques of oral interpretation. The recreation of literature is stressed through acquiring the skills and techniques necessary to convey the intellectual, emotional, and aesthetic values of literature to an audience. The course will include study in the oral interpretation of prose, drama, and poetry.

Prerequisite: none



Spe 133 INTRODUCTION TO THE THEATRE 3 hours
An appreciation course designed to give a comprehensive introduction to theatre, including theatre history and contributions made by directors, actors, designers, technicians and playwrights to modern dramatic productions.

Prerequisite: none.

Spe 271 DIRECTED STUDIES IN COMMUNICATION OR THEATRE ARTS 1 hour
Independent study in the many and varied aspects of the theatre for the advanced student. This could include study in acting, directing, costuming, makeup, scene design and construction, stage lighting, dramatic theory and history. Experimental research and studies of the theories of communication are also possible

Prerequisite: Consent of the instructor.

TEACHER AIDE

TeacA 201 TEACHER AIDE PLACEMENT 1 hour
A course designed to assist Teacher Aide students in obtaining jobs suitable to their training and interests.

Prerequisite: none

Teac A 213 TEACHER AIDE SEMINAR 3 hours
A seminar providing the opportunity for Teacher Aide students to discuss the field of Teacher Aide Work, and to share the experiences and problems they have encountered in their role as Teacher Aide Interns. Moderated by a college staff member, the seminar serves as the vehicle to tie coursework and experience together in a relevant manner.

Prerequisite: Sophomore standing.

Teac A 291, 292, 293 TEACHER AIDE INTERNSHIP 1-3 hours
Supervised work experience in an actual educational setting, coordinated with the student's regular classwork, to provide a realistic view of the varied duties of a Teacher Aide.

Prerequisite: Consent of the instructor.