



Courses

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College Credit Course Descriptions

Statement on Florida's Statewide Course Numbering System

The course numbers appearing in the catalog are part of a statewide system of prefixes and numbers developed for use by all public postsecondary and participating private institutions in Florida. One of the major purposes of this system is to make transferring easier by identifying courses which are equivalent, no matter where they are taught in the state. All courses designated as equivalent will carry the same prefix and last three numeric digits.

The classifying and numbering of courses was done by postsecondary faculty members in each academic discipline. Their work was reviewed by faculty members in all of Florida's postsecondary institutions, who made suggestions and changes to be incorporated into the system.

The course numbering system is, by law, descriptive, not prescriptive. It in no way limits or controls what courses may be offered or how they are taught. It does not affect course titles or descriptions at individual schools. It seeks only to describe what is being offered in postsecondary education in Florida in a manner that is intelligible and useful to students, faculty and other interested users of the system.

The course numbering system was developed so that equivalent courses could be accepted for transfer without misunderstanding. Each public institution is to accept for transfer credit any course which carries the same prefix and last three numeric digits as a course at the receiving institution.

For example, if a student has successfully completed SYG 000 at a community college, the student cannot be required to repeat SYG 000 at the school to which he or she transfers. Further, credit for any course or its equivalent, as judged by the appropriate faculty task force and published in the course numbering system, which can be used by a native student to satisfy degree requirements at a state university, can also be used for that purpose by a transfer student regardless of where the credit was earned.

It should be noted that a receiving institution is not precluded from using non-equivalent courses for satisfying certain requirements.

General Rule for Course Equivalencies

All undergraduate courses bearing the same alpha prefix and last three numbers (and alpha suffix, if present) have been agreed upon to be equivalent. For example, an introductory course in sociology is offered in nearly 40 postsecondary institutions in Florida. Since these courses are considered to be equivalent, each one will carry the designator SYG 000.

First Digit

The first digit of the course number is assigned by the institution, generally to indicate the year or (level at which) it is offered. This digit does not affect the equivalency.

0 — college preparatory credit
(not for degree)

1 — freshman year

2 — sophomore year

In the sociology example mentioned above, one institution which offers the course in the freshman year will number it SYG 1000; a school offering the same course in the sophomore year will number it SYG 2000. If the prefix and last three numeric digits are the same, the courses are substantively equivalent.

Titles

Each institution will retain its own title for each of its courses. The sociology courses mentioned above are titled at different colleges Introductory Sociology, General Sociology and Principles of Sociology. The title does not affect the equivalency. The courses all carry the same prefix and last three numeric digits: that is what identifies them as equivalent.

Equivalency of Sequences

In certain cases, sequences of courses in a given discipline are equivalent rather than the individual courses which make up these sequences. In these cases the subject matter topics may not be taught in the same sequence, course by course, in several institutions; however, upon completion of the full sequence at any of the several institutions, students have completed substantively equivalent content. These sequences are clearly identified in the course equivalency profiles.

Explanation of Prefixes and Numbers

Prefixes and numbers in the course numbering system are not chosen at random; they are designed to describe course content in an organized fashion within a classification system developed for each subject matter area.

Generally each of the major classifications in a discipline is represented by a three-alpha prefix. In some cases, one three-alpha prefix has been sufficient for the entire discipline. A discipline may use as many prefixes as necessary to accommodate its major classifications. The logic of the system allows it to be infinitely expandable with minimal disruption to existing numbers.

History, for example, has several prefixes: AFH, African History; AMH, American History; ASH, Asian History; EUH, European History; HIS, History — General; LAH, Latin American History; and WOH, World History. All history courses in the state will carry one of these prefixes. (Local titles are used for each particular course. The last three numbers are used to indicate equivalency.)

Exceptions to the Rule for Equivalencies

The following are exceptions to the general rule for course equivalencies.

1. All numbers which have a second digit of nine are for courses as directed independent study, thesis hours, etc., and courses with 900 numbers must be evaluated individually and are not automatically transferable.
2. All internships, practicums, clinical experiences and study abroad courses, whatever numbers they carry, are not automatically transferable.
3. Performance or studio courses in art, dance, theater and music are not automatically transferable but must be evaluated individually.

Statewide Course Numbering System

Course Prefix Titles Index

Listed below is an alphabetical index of the course classification discipline and the respective course three-digit prefix. To identify the course prefix, scan the alphabetical listing, locate the desired classification discipline and then note the prefix that distinguishes that specific discipline.

The courses which Florida Community College at Jacksonville offers in that discipline can be ascertained by following the appropriate three-digit prefix in the alphabetical listing of course descriptions in the following section of the catalog.

Classification Discipline

Accounting: General
Advertising
Aeronautical Science
American History
American Literature
Anthropology
Applied Accounting
Architecture
Art
Art History
Astronomy
Automotive/Engine Repair
Aviation Management
Aviation Technology Flight
Aviation Technology Theory
Banking
Biological Science — Introductory
Botany
Building Construction
Building Construction Trades
Business Law
Chemistry
Child Development
Chinese
Clothing and Textiles
Comparative Politics
Computer and Information Systems
Computer Design/Architecture
Computer Engineering Technology
Computers in General Studies
Computer Programming
Computing Theory
Creative Writing

Prefix

ACG
ADV
ASC
AMH
AML
ANT
APA
TAR
ART
ARH
AST
AER
AVM
ATF
ATT
BAN
BSC
BOT
BCN
BCT
BUL
CHM
CHD
CHI
CTE
CPO
CIS
CDA
CET
CGS
COP
COT
CRW

Criminal Justice Development
Criminal Justice Technology
Criminology and Criminal Justice
Dance Activities
Dental Hygiene
Dental Support
Developmental Psychology
Dietetic
Economics
Education: Early Childhood
Education: Foundations
Education: General
Education: Hard of Hearing and Deaf
Education: Technology and Media
Educational Psychology
Electronic Engineering Technology
Electronic Specialty Technology
Emergency Medical Services
Engineering Technology: Civil
Engineering Technology: Drafting
Engineering Technology: General
Engineering Technology: Industrial
Engineering Technology: Mechanical
English as a Second Language
(for Non-Native Speakers)
English as a Second Language — Preparatory
English Composition
English Literature
European History
Film
Finance
Fire Fighting and Protection
Food Science
Food Service Systems
French Language
General Business
General History
Geography: Regional Areas
Geography: Systematic
Geology
German and Germanic Languages
Graphic Arts
Health, Leisure and Physical Education
Health Science
Home Economics: Family Development
Hotel and Restaurant
Humanities
Human Nutrition
Human Services
Interdisciplinary Science — Natural
Interdisciplinary Social Sciences
Interdisciplinary Studies
Interior Design
International Relations
Italian Language
Journalism
Latin American History
Leisure
Library Sciences
Linguistics
Literature
Management
Management: Applied

CJD
CJT
CCJ
DAA
DEH
DES
DEP
DIE
ECO
EEC
EDF
EDG
EHD
EME
EDP
EET
EST
EMS
ETC
ETD
ETG
ETI
ETM
ENS
ESL
ENC
ENL
EUH
FIL
FIN
FFP
FOS
FSS
FRE
GEB
HIS
GEA
GEO
GLY
GER
GRA
HLP
HSC
FAD
HFT
HUM
HUN
HUS
ISC
ISS
IDS
IND
INR
ITA
JOU
LAH
LEI
LIS
LIN
LIT
MAN
MNA

Marketing	MAR	Religion	REL
Marketing Applications	MKA	Respiratory Therapy	RET
Mass Media Communications	MMC	Risk Management and Insurance	RMI
Mathematics: Algebraic Structures	MAS	Russian Language	RUS
Mathematics: Applied	MAP	Social Psychology	SOP
Mathematics: Calculus and Precalculus	MAC	Sociology, General	SYG
Mathematics: Education	MAE	Spanish Language	SPN
Mathematics: General	MAT	Speech Communication	SPC
Mathematics: General and Finite	MGF	Speech Pathology and Audiology	SPA
Mathematics: History and Foundations	MHF	Statistics	STA
Medical Laboratory Technology	MLT	Student Life Skills	SLS
Medical Records	MRE	Surveying and Related Areas	SUR
Meteorology	MET	Tax	TAX
Microbiology	MCB	Theatre	THE
Modern Hebrew Language	HBR	Theatre Arts	TPP
Music	MUS	Theatre Production and Administration	TPA
Music: Brasses	MVB	Transportation	TRA
Music: Church	MUR	Women's Studies	WST
Music: Commercial	MUM	Zoology	ZOO
Music: Composition	MUC		
Music: Conduction	MUG		
Music: Education	MUE		
Music: History	MUH		
Music: Keyboard	MVK		
Music: Literature	MUL		
Music: Music Ensembles	MUN		
Music: Opera/Musical Theatre	MUO		
Music: Other Instruments	MVO		
Music: Percussion	MVP		
Music: Strings	MVS		
Music: Theory	MUT		
Music: Voice	MVV		
Music: Woodwinds	MVW		
Nursing Practice and Theory	NUR		
Oceanography: Biological	OCB		
Oceanography: General	OCE		
Office Systems Technology	OST		
Oral Interpretation	ORI		
Ornamental Horticulture	ORH		
Para-Legal Assistant	PLA		
Philosophy	PHI		
Photography	PGY		
PHYSICAL EDUCATION ACTS (GENERAL) —			
Object Centered, Land	PEL		
Physical Education Acts (General) —			
Performance Centered, Land	PEM		
Physical Education Acts (General) —			
Water, Snow, Ice	PEN		
Physical Education Acts (Professional) —			
Object Centered, Land	PEO		
Physical Education Theory	PET		
Physical Science	PSC		
Physics	PHY		
Physics	PHZ		
Political Science	POS		
Process Biology (Cell/Molecular/Ecology/ Genetics/Physiology)	PCB		
Psychology	PSY		
Quantitative Methods in Business	QMB		
Radiologic Technology	RTE		
Radio/Television	RTV		
Reading	REA		
Real Estate	REE		

Course Descriptions

College credit courses in this catalog with the (Y) symbol count toward the Associate in Arts Degree and are guaranteed transferable for those students transferring with the Associate in Arts Degree. When students transfer without the Associate in Arts Degree, the transferability of these courses is decided by the receiving institution.

College credit courses in this catalog without the (Y) symbol will not count toward the Associate in Arts Degree. The transferability of these courses is decided by the receiving transfer institution.

Several opportunities to earn credit by examination are provided to students with prior learning and life experiences in content areas. Credit by examination programs include the College Level Examination Program (CLEP), the DANTES Subject Standardized Tests, the ACT Proficiency Examination Program (ACT/PEP) and the College's own Proficiency Examination Program (PEP). Courses for which an examination is available through one of these programs are identified with a (CBE) at the end of the course description. Courses for which certification is available are identified with a (CBC) at the end of the course description. Occasionally the testing program sponsor will discontinue a test, so contact any campus testing and assessment center for additional information concerning test availability and registration information.

All courses in the following list are not taught each term. Class schedules are published prior to each term that show the courses that will be offered. Many courses in this catalog have prerequisite courses listed in the course descriptions.

In the college credit course descriptions listed below the contact hours listed refer to the number of contact hours per week during a 15-week semester. When a course is taught during a term, which is shorter or longer than 15 weeks, the number of contact hours per week is adjusted proportionately.

ACG — Accounting: General

ACG 2021 Financial Accounting (Y) 4 Credit Hours

This course is the study of the area of accounting that specializes in the processes and principles used to prepare financial statements. Four contact hours.

ACG 2071 Managerial Accounting (Y) 3 Credit Hours

Prerequisite: ACG 2021. This course interprets and analyzes three major areas: planning and controlling routine operations (break-even analysis, job order and process cost systems); inventory valuation and income determination (budgeting and standard costing); and policy making and long-range planning (capital budgeting). Three contact hours.

ACG 2100 Intermediate Accounting I (Y) 3 Credit Hours

Prerequisite: ACG 2021. This course is a continuation of accounting principles including a review of the accounting cycle with special attention given to working capital, an in-depth study of financial statements, cash, receivables, current liabilities, inventories, plant and equipment assets and intangible assets. Three contact hours.

ACG 2110 Intermediate Accounting II (Y) 3 Credit Hours

Prerequisite: ACG 2100. This course is a continuation of Intermediate Accounting I with coverage of the following topics: a study of corporate contributed capital, retained earnings and dividends, earnings per share, long-term debt and investments, pension plans and leases, accounting for income taxes, the statement of changes in financial position, accounting for price level changes and further statement analysis. Three contact hours.

ACG 2500 Fund Accounting (Y) 3 Credit Hours

Prerequisite: ACG 2071. This course, recommended for associate in science in accounting students, is a study of the accounting methods and procedures used by not-for-profit organizations such as governmental agencies, hospitals and charitable organizations. Three contact hours.

ADV — Advertising

ADV 2000 Advertising (Y) 3 Credit Hours

This basic course, designed to familiarize students with the function of the advertising profession, covers consumer behavior, research and market segmentation. The course examines various kinds of advertising departments as well as the functions of the advertising agency itself — copy, art, media selection, TV/radio production, print production and account management. Students will prepare print advertisements and produce TV and radio commercials. Three contact hours.

AER — Automotive/ Engine Repair

AER 1100 Engines 4 Credit Hours

This course is designed to provide instruction in the repair, diagnosis and tuning of engines in both classroom and laboratory conditions. Training on American and foreign built engines will be provided. Eight contact hours: four lecture hours, four laboratory hours. (CBE)

AER 1310 Automotive Electrical Systems 4 Credit Hours

This course is designed to teach entry-level skills in mechanics. Topics include engine electrical systems, starting systems, charging systems, accessory systems, basic emission controls and an introduction to computer control systems. Both lecture and shop

experiences will be provided. Eight contact hours: four lecture hours, four laboratory hours. (CBE)

AER 1410 Brake Systems 4 Credit Hours

This course is designed to teach job entry skills in the theory, operation and repair of brake systems, including both drum and disc brakes. Also presented will be an introduction to anti-lock brake systems. Instruction will combine both lecture and shop experience. Eight contact hours: four lecture hours, four laboratory hours. (CBE)

AER 1450 Steering and Suspension 4 Credit Hours

This course is designed to teach entry-level skills in the service and repair of steering and suspension systems, power steering, wheels and tires. Both lecture and shop experience will be provided. Eight contact hours: four lecture hours, four laboratory hours. (CBE)

AER 1610 Air Conditioning and Heating 4 Credit Hours

This course is designed to teach entry-level skills in the theory, service and repair of automotive heating and air conditioning systems. It will include both classroom lecture and shop experience. Eight contact hours: four lecture hours, four laboratory hours. (CBE)

AER 2251 Advanced Automatic Transmissions 3 Credit Hours

Prerequisites: AER 1310 and AER 2260. This course is an advanced study of automotive automatic transmissions. Students are expected to have a basic knowledge of electrical systems, engine operation, fuel systems, drivability diagnosis and automatic transmission operation prior to enrolling. This course will concentrate on the automatic transmission as used in today's vehicles, including instruction in overdrive transmission and lock-up torque converters, electronic shift controls

and all-wheel drive systems. Six contact hours: three lecture hours, three laboratory hours.

AER 2260 Clutch and Transmissions
4 Credit Hours

This course seeks to develop entry-level skills in the theory and repair of clutches, manual and automatic transmissions, and transaxles. Also included are final drive and differential assemblies. Instruction will combine lecture and shop experience. Eight contact hours: four lecture hours, four laboratory hours. (CBE)

AER 2311 Advanced Electrical
3 Credit Hours

Prerequisite: AER 1310. This course is an advanced study of automotive electrical and electronic systems. Students are expected to have a basic knowledge of electrical systems, engine operation, fuel systems and drivability diagnosis prior to enrolling. The course will concentrate on electronic vehicle controls including fuel injection, feedback systems, climate controls and other computer controlled systems. Parts of the General Motors Specialized Electronics Training (SET) course will be used. Six contact hours: three lecture hours, three laboratory hours.

AER 2520 Fuel and Emission Control Systems
4 Credit Hours

Prerequisite: AER 1100 or consent of instructor. This course is designed to teach entry-level skills in fuel and emission control systems. Also included are computer control and fuel injection. Both lecture and shop experience will be utilized. Eight contact hours: four lecture hours, four laboratory hours.

AER 2522 Drivability and Diagnosis
4 Credit Hours

Prerequisites: AER 2520 and AER 1310. This course is designed to teach job entry skills in the diagnosis and repair of drivability problems. Topics

covered include engine performance and electrical and computer system operations. Emphasis is placed on manufacturer's diagnostic charts and advanced diagnostic equipment. Use of scanners on both carburetor and fuel-injected vehicles will be addressed. Eight contact hours: four lecture hours, four laboratory hours.

AER 2523 Applied Automotive Diagnosis
3 Credit Hours

Prerequisite: AER 2522. This course is an advanced study of automotive diagnostic equipment and techniques. Students are expected to have a basic knowledge of electrical systems, engine operation, fuel systems and drivability diagnosis prior to enrolling. The course will concentrate on electronic engine controls including fuel injection, feedback systems and computer controlled engine management systems. Six contact hours: three lecture hours, three laboratory hours.

AMH — American History

AMH 2010 United States History to 1865 (Y)
3 Credit Hours

This course emphasizes the European background, Revolution, Articles of Confederation, the U.S. Constitution, problems of the new republic, sectionalism, manifest destiny, slavery and the War Between the States. The course includes reading and writing competencies. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

AMH 2020 United States History From 1865 to the Present (Y)
3 Credit Hours

This course includes the Reconstruction, growth of big business, the Agrarian Revolt, Latin American affairs, the progressive movement, World War I and political, economic and world affairs since World War II. Three contact hours. (CBE)

AMH 2070 History of Florida (Y)
3 Credit Hours

This course in the history of Florida emphasizes the explorations, U.S. acquisitions, Convention of St. Joseph, Civil War and Reconstruction, and Florida's growth in the 20th Century. Three contact hours.

AMH 2092 African-American History and Culture (From African Origins Through Reconstruction) (Y)
3 Credit Hours

This survey course deals with the trends, institutions, events and personalities of black people in the American past, including a brief treatment of the African origin, the development of slavery, the black people during the Revolutionary War and the black people during the Civil War and Reconstruction. This course stresses the origin of racism, general minority problems, cultural appreciation and black ideas. Three contact hours.

AMH 2093 African-American History and Culture (From World War I to the Present) (Y)
3 Credit Hours

This course is a sequential continuation of African-American History and Culture (From African Origins Through Reconstruction) with special emphasis on how the American government's reversal of sentiment caused the failure of the Reconstruction Act. It also focuses on the government's failure to enforce the 15th amendment rights of African-Americans. The course demonstrates how these two events set the stage for subsequent African-American political movements from the post reconstruction era until the present including the race riots of 1910, 1919, the Civil Rights Movement as well as the rise of Black Nationalism and cultural nationalism in America. Three contact hours.

AML — American Literature

AML 2012 American Literature: Colonial Times to 1900 (Y)

3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course is a critical study in selections from American literature: colonial period to the late 19th century. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

AML 2022 American Literature: 1900 to the Present (Y)

3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course is a critical study of selections from American literature: late 19th century to the present. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

AML 2600 Introduction to African- American Literature (Y)

3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course is a survey course that treats the major periods of African-American literature from its beginnings in America to the present. Attention will be given to the African background. Concentration centers on the writers' views of themselves and the political, economic and social forces that operate on them. Three contact hours.

ANT—Anthropology

ANT 2410 Cultural Anthropology (Y)

3 Credit Hours

This course consists of the study of humanity, the concept of culture and components of culture with emphasis on the different cultural adaptations of humanity worldwide. Three contact hours.

ANT 2511 Physical Anthropology (Y)

3 Credit Hours

This course consists of the study of the human as a biological and cultural animal, including evolutionary adaptations and the human place in the ecological system. Three contact hours.

APA — Applied Accounting

APA 1001 Applied Accounting

3 Credit Hours

This course will consist of the practical application of basic accounting principles and practices including data accumulation systems, income measurement, valuation of assets and liabilities and the study of financial statements. The course includes problems for both a service-oriented business and a merchandising concern. Emphasis will be placed on the following topics: the accounting cycle, journalizing and posting, adjusting and closing entries, worksheets, and preparing financial statements. Other topics will include receivables and payables, payroll, internal control procedures, and the use of data processing in accounting. Three contact hours.

ARH — Art History

ART COURSES (VISUAL ARTS)

Lecture Courses

ARH 1000 Art Appreciation (Y)

3 Credit Hours

Prerequisite: ENC 1101 or satisfactory score on placement test. This course supplies non-art majors with a foundation for understanding the visual arts through introduction to different media of art expression. This course includes reading and writing competencies. Three contact hours.

ARH 2004 Introduction to Non-Western Art (Y)

3 Credit Hours

This course is an introduction to the art forms of African, Pre-Columbian, Native American and Oceanic cultures. Three contact hours.

ARH 2050 Art History I (Y)

3 Credit Hours

Prerequisite: ENC 1101 or satisfactory score on placement test. This course includes a historical and critical study of painting, sculpture and architecture from prehistoric times to the

Renaissance. This course includes reading and writing competencies. Three contact hours.

ARH 2051 Art History II (Y)

3 Credit Hours

Prerequisite: ARH 2050, ENC 1101 or satisfactory score on placement test. This course is a continuation of the history and criticism of art from the Renaissance to the present. This course includes reading and writing competencies. Three contact hours.

ARH 2550 Overview of Chinese Art (Y)

1 Credit Hour

This course is an overview of the outstanding characteristics of the visual arts of China. Painting, sculpture, architecture and ceramics will be investigated. One contact hour.

ARH 2553 Overview of Japanese Art (Y)

1 Credit Hour

This course is an overview of the outstanding characteristics of the visual arts of Japan. Painting, sculpture, architecture and print-making will be investigated. One contact hour.

ARH 2941 Gallery Practicum (Y)

1 Credit Hour

Prerequisite: ARH 1000 or consent of the instructor. This course offers students the practical experience of organizing gallery exhibitions including exhibit development, promotion, installation, space, design and publicity as well as the other issues involved in exhibit organization. Gallery director lectures will be included. One contact hour.

ART — Art

FOUNDATION COURSES

Design

ART 1001C Studio Art for Beginners and Non-majors (Y)

3 Credit Hours

This course is designed for beginners or non-art majors with little or no previous art

experience. A sampling of drawing, printing, sculpture, ceramics and other popular crafts and art forms will be studied through discussions and studio work. Those desiring more in-depth study should enroll in specific studio courses. Six contact hours: two lecture hours, four laboratory hours.

ART 1006C Artists' Tools and Equipment (Y)

1 Credit Hour

This course is an introduction to safety practices, hand and power tools, materials and processes used in making art. Two contact hours: one lecture hour, one studio hour.

ART 1201C Design I (Y)

3 Credit Hours

This course is an introduction to the field of the visual arts through the study of the elements and principles of design. The course explores a variety of materials and techniques with emphasis on line, color, texture, form and in two-dimensional space organizations. Six contact hours: two lecture hours, four studio hours.

ART 1203C Design II (Y)

3 Credit Hours

Prerequisite: ART 1201C. This course continues the study of the elements and principles of design. The course explores a variety of materials and techniques with emphasis on three-dimensional space organization. Six contact hours: two lecture hours, four studio hours.

ART 2808C Advanced Interdisciplinary Studies (Y)

3 Credit Hours

Prerequisites: ART 1201C, ART 1203C, ART 1300C, ART 1301C and completion of two semesters of an advanced 2000 level studies course or consent of both instructor and department chairperson. This course is designed for advanced students who would like to expand their art experience without restricting them to a single medium or discipline. Critical thinking,

experimentation and problem solving will be achieved through an in-depth study of cross-media art making. Six contact hours: two lecture hours, four laboratory hours.

ART 2955 Fine Art Portfolio (Y)

1 Credit Hour

This course will provide students the necessary skills to put together and present a portfolio of artwork. Topics include image presentation, photographing works and preparing a resume. One contact hour.

Career Preparation

ART 1831 Art and Business — Studio Planning

1 Credit Hour

This course is designed to instruct students in determining specific studio needs. The course will provide students with instruction in layout and design, costs and costing, and supplies and equipment sources. One contact hour.

ART 1832 Art and Business — Business Planning

1 Credit Hour

This course is designed to instruct students in the organization of an art business. Students will receive instruction in the fundamental areas of planning, directing, organizing and controlling in a small business. One contact hour.

ART 1945 Art and Business — Galleries and Exhibitions (Y)

1 Credit Hour

This course is designed to introduce art students to methods of finding and arranging exhibition opportunities for the sale of their artwork. Students will receive instruction in how to find galleries, prepare and present artwork and how to transport art to exhibitions. One contact hour.

Drawing

ART 1300C Drawing I (Y)

3 Credit Hours

This course emphasizes the basic discipline of drawing through the use of still life,

landscape and the figure. Six contact hours: two lecture hours, four studio hours.

ART 1301C Drawing II (Y)

3 Credit Hours

Prerequisite: ART 1300C. This course is a continuation of Drawing I. Six contact hours: two lecture hours, four studio hours.

STUDIO COURSES

Ceramics

ART 2110C Ceramics:

Hand-Building I (Y)

3 Credit Hours

Students will benefit by taking Drawing I and Design I prior to enrolling in this course. This course introduces the basic methods of ceramic production in hand-building and glaze application. Six contact hours: two lecture hours, four studio hours.

ART 2111C Ceramics:

Hand-Building II (Y)

3 Credit Hours

Prerequisite: ART 2110C. This course, a continuation of Ceramics: Hand-Building I emphasizes creativity and special problems. The course also includes kiln stacking and firing. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four studio hours.

ART 2112C Ceramics:

Wheel Throwing I (Y)

3 Credit Hours

Prerequisite: ART 2110C. This course introduces the basic methods of wheel throwing along with kiln stacking and glazing techniques. Six contact hours: two lecture hours, four studio hours.

ART 2113C Ceramics:

Wheel Throwing II (Y)

3 Credit Hours

Prerequisites: ART 2110C and ART 2112C. This course is a continuation of Ceramics: Wheel Throwing I. Emphasis is on perfecting the technique of wheel throwing and on creativity

with ceramic sculpture. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four studio hours.

ART 2115C Glaze Exploration (Y)
3 Credit Hours

Prerequisite: ART 2111C. This course includes practice in the use of the nature of glazing techniques such as Mishika and Sgraffito plus application and testing procedures. Six contact hours: two lecture hours, four studio hours.

Graphics

ART 2222C Introduction to Computer Images I (Y)
3 Credit Hours

Prerequisites: ART 1201C and ART 1300C. This course is an introduction to the microcomputer as a tool for the visual arts. The course selects from a variety of imaging software and requires no computer experience. Six contact hours: two lecture hours, four laboratory hours.

ART 2225C Introduction to Computer Images II (Y)
3 Credit Hours

Prerequisite: ART 2222C. This course is a continuing study of the microcomputer as a tool for the visual arts. A course in combining 2-D, 3-D, animation, motion pictures, video, and audio, with photography, digital draw and paint programs, and outputting to video tape and other permanent storage. Six contact hours: two lecture hours, four laboratory hours.

Jewelry

ART 2150C Jewelry Fabrication (Y)
3 Credit Hours

Prerequisites: ART 1201C and ART 1300C. This course emphasizes creative jewelry construction and design techniques. Development of general skills in materials and processes to promote individual creativity in jewelry

production will be discussed. Six contact hours: two lecture hours, four laboratory hours.

ART 2151C Jewelry Casting (Y)
3 Credit Hours

Prerequisite: ART 2150C. This course emphasizes creative casting and enameling techniques with a focus on individual creativity and uniqueness. Six contact hours: two lecture hours, four laboratory hours.

Painting

ART 1563C Mural Painting I (Y)
3 Credit Hours

Prerequisite: ART 1201C, ART 1300C, ART 2510C or consent of instructor. This course introduces art students to the techniques specific to large-scale painting on canvas and architectural sites. Mural painting combines and enhances all of the basic two-dimensional art skills learned in design, drawing and painting. Projects include small-scale design and actual large-scale "on-site" painting. Students will also become familiar with the historical and conceptual precedents for large-scale painting from the past 3,000 years. Six contact hours: two lecture hours, four laboratory hours.

ART 1564C Mural Painting II (Y)
3 Credit Hours

Prerequisite: ART 1201C, ART 1300C, ART 1563C, ART 2510C or consent of instructor. A continuation of Mural Painting I, this course gives students an opportunity to further develop techniques specific to large scale painting on canvas and architectural sites with an emphasis on alternative tools and advanced painting techniques. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four laboratory hours.

ART 2510C Painting I (Y)
3 Credit Hours

Prerequisite: ART 1301C. This course introduces students to basic oil painting techniques and color theory. Projects designed to lead students toward more independent concepts, include standard subjects such as still life, landscape, and portrait and figure painting. Six contact hours: two lecture hours, four studio hours.

ART 2520C Painting II (Y)
3 Credit Hours

Prerequisite: ART 2510C or consent of instructor. This course, a continuation of Painting I, encourages students to plan independent projects, working within certain broad guidelines as to subject matter and technical approach. Individual interests and strengths are part of the planned program for students; however, the course requires a certain specific number of paintings during the semester. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture, four studio hours.

ART 2540C Introduction to Watercolor (Y)
3 Credit Hours

This course introduces students to the methods and materials involved in several water media including tempera, gouache, acrylic and watercolor with emphasis on traditional watercolor techniques. Six contact hours: two lecture hours, four laboratory hours.

ART 2550C Advanced Watercolor (Y)
3 Credit Hours

Prerequisite: ART 2540C. This course continues the investigation of methods and materials begun in Introduction to Watercolor with emphasis again on watercolor technique. Students are encouraged to develop a personal expression with the medium. With consent of the instructor, students may repeat

this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four laboratory hours.

PGY — Photography

PGY 2104C Creative Photography (Y)

3 Credit Hours

Prerequisite: PGY 2401C or portfolio. This is an intermediate level photography course designed to pursue historical, creative and manipulative techniques in alternative methods of photography. With consent of the instructor, students may repeat this course for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four laboratory hours.

PGY 2401C Photography I (Y)

3 Credit Hours

This course is an introduction to the use of the camera, laboratory and materials, and methods and procedures for the creative applications of individual expressions in photography. Students must have a 35mm camera or equivalent. Six contact hours: two lecture hours, four laboratory hours.

PGY 2410C Photography II (Y)

3 Credit Hours

Prerequisite: PGY 2401C. This course, a continuation of Photography I, emphasizes black and white and color processing. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four laboratory hours.

ART

Printmaking

ART 2400C Printmaking I (Y)

3 Credit Hours

Prerequisite: ART 1300C or ART 1301C. This course consists of instruction in line etching, tone etching, intaglio printing and

relief printing. Six contact hours: two lecture hours, four laboratory hours.

ART 2401C Printmaking II (Y)

3 Credit Hours

Prerequisite: ART 2400C. This course, a continuation of Printmaking I, presents a more detailed study of intaglio materials and techniques. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four studio hours.

ART 2430C Serigraphy I (Y)

3 Credit Hours

Prerequisite: ART 1201C. This course includes an introduction to the basic techniques of serigraphy, including standard stenciling processes such as cut stencil and glue stencil. Six contact hours: two lecture hours, four laboratory hours.

ART 2431C Serigraphy II

3 Credit Hours

Prerequisite: ART 2430C. This course is a continuation of Serigraphy I and is designed to develop technical skills in handling advanced art printing processes including photo-silk screening and multi-color registration prints. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four laboratory hours.

Sculpture

ART 2701C Sculpture I (Y)

3 Credit Hours

This course, designed for beginning sculpture students, emphasizes modeling and casting techniques in materials such as clay and plaster. Six contact hours: two lecture hours, four studio hours.

ART 2702C Sculpture II (Y)

3 Credit Hours

Prerequisite: ART 2701C or consent of the instructor. This course, a continuation of Sculpture I,

explores new and more advanced techniques and materials with individual projects encouraged. With consent of the instructor, students may repeat this course for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four studio hours.

Textiles

ART 1130C Textile Design (Y)

3 Credit Hours

This course is an introduction to textile processes including silk-screen printing, batik, tie dye and block printing. Six contact hours: two lecture hours, four studio hours.

ART 2101C Crafts as an Element of Design (Y)

3 Credit Hours

This course, an introduction to contemporary and traditional crafts, includes weaving, batik, silk screening, tie dye, block printing and leather crafts. Students may repeat this course for additional credit for up to a combined total of two semesters with a maximum of six semester hours total credit. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four studio hours.

Weaving

ART 2131C Beginning Weaving (Y)

3 Credit Hours

This course is an introduction to fiber processes including off-loom techniques, primitive loom construction and weaving, and simple four-harness loom weaving. Techniques include coiling, twining, dyeing, knotting, tapestry and twill variations. Six contact hours: two lecture hours, four studio hours.

ART 2135C Intermediate Weaving (Y)

3 Credit Hours

Prerequisite: ART 2131C or consent of the instructor. This course supplements beginning weaving and increases students'

weaving vocabulary. Processes include double weave, supplemental weft techniques, pattern drafting and color study. Six contact hours: two lecture hours, four studio hours.

ART 2136C Advanced Weaving (Y)
3 Credit Hours

Prerequisites: ART 2131C and ART 2135C or consent of the instructor. This course, designed for experienced weavers who want to investigate advanced processes and further skills, emphasizes the aesthetic handling of fibers. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four studio hours.

ASC — Aeronautical Science

ASC 1010 History of Air Transportation/National Airspace System (Y)
3 Credit Hours

This course is designed to present a chronological history of man's conquest for flying, an overview of the problems implementing the National Airspace System, airspace allocation, safety of flight, accident analysis, new developments in navigation, ATC systems, and economic, social and political impacts. Three contact hours. (CBE)

ASC 1210 Aviation Weather (Y)
3 Credit Hours

This course consists of the fundamentals of aviation meteorology and its effects on aircraft and the air traffic control system. Three contact hours. (CBE)

ASC 1310 Federal Air Regulations/Legislation
3 Credit Hours

This course is designed to familiarize students with the Federal Aviation regulations, contracts, insurance, liability, regulatory statutes and case law as relating to pilots, aircraft operations and air traffic control. Three contact hours. (CBE)

ASC 2110 Advanced Air Navigation
3 Credit Hours

Prerequisite: FAA private pilot certificate. This course is designed for aviation students who desire to achieve a level of competence and understanding of air navigation above the minimum required to pass the various FAA written tests. The course includes advanced automatic direction finding (ADF) techniques, advanced VHF omni range (VOR) techniques, flight planning, weather, chart construction and plotting, LORAN navigation techniques, RNAV techniques and navigation computer techniques. The FAA's direct user access terminal (DUAT) system will be used extensively during the course, which is equally appropriate for VFR private pilots and those pilots with advanced certificates and instrument ratings. Three contact hours: two lecture/discussion hours, one laboratory hour. (CBE)

AST — Astronomy

AST 1002 Introduction to Astronomy (Y)
3 Credit Hours

Corequisite: AST 1002L. Students will benefit by taking high school algebra or MAT 0024 prior to enrolling in this course. This is a general education course and is not intended for students who are going to major in astronomy or other sciences. Students will become acquainted with the solar system with emphasis on Earth and its satellite, the moon. Students will also study other planets, satellites, comets, meteors, the Milky Way and other galaxies, and the theories of the universe. The course will discuss the stars and planets relevant to the most modern ideas. Three contact hours. (CBE)

AST 1002L Astronomy Laboratory (Y)
1 Credit Hour

Corequisite: AST 1002 or following AST 1002. This is a laboratory course which is intended to supplement AST 1002, Introduction to Astronomy. Students should have a working knowledge of mathematics at a level equivalent to MAT 0024. Students will learn to use various types of equipment and simple procedures for obtaining useful data. Two contact hours (laboratory).

ATF — Aviation Technology Flight

ATF 1000 Basic Flight I
3 Credit Hours

Prerequisites: Federal Aviation Administration (FAA) Class III medical certificate/student pilot license. This course is for students who wish to acquire the training and knowledge required to pilot an airplane and experience solo flight. The course consists of basic flight maneuvers, emergency procedures, radio communications, human factors, Federal Aviation Regulations, etc. The course requirements are met when the student completes the first solo flight. FCCJ does not provide the airplane or the flight instruction required. All training is done at a private flight school of the student's choice and at the student's expense. FCCJ will award college credit for this instruction to currently enrolled students who have completed a minimum of three ATT, ASC or ATF courses appropriate to their degree at FCCJ. This credit will be awarded upon presentation of proof of solo flight (instructor endorsement and flight logged in student logbook) or pilot certification or rating added to pilot certificate, as appropriate. Three contact hours: one lecture hour, two laboratory hours. (CBE)

ATF 1100 Basic Flight II**3 Credit Hours**

Prerequisite: ATF 1000. This course is a continuation of Basic Flight I. The course consists of basic and advanced flight maneuvers, aerodynamics, aircraft performance, weather, emergency procedures, radio communications, cross country flight, night flight, advanced takeoff and landing techniques, human factors, Federal Aviation Regulations, etc. The course requirements are met when students earn certification as Private Pilots. FCCJ does not provide the airplane or the flight instruction required. All training is done at a private flight school of students' choice and at students' expense. FCCJ will award college credit for this instruction to currently enrolled students who have completed a minimum of three ATT, ASC or ATF courses appropriate to their degree at FCCJ. This credit will be awarded upon presentation of proof of solo flight (instructor endorsement and flight logged in student logbook) or pilot certification or rating added to pilot certificate, as appropriate. Three contact hours: one lecture hour, two laboratory hours. (CBE)

ATF 1104 Primary Flight**4 Credit Hours**

Prerequisites: FAA student pilot certificate and FAA Class III medical certificate. This course is the first step in students' eventual certification as Commercial Pilots. The course consists of basic and advanced flight maneuvers, aerodynamics, aircraft performance, weather, emergency procedures, radio communications, cross country flight, night flight, advanced takeoff and landing techniques, human factors, Federal Aviation Regulations, etc. The course requirements are met when students earn certification as Private Pilots. FCCJ does not provide the airplane or the flight instruction required. All training is done at a private flight school

of the students' choice and at students' expense. FCCJ will award college credit for this instruction to currently enrolled students who have completed a minimum of three ATT, ASC or ATF courses appropriate to their degree at FCCJ. This credit will be awarded upon presentation of proof of solo flight (instructor endorsement and flight logged in student logbook) or pilot certification or rating added to pilot certificate, as appropriate. Six contact hours: three lecture/discussion hours, three laboratory hours. (CBE)

ATF 2200 Instrument Flight (Y)**4 Credit Hours**

Prerequisite: ATF 1104. This course is the second step in students' certification as instrument rated Commercial Pilots. The course consists of basic and advanced instrument flight, emergency procedures, instrument flight rules (IFR) radio communications, IFR cross country flight planning, IFR night flight, instrument approach and departure procedures, human factors, Federal Aviation Regulations, etc. The course requirements are met when students earn the Instrument Rating. FCCJ does not provide the airplane or the flight instruction required. All training is done at a private flight school of students' choice and at students' expense. FCCJ will award college credit for this instruction to currently enrolled students who have completed a minimum of three ATT, ASC or ATF courses appropriate to their degree at FCCJ. This credit will be awarded upon presentation of proof of solo flight (instructor endorsement and flight logged in student logbook) or pilot certification or rating added to pilot certificate, as appropriate. Six contact hours: two lecture hours, four laboratory hours. (CBE)

ATF 2400 Commercial Flight**5 Credit Hours**

Prerequisites: ATT 1104 and ATF 2200. This course is the third and final step in students' certification as Commercial Pilots. The course consists of advanced flight maneuvers flown to commercial pilot standards, advanced aerodynamics, aircraft performance, weather, emergency procedures, radio communications, cross country flight, night flight, advanced takeoff and landing techniques, human factors, Federal Aviation Regulations, etc. The course requirements are met when students earn certification as Commercial Pilots. FCCJ does not provide the airplane or the flight instruction required. All training is done at a private flight school of students' choice and at students' expense. FCCJ will award college credit for this instruction to currently enrolled students who have completed a minimum of three ATT, ASC or ATF courses appropriate to their degree at FCCJ. This credit will be awarded upon presentation of proof of solo flight (instructor endorsement and flight logged in student logbook) or pilot certification or rating added to pilot certificate, as appropriate. Seven contact hours: three lecture hours, four laboratory hours. (CBE)

ATF 2530 Advanced Flight**2 Credit Hours**

Prerequisite: ATF 2400. This course is the final step in students' certification as Commercial Pilots with multi-engine rating or as Flight Instructor. The course consists of either multi-engine normal and emergency procedures or primary flight instructor procedures. The course requirements are met when students earn either multi-engine ratings or certification as Flight Instructors. FCCJ does not provide the airplane or the flight instruction required. All training is done at a private flight school of students' choice and at

students' expense. FCCJ will award college credit for this instruction to currently enrolled students who have completed a minimum of three ATT, ASC or ATF courses appropriate to their degree at FCCJ. This credit will be awarded upon presentation of proof of solo flight (instructor endorsement and flight logged in student logbook) or pilot certification or rating added to pilot certificate, as appropriate. Four contact hours: two lecture/discussion hours, two laboratory hours. (CBE)

ATT — Aviation Technology Theory

ATT 1100 Private Pilot Ground School 3 Credit Hours

This course, consisting of classroom instruction in preparation for FAA private pilot written examination, includes the science of flight, airplane systems and instruments, weight, balance and performance, meteorology, physiology of flight, basic navigation, radio navigation, air traffic control and communications, airman's information manual and Federal Aviation Regulations. Three contact hours. (CBE)

ATT 1110 Commercial Pilot Ground School 3 Credit Hours

Prerequisites: Class II medical certificate and FAA private pilot certificate. This course, consisting of classroom instruction in preparation for the FAA commercial pilot, airplane written test, includes Federal Aviation Regulations, flight operations, aerodynamics, aviation weather, charts, instruments, navigation, performance, and weight and balance. The FAA commercial pilot, airplane written test will be offered as an option immediately following the course. Three contact hours. (CBE)

ATT 1120 Instrument Rating Ground School 4 Credit Hours

Prerequisite: FAA Private Pilot Certificate. This course prepares students for the FAA instrument pilot written test, reviews aircraft systems and instruments, advanced meteorology, and the air traffic control system, terminology and radar. The course concentrates on IFR shorthand, IFR approach plates, enroute charts, IFR flight planning, regulations and procedures. Four contact hours. (CBE)

ATT 1810 Environment of the Air Traffic Controller 3 Credit Hours

This course presents a candid look at the air traffic controller's language, tools and profession. Three contact hours. (CBE)

AVM — Aviation Management

AVM 2941 Facility Internship/Flight Safety 4 Credit Hours

Prerequisite: ATT 1810. This course is designed to present an analysis of factors and procedures relating to aviation safety programs, accident investigations/analysis, physiological/psychological human factors and the effect of weather. The course includes familiarization with the air traffic control system via on-site orientation visits to flight service stations, control towers, approach control facilities, air route traffic control centers, weather centers and radar sites. Four contact hours: one lecture hour, three laboratory hours. (CBE)

BAN — Banking

BAN 1004 Principles of Bank Operation 3 Credit Hours

This course touches on nearly every aspect of banking, providing a comprehensive introduction to the diversified services and operations of the banking industry today. The history, evolution and trends of

banking are explored as well as the documents, language and services of banking. Three contact hours. (CBE)

BAN 2240 Consumer Lending 3 Credit Hours

This course is designed to provide accurate and authoritative information regarding consumer lending. Emphasis is placed on all types of credit including installment and single payment loans extended to individuals primarily for the purpose of buying goods and services for their personal consumption. This course also covers theory needed by students to administer the full spectrum of collection activities while simultaneously maintaining good customer relations. Three contact hours.

BAN 2501 Money and Banking (Y) 3 Credit Hours

Prerequisite: ECO 2013 (recommended but not required). This course provides students with the key concepts, theories and processes that link money and banking to the workings of the U.S. economy. The role of money and the money supply in the economy and the role the banks play as money creators are explored in this course. Financial intermediaries, bank operations, the Federal Reserve, tools of monetary and fiscal policy, monetary theory and international banking are all topics covered in Money and Banking. Three contact hours. (CBE)

BCN — Building Construction

BCN 1001 Introduction to Building Construction (Y) 3 Credit Hours

This course is an introduction to residential and commercial building construction. It is an overview of principles and practices used by engineers, architects and contractors in the planning and erecting of buildings. An examination of building codes and regulations is included. Three contact hours. (CBE)

BCN 2614 Planning and Estimating
3 Credit Hours

Prerequisites: BCN 1001 and ETI 1420. This course consists of a study of fundamental planning and a step-by-step method for preparing a quantity survey. The subjects covered in the course include job requirements, costs of construction operations and critical path method (CPM) of scheduling and preparing estimates in accordance with the C.S.I. format. Four contact hours: two lecture hours, two laboratory hours. (CBE)

BCT — Building Construction Trades

BCT 1113 Blueprint Reading
2 Credit Hours

This course teaches the fundamentals of blueprint reading and sketching common to all the construction trades. The course covers plans, elevations, shapes, details, and views in sections. Two contact hours.

BOT — Botany

BOT 1010C Botany (Y)
4 Credit Hours

An evolutionary survey of the plant kingdom, this course emphasizes the principles, which are applicable to all forms of plant life. Six contact hours: three lecture hours, three laboratory hours.

BOT 2153C Local Flora (Y)
4 Credit Hours

Prerequisite: BOT 1010C or consent of instructor. Survey of local vascular flora and local communities (northeast Florida) and evolutionary relationships of vascular plants. Laboratory work will emphasize field work including collecting and identifying vascular plants. Six contact hours: three lecture hours, three laboratory hours.

BSC — Biological Science — Introductory

BSC 1005 Life in Its Biological Environment (Y)
3 Credit Hours

This course is an introduction to biological structure, function processes, principles and concepts. This course fulfills the General Education Requirement. Three contact hours. (CBE)

BSC 1005L Biology Laboratory (Y)
1 Credit Hour

Corequisite: BSC 1005. This course provides students individualized, self-paced practice in specific areas of need as they attempt to improve biological skills. Two contact hours (laboratory).

BSC 2010C Principles of Biology I (Y)
4 Credit Hours

This course, an introduction to the principles of biology, includes studies of cellular organization, genetics and evolution. This course fulfills the General Education Requirements and the laboratory requirement needed by many students who plan to transfer to a four-year institution. Five contact hours: three lecture hours, two laboratory hours. (CBE)

BSC 2011C Principles of Biology II (Y)
4 Credit Hours

Prerequisite: BSC 2010C. This course, a continuation of Principles of Biology I and recommended for science students transferring to four-year institutions studies the systematics of life forms and a required laboratory experience to reinforce subject matter. Five contact hours: three lecture hours, two laboratory hours.

BSC 2023C Human Biology (Y)
4 Credit Hours

Prerequisite: BSC 2010C or equivalent. This course is an introduction to the science of biology with emphasis on cells and tissues, body organization, homeostasis, body systems, regulation and integration of

body parts, reproduction, development and heredity, disease and disorder. Five contact hours: three lecture hours, two laboratory hours.

BSC 2085C Human Anatomy and Physiology I (Y)
3 Credit Hours

This course, a study of the gross morphology and physiology of the human, includes sections concerned with cells, tissues, the musculo-skeletal system, circulation, the lymphatic system, the digestive system and the integument. Four contact hours: two lecture hours, two laboratory hours.

BSC 2086C Human Anatomy and Physiology II (Y)
3 Credit Hours

Prerequisite: BSC 2085C. A continuation of Human Anatomy and Physiology I, this course covers the nervous system, special senses, the endocrine system, the reproductive system, human inheritance and embryonic development, the respiratory system, the urinary system, and fluid and electrolyte dynamics. Four contact hours: two lecture hours, two laboratory hours.

BSC 2931 Selected Topics in Biological Sciences (Y)
1 Credit Hour

Prerequisite: depends upon topics. Corequisite: depends upon topics. The open format of this course provides an opportunity to address various selected topics related to the biological sciences. This course may be repeated for credit. One contact hour.

BSC 2932 Selected Topics in Biological Sciences (Y)
2 Credit Hours

Prerequisite: depends upon topics. Corequisite: depends upon topics. The open format of this course provides an opportunity to address various selected topics related to the biological sciences. This course may be repeated for credit. Two contact hours.

**BSC 2933 Selected Topics
in Biological Sciences (Y)**
3 Credit Hours

Prerequisite: depends upon topics. Corequisite: depends upon topics. The open format of this course provides an opportunity to address various selected topics related to the biological sciences. This course may be repeated for credit. Three contact hours.

BUL — Business Law

**BUL 2130 Business Law I —
The Legal Environment of Business (Y)**
3 Credit Hours

This course is an introduction to law as it relates to and impacts upon the operation of business. Consideration is given to the Uniform Commercial Code, social forces, governmental regulations, administrative agencies, international law, criminal law, torts, property law, consumer protection and environmental law. Three contact hours. (CBE)

BUL 2242 Business Law II (Y)
3 Credit Hours

Prerequisite: BUL 2130. This course covers advanced subjects in business law with emphasis on sales, contracts and commercial paper. These subjects will be helpful to students preparing for professional certification in areas such as accounting and real estate. Three contact hours.

**CCJ — Criminology and
Criminal Justice**

**CCJ 1010 Introduction to
Criminology (Y)**
3 Credit Hours

The course provides a survey of deviant behavior as related to the concept and definition of crime, the concept and purposes of the law, the measurement and causes of crimes and societal reactions to criminal behavior from historical through contemporary periods. Oral presentations by students are required. Three contact hours.

**CCJ 1020 Introduction to
Criminal Justice (Y)**
3 Credit Hours

This introduction to the philosophical and historical backgrounds of law enforcement includes the study of the organization, purpose, functions and processes of law enforcement, private security operations, privatization of correctional institution and other agencies involved in the administration of criminal justice in the United States. Three contact hours. (CBE)

**CCJ 1030 Man, Crime
and Society (Y)**
3 Credit Hours

This course consists of a basic study of the nature and peculiarities of human behavior in direct relationship to crime and delinquency. Three contact hours.

**CCJ 1220 Criminal Law,
Evidence and Procedure (Y)**
3 Credit Hours

This course consists of the study of the scope, purposes and principles of criminal law, the classification and analysis of crimes and criminal acts in general and the examination of selected specific offenses. Three contact hours.

**CCJ 1300 Introduction to
Corrections (Y)**
3 Credit Hours

With emphasis on career orientation, this course examines the total correctional process from law enforcement through the administration of justice, probation, prisons and correctional institutions, and parole. Three contact hours.

CCJ 1400 Police Administration (Y)
3 Credit Hours

This course presents the principles of organization and administration in law enforcement including functions and activities, planning and research, public relations, personnel and training, inspection and control, records and communications and custody. Oral presentations by students are required. Three contact hours.

**CCJ 2230 Criminal Evidence
and Procedure (Y)**
3 Credit Hours

This course consists of the study and examination of the criminal rules of evidence — kinds, degrees, admissibility, competence and weight — specifically as they affect the law enforcement officer in the processes of arrest, force, search, seizure, preservation, custody, testimony and courtroom procedures. Three contact hours.

CCJ 2250 Constitutional Law (Y)
3 Credit Hours

This study of the United States and Florida constitutions presents an in-depth analysis of constitutional law with emphasis in areas of arrest, search and seizure, interrogation, self-incrimination and related topics of interest to law enforcement. The course also includes special emphasis on authority and limitations on police under the Bill of Rights. Three contact hours.

**CCJ 2330 Probation, Pardon
and Parole (Y)**
3 Credit Hours

This course examines, as community based correctional programs, probation as a judicial process and parole as an executive function. The course also reviews the use of pardons. Three contact hours.

**CCJ 2340 Treatment Techniques
and Practices (Y)**
3 Credit Hours

This course evaluates the basic principles of the techniques of changing attitude and behavior. The course also reviews the individual and group approaches to counseling. Three contact hours.

**CCJ 2360 Advanced and
Contemporary Issues in
Corrections (Y)**
3 Credit Hours

This course describes and evaluates modern trends in corrections, such as the community based programs in work-release, halfway houses, contact program planning, as well as the therapeutic community and

treatment concept in institutions. Three contact hours.

CCJ 2488 Ethics in Criminal Justice
3 Credit Hours

This course provides a survey of the various ethical systems, the recognition of moral issues, and the development of moral imagination. The course also focuses on the ethical issues and problems generally encountered in the criminal justice system. Three contact hours.

CCJ 2500 Juvenile Delinquency (Y)
3 Credit Hours

This course presents the major issues of crime causation, rehabilitation and juvenile delinquency participation among the lower, middle and upper social classes. The course also covers the process of handling juvenile delinquents from confrontation with authorities, to detention, to release and aftercare. Three contact hours.

CCJ 2667 Victimology
3 Credit Hours

This course covers the role of the victims in the phenomenon of crime and the abuse, rape, elderly victims, victim service programs, and compensation/restitution. Three contact hours.

**CCJ 2930 Special Topics/
Seminars—Criminology (Y)**
3 Credit Hours

Students in this course choose a critical issue in the contemporary law enforcement system to analyze. This analysis provides ideas for improvement, which are then shared and critiqued in class. Three contact hours.

**CCJ 2933 Special Topics —
Corrections (Y)**
3 Credit Hours

This course includes research writing and discussion of selected subject areas related to corrections, such as correctional planning for short term offenders and misdemeanants, handling of "unusual" prisoners, classification of offenders, authority and responsibility of correctional officers, professional and legal

standards and analysis of contemporary correctional problems. Three contact hours.

**CDA — Computer
Design/Architecture**

CDA 1522 Computer Networks (Y)
3 Credit Hours

Prerequisite: CGS 1060 (Engineering Technology students may substitute CET 1461). Students will study Local Area Networks (LANs), Wide Area Networks (WANs), PC to mainframe connections, LANs gatewayed to mainframe hosts and other distributed systems. Various topologies and connectivity balance will be taught as well as discussions on Router, Gateways, Bridges, and various network operating systems (NOS). The skills taught in this course will enable students to have an understanding of how to build a network. Four contact hours: three lecture hours, one laboratory hour. (CBC)

**CDA 2500 Introduction to
Data Communications (Y)**
3 Credit Hours

Prerequisite: CGS 1060. This course will provide students with the basic concepts of data communications. It will cover such topics as transmission media, modulation techniques, link control, line protocols and transmission impairments. Lab work will include setting up and using communication software, file transfer, and exploring the Internet. Four contact hours: three lecture hours, one laboratory hour.

**CDA 2524 Advanced
Computer Networks**
4 Credit Hours

Prerequisite: CDA 1522. Students will continue with a study of LANs, MANs, and WANs as begun in the basic introductory course. Various topologies and connectivity techniques will be taught in more depth on topics such as bridges, routers, gateways, troubleshooting tools, and network operating systems. The skills taught in the course will

enable students to have a complete understanding of network interoperability and WAN connectivity. Four contact hours: three lecture hours, one laboratory hour. (CBC)

**CDA 2525 Advanced Local Area
Network Administration**
4 Credit Hours

Prerequisites: CGS 1060 or prior computer experience and CGS 1551 or current Novell CNA certification. The objective of this course is to teach individuals advanced administration of local area network (LAN) operating systems. Students will learn to install network file servers, configure and manage network directory services, partition networks, create replicas, and perform network synchronization. Four contact hours: three lecture hours, one laboratory hour.

**CDA 2527 Network Analysis
and Design**
4 Credit Hours

Prerequisites: CDA 2524 and CDA 2525. This course will review basic LAN interconnectivity concepts and teach students to apply concepts to network design and analysis. The course will cover requirement analysis, problem determination and design implementation. This is an advanced course designed for experienced individuals wishing to broaden their skills to include network design. Four contact hours: three lecture hours, one laboratory hour. (CBC)

**CEN — Computer
Engineering**

**CEN 1300 Microsoft
Systems Administration**
4 Credit Hours

Prerequisite: CDA 1522 or equivalent experience. This course prepares students to administer Microsoft networks. In-depth hands-on practice will supplement lecture on theory, concepts and terminology. This course may also include preparation for vendor certification. Topics include

network protocols, server installation and configuration, storage and backup, security, printing, interoperability, remote access, monitoring, and troubleshooting. Four contact hours: three lecture hours, one laboratory hour.

CEN 1503 Novell Systems

Administration

4 Credit Hours

Prerequisites: CGS 1560, CDA 1522 or equivalent experience. This course prepares students to administer Novell networks. In-depth hands-on practice will supplement lecture on theory, concepts and terminology. This course may also include preparation for vendor certification. Topics include installation, directory services, file systems, security, scripts, server and workstation management, printing, and troubleshooting. Four contact hours: three lecture hours, one laboratory hour.

CEN 2302 TCP/IP Administration

4 Credit Hours

Prerequisites: CEN 1300, CEN 1503, COP 1341, or equivalent experience. This course prepares students to administer TCP/IP protocols and services. The course will cover one or more of the most popular network operating systems. In-depth hands-on practice will supplement lecture on theory, concepts and terminology. This course may also include preparation for vendor certification. Topics include architectures, installation, utilities, addressing, bridging and routing, naming services, networking services, and diagnostics. Four contact hours: three lecture hours, one laboratory hour.

CEN 2303 Database Systems Administration

4 Credit Hours

Prerequisite: CEN 1300 or equivalent experience. The course prepares students to administer SQL servers. In-depth hands-on practice will supplement lecture on theory, concepts and terminology. This course may also include preparation for vendor

certification. Topics include relational databases, installation, administration, storage, security, recovery, importing and exporting, replication, performance, tuning and troubleshooting. Four contact hours: three lecture hours, one laboratory hour.

CEN 2304 Microsoft Advanced Systems Administration

4 Credit Hours

Prerequisite: CEN 1300. This course prepares students to administer Microsoft networks in the enterprise. In-depth hands-on practice will supplement lecture on theory, concepts and terminology. This course may also include preparation for vendor certification. Topics include enterprise networking, protocols, network services, remote access, clients and servers, users and groups, profiles and policies, multi-protocol routing, analysis and optimization, and problem resolution. Four contact hours: three lecture hours, one laboratory hour.

CEN 2306 E-mail System Administration

4 Credit Hours

Prerequisite: CEN 1300, CGS 2555, or equivalent experience. This course prepares students to administer electronic mail systems. In-depth hands-on practice will supplement lecture on theory, concepts and terminology. This course may also include preparation for vendor certification. Topics include server architecture and installation, managing accounts, client configuration, Internet service and protocols, security monitoring, and maintenance, interoperability, troubleshooting, and performance. Four contact hours: three lecture hours, one laboratory hour.

CEN 2307 Internet Site Administration

4 Credit Hours

Prerequisites: CEN 1300, CGS 2555, or equivalent experience. This course prepares students to administer Internet sites. In-depth hands-on practice will

supplement lecture on theory, concepts and terminology. This course may also include preparation for vendor certification. Topics include architecture, protocols, installation, configuration, web services, ftp services, security, management, tuning, analysis, and troubleshooting. Four contact hours: three lecture hours, one laboratory hour.

CET — Computer Engineering Technology

CET 1114 Digital Fundamentals (Y)

3 Credit Hours

Prerequisites: EET 1035 and MAC 1105. This is an introductory course covering basic digital concepts, devices and circuits found in modern digital and computerized equipment. Four contact hours: three lecture hours, one laboratory hour. (CBE)

CET 1461 Computer Applications in Engineering

3 Credit Hours

Prerequisite: MAT 1033 or satisfactory score on placement test. Corequisite: MAC 1105. This course is an introduction to computerized tools for engineering problem solution and reporting. It provides a background in specific computer skills required in the engineering technology area. It includes problem solving using programmable calculators and demonstrates their relationship to computers. It also includes word processing for engineering report writing and requisite Windows and/or DOS skills. Four contact hours: three lecture hours, one laboratory hour.

CET 2123 Microprocessor Fundamentals (Y)

3 Credit Hours

Prerequisite: CET 1114. This course is intended for technicians whose job it is to service systems containing microprocessors. It is a study of the structure and programming of the microprocessor as well as interfacing with peripherals and system

troubleshooting. Four contact hours: three lecture hours, one laboratory hour.

CET 2173 Microcomputer Systems Troubleshooting (Y)
3 Credit Hours

Prerequisite: CET 2123. This is a course in diagnostic and repair procedures for microcomputers in a business or industrial environment. The course is intended for computer service technicians and utilizes microcomputers and their peripherals. Four contact hours: three lecture hours, one laboratory hour.

CET 2186 Computer Peripherals and Interfacing
3 Credit Hours

Prerequisite: CGS 1060. This course is intended for non-electronics majors. The course is a study of the interrelationships between the computer control processing unit and peripheral input/output devices with emphasis on interfacing considerations between C.P.U. and series/parallel terminals, general troubleshooting and routine maintenance procedures common to the computer industry as an integral part of the course. Four contact hours: three lecture hours, one laboratory hour. (CBE) (CBC)

CET 2496 Network Service and Troubleshooting
4 Credit Hours

Prerequisites: CET 2186 and CDA 1522. This course covers the fundamentals of troubleshooting and servicing a wide variety of problems on a local area network. Topics include troubleshooting concepts; research tools used; troubleshooting and using network adapters, printers, cables, and storage devices; troubleshooting the DOS workstation; network disaster recovery, and network optimization. Four contact hours: three lecture hours, one laboratory hour. (CBC)

CET 2941 Computer Maintenance Practicum (Y)
2 Credit Hours

Prerequisite: CET 2173. This course should be taken during students' last term in the program and enrollment requires consent from the program manager. It is a non-lecture course wherein students perform routine maintenance, troubleshooting and repair on College microcomputer systems. A minimum of four hours per week under close supervision from the College microcomputer specialist will be spent on these activities. Flexible scheduling will be used to spread the number of students evenly over the week's work. Four contact hours (laboratory).

CGS — Computers in General Studies

CGS 1003 Introduction to Using Microcomputers (Y)
2 Credit Hours

This course is designed to train students to use microcomputers. It includes laboratory exercises in Windows and word processing. Two contact hours.

CGS 1060 Introductory Computer Concepts (Y)
3 Credit Hours

This course, intended for individuals with no previous computing experience, includes the history of computers, a survey of how computers are used today, the basic components of computers and computer terminology and laboratory experiences using application software. A study of information systems and computer careers completes the course. Additional lab time may be required in order to complete application assignments. Four contact hours: three lecture hours, one laboratory hour. (CBE)

CGS 1062 Introduction to Midrange Computer Systems (Y)
3 Credit Hours

Prerequisite: CGS 1060. This course is designed as an introduction to midrange computer systems with major

emphasis on the IBM AS/400 with an introduction to Office Vision/400, command language, security, system architecture and utilities. A hands-on approach is used when appropriate. Four contact hours: three lecture hours, one laboratory hour.

CGS 1100 Microcomputer Applications for Business and Economics (Y)
4 Credit Hours

This business oriented course will include training in Windows operating systems, word processing, financial spreadsheets, database applications, and a special topics section that will introduce presentation software, the Internet, World Wide Web browsers, E-mail, local area networks and other contemporary issues as time permits. Four contact hours: three lecture hours, one laboratory hour.

CGS 1550 Local Area Network (LAN) Administration with Windows NT Server
4 Credit Hours

Prerequisite: CGS 1060 or prior computer experience. The object of this course is to teach individuals to administer a Local Area Network (LAN) operating system using Windows NT Server. Students will create LAN user environments, perform resource accounting and management, administer security, setup electronic mail, conduct backup and recovery operations, and install local and remote network print services. Four contact hours. (CBC)

CGS 1551 Local Area Network (LAN) Administration with Netware
4 Credit Hours

Prerequisite: CGS 1060 or prior computer experience. The objective of this course is to teach individuals to administer Local Area Network (LAN) operating systems. Creating LAN user environments, resource accounting and management, security, electronic mail, backup and recovery operations, and remote network printing will be covered in detail. Four contact hours. (CBC)

CGS 1560 Introduction to DOS (Y)
1 Credit Hour

Prerequisite: CGS 1060 or CGS 1570 or CGS 1100 or equivalent experience. This five week course covers in-depth the PC-DOS/MS-DOS microcomputer operating system. The course is directed toward those who will be supporting the DOS operating system and systems that make use of the DOS environment. Topics include operating system concepts, file systems, system configuration, batch files, and troubleshooting. One contact hour.

CGS 1564 Introduction to Windows
1 Credit Hour

This course is an introduction to Windows applications. It is intended for the new user who needs to develop skills in all Windows programs. Topics include using the mouse and working with program manager Windows accessories and file manager. One contact hour.

CGS 1566 Workstation Administration (Y)
4 Credit Hours

Prerequisite: CGS 1060 or CGS 1570 or CGS 1100 or equivalent experience. This course prepares students to administer microcomputer workstations. The course will cover one or more of the most popular workstation operating systems. In-depth hands-on practice will supplement lecture on theory, concepts and terminology. This course may also include preparation for vender certification. Topics include installation, account and policy administration, configuration, file systems, security, network connectivity, printing, performance tuning, and troubleshooting. Four contact hours: three lecture hours, one laboratory hour.

CGS 1570 Microcomputer Applications (Y)
3 Credit Hours

Recommended prerequisite: OST 1100 or keyboarding experience. This course is intended for

students with no previous experience in information systems. It orients students to computer operating systems, DOS and Windows, word processing software, spreadsheet software, database software, and business graphics software to solve common problems of the computerized workplace. Four contact hours: three lecture hours, one laboratory hour. (CBE)

CGS 1580 Introduction to Desktop Publishing (Y)
3 Credit Hours

Recommended prerequisite: working knowledge of IBM or Macintosh microcomputers or compatibles and experience with word processing software. This course is designed for individuals who wish to develop desktop publishing skills. Individuals who will benefit from this course include administrative assistants involved in corporate report production, secretaries involved in newsletter production, individuals in the advertising and printing industries, corporate personnel involved with printed communications and writers. The course includes skills leading to the development of newsletters, brochures, technical papers and annual reports. Four contact hours: three lecture hours, one laboratory hour.

CGS 2470 Computer Aided Drafting and Design (Y)
3 Credit Hours

Prerequisite: ETD 1100. (Interior design students may substitute IND 1606 for ETD 1100.) This course provides students with a general understanding of Computer Aided Drafting and Design (CADD) operations. Students will acquire a working knowledge of steps required for initializing commands to the CADD system using the keyboard and the stylus. Students will create drawings using various menus and will command the system to create a fast-plot of any current active drawing in the system. Six contact hours: two lecture hours, four laboratory hours.

CGS 2512 Spreadsheet Concepts and Practices (Y)
3 Credit Hours

This course is designed for individuals who wish to master and use spreadsheet software. The course is directed toward novices, first-time owners of personal or business computers and individuals who would like to learn more about spreadsheet software and operations. Covered in the course are the history and terminology of spreadsheet software, spreadsheet design and construction, and uses of spreadsheet to solve financial problems. Also covered are spreadsheet graphics, spreadsheet database and spreadsheet automation with macros. The course requires use of the IBM personal computers or compatible computers. Four contact hours: three lecture hours, one laboratory hour.

CGS 2525 Introduction to Multimedia (Y)
3 Credit Hours

Prerequisite: CGS 1060, CGS 1570 or working knowledge of computers. This course is designed for individuals who would like to learn multimedia technology. The course will include such topics as determining what technology to use and how to use it most effectively. Computer graphics will be highlighted as well as other visual aids such as charts, posters, slides and transparencies. Audio and other current and cutting-edge technologies used in multimedia presentations will also be explored. Course content emphasizes audience reaction to a presentation. Four contact hours: three lecture hours, one laboratory hour. (CBC)

CGS 2542 Database Concepts for Microcomputers (Y)
3 Credit Hours

Prerequisite: CGS 1060 or CGS 1570. This course is aimed at familiarizing students with the roles and advantages of databases. A series of database

application projects on micro-computers is designed to build familiarity with creating, loading, maintaining and updating the database. Conducting database queries and building database reports are covered. Four contact hours: three lecture hours, one laboratory hour.

CGS 2555 Introduction to the Internet (Y)

4 Credit Hours

This course is designed to provide an overview of the Internet and its most important services. After a short overview of basic computer and networking concepts, the course will focus on how to use and search the Web in addition to creating a personal Web page using HTML. Also, other services available on the Internet will be covered such as Gopher, FTP, Telnet, E-Mail and Usenet. The course also includes a hands-on component that will allow students to develop proficiency in each of the service areas identified above with the Netscape browser or its equivalent. Four contact hours: three lecture hours, one laboratory hour.

CGS 2571 Advanced Microcomputer Applications

3 Credit Hours

Prerequisite: CGS 1570 or equivalent experience; keyboarding skills required. This course is intended for students who have had an introduction to micro-computer applications, and desire instruction in advanced topics using an integrated software suite. The focus of this course will be integration of files between software applications represented in the suite. Additional topics using word processing, spreadsheet, presentation graphics, and database management that are not covered in the introductory course will also be taught. Four contact hours: three lecture hours, one laboratory hour.

CHD — Child Development

CHD 1110 Infant and Toddler Care I (Development)

3 Credit Hours

This course introduces infant and toddler care workers to the stages of human development from birth to three years. The course also covers the impact of health, parenting, environment, nutrition, mental health and self-esteem on normal and abnormal development. This course is useful for CDA (Child Development Associate) documentation. Three contact hours.

CHD 1220 Child Growth and Development I

3 Credit Hours

This course is an introductory study of physical, social, emotional and cognitive development, conception through age six. The course stresses acquisition of skills in child observation and recording and behavior management. It includes Module IV of the HRS Child Care Worker Training course. This course is useful for CDA (Child Development Associate) documentation. Three contact hours. (CBE)

CHD 1380 Curriculum for Young Children I

3 Credit Hours

This course is an introductory study of safety, health, physical, cognitive and program environment from pre-school years through age eight. This course is designed to assist students in the development of creative age appropriate activities to help school age children achieve classroom success. Three contact hours.

CHD 1381 Curriculum for Young Children II

3 Credit Hours

Prerequisite: CHD 1380. This course is designed to provide students with training and knowledge as they develop new skills that will assist in providing age appropriate activities in the area of cognitive and communication skills. Three contact hours.

CHD 1382 Curriculum for Young Children III

3 Credit Hours

Prerequisite: CHD 1381. This course is designed to provide a varied environment that invites exploration and experimentation. Offering a variety of activities and experiences that promote self-expression and interaction with children that encourage self-esteem, social development, and creativity along with parent involvement. Three contact hours.

CHD 1710 Child Growth and Development II

3 Credit Hours

Prerequisite: CHD 1220. This course focuses on the young differently-abled child, children in crisis, working with families, behavior management, nutrition, health and safety in the early childhood classroom. The course includes Modules II and III of the HRS Child Care Worker Training Course. This course is useful for CDA (Child Development Associate) documentation. Three contact hours.

CHD 2120 Infant and Toddler Care II (Education)

3 Credit Hours

Prerequisite: CHD 1110. This course introduces infant and toddler care workers to educational strategies for children from birth to three years. The course also covers minimum standards, classroom management, teacher preparation, assessment, and discipline and parent participation. This course is useful for CDA (Child Development Associate) documentation. Three contact hours.

CHI — Chinese

CHI 1000 Conversational Chinese (Y)

3 Credit Hours

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used; students are

expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work).

CHI 1120 Beginning Chinese I (Y)
4 Credit Hours

This beginning course consists of the fundamentals of Chinese speech and grammar taught by integrating the basic communication skills of hearing and understanding, speaking, reading and writing. Five contact hours: four lecture, one laboratory (unsupervised).

CHI 1121 Beginning Chinese II (Y)
4 Credit Hours

Prerequisite: CHI 1120. This course is a continuation of Beginning Chinese I. Five contact hours: four lecture, one laboratory (unsupervised).

CHM — Chemistry

CHM 1020 Chemistry for Liberal Arts (Y)
3 Credit Hours

Students will benefit by taking high school algebra or MAT 0024 prior to enrolling in this course. This course, designed to meet the General Education Requirements for non-science majors, is designed especially for students who wish to gain an understanding of the fundamental nature of physical science from the chemical point of view. The treatment utilizes an approach to scientific concepts and methods, stressing and illustrating principles rather than merely listing phenomena. Three contact hours.

CHM 1025C Introduction to General Chemistry (Y)
4 Credit Hours

Corequisite: MAC 1105 or satisfactory score on placement test. This course is an introduction to the concepts of inorganic chemistry including structures of matter, atomic theory, nomenclature, bonding,

gases, solutions, equilibrium, and acids and bases. This course is for students who have had no previous chemistry and plan to major in science, engineering, pre-medicine or pharmacy. Six contact hours: four lecture/discussion hours, two laboratory hours.

CHM 1032C Principles of General Chemistry (Y)
4 Credit Hours

Corequisite: MAT 1033 or satisfactory score on the placement test. Students will benefit by taking high school algebra or MAT 1033 prior to enrolling in this course. This course is an introduction to the concepts of inorganic chemistry including structures of matter, atomic theory, nomenclature, bonding, bases and introduction to organic chemistry. This course is for students who have had no previous chemistry and plan to major in dental hygiene, medical technology, nursing or health related fields. Six contact hours: four lecture/discussion hours, two laboratory hours.

CHM 2045C General Chemistry and Qualitative Analysis I (Y)
4 Credit Hours

Prerequisites: MAC 1105 and CHM 1025C or satisfactory score on the chemistry placement test. This course, designed to introduce students to modern chemical concepts, includes modern atomic structure and periodicity, chemical bonding, states of matter, gas laws and solutions. The laboratory work will be quantitative in nature, stressing accurate laboratory techniques. This course meets the first year college requirements for those majoring in science, engineering, pre-medicine or pharmacy. Six contact hours: three lecture hours, three laboratory hours. (CBE)

CHM 2046C General Chemistry and Qualitative Analysis II (Y)
4 Credit Hours

Prerequisite: grade of "C" or better in CHM 2045C. This course, a continuation of

General Chemistry and Qualitative Analysis I, stresses chemical equilibrium, chemical kinetics, electrochemistry, oxidation-reduction and selected families of metals and non-metals. Laboratory work includes studies of ionic equilibrium in aqueous solutions and semi-micro qualitative analysis. Six contact hours: three lecture hours, three laboratory hours.

CHM 2205C Introductory Organic/Biochemistry (Y)
4 Credit Hours

Prerequisite: CHM 1032C. This course is an introduction to organic chemistry of functional groups and a survey of the biochemistry of proteins, carbohydrates, lipids and nucleic acids. Six contact hours: three lecture hours, three laboratory hours.

CHM 2210C Organic Chemistry I (Y)
4 Credit Hours

Prerequisite: CHM 2046C or equivalent. This course emphasizes the general principles and theories of organic chemistry with emphasis on classification, nomenclature, methods of preparation, characteristic reactions, stereo-chemistry and structure determination of organic compounds. Six contact hours: three lecture hours, three laboratory hours.

CHM 2211C Organic Chemistry II (Y)
4 Credit Hours

Prerequisite: CHM 2210C. This course, a continuation of Organic Chemistry I includes mechanisms of organic reactions, carbohydrates and macromolecules. Six contact hours: three lecture hours, three laboratory hours.

CHM 2930 Selected Topics in Chemistry (Y)
3 Credit Hours

Prerequisite: instructor approval. The open format of this course provides an opportunity to address various selected topics related to the chemistry

sciences. This course may be repeated for credit. Three contact hours.

CIS — Computer and Information Systems

CIS 2300 Command-Level CICS Programming (Y)

3 Credit Hours

Prerequisites: COP 2120 and COP 2540. This course provides training in Customer Information Control Systems (CICS), a general-purpose database and data communication interface between an operating system and application programs. Students will design, code, test and debug programs in COBOL for real time applications. Four contact hours: three lecture hours, one laboratory hour.

CIS 2321 Information Systems (Y)

3 Credit Hours

Prerequisite: COP 2540, CGS 2542 or COP 2700. This course designed to introduce students to the fundamental concepts of information systems, focuses on the study, analysis and design phases of the system development life cycle. Emphasis is on current system documentation techniques through the use of both classical and high level fourth generation software tools/techniques for describing process flows, data flows, data structures, file design, input and output designs, and program specifications. Four contact hours: three lecture hours, one laboratory hour.

CIS 2401 User Support and Software Evaluation (Y)

3 Credit Hours

Prerequisite: CGS 1060 or CGS 1570. This course will present a host of skills critical to the success of an integrated systems or end user support specialist. They will include evaluating software and hardware, resolving computer security issues, developing disaster preparedness plans, writing RFPs, networking non-computer hardware, integrating telephone systems, voice mail

systems and reprographic systems, and ergonomics. Four contact hours: three lecture hours, one laboratory hour.

CIS 2410 Midrange Operations and Management (Y)

3 Credit Hours

Prerequisites: COP 2700 and CDA 1522. This is a capstone course designed to provide students with advanced features of a midrange computer system and the associated concepts and principles. Emphasis is on the IBM AS/400 platform. Sample topics include disaster and recovery, communications, journalizing and commitment, and object management concepts. Four contact hours: three lecture hours, one laboratory hour.

CIS 2930 Combined Topics In CIS (Y)

3 Credit Hours

Prerequisite: depends on topic. Corequisite: depends on topic. The open-topic format of this course provides an opportunity to address various combinations of topics related to CIS curriculum or DP industry need. This course may be repeated for credit. Four contact hours: three lecture hours, one laboratory hour.

CJD — Criminal Justice Development

CJD 2310 Police Supervision

3 Credit Hours

This introductory course, designed to acquaint future and present police supervisors with an understanding of the various functions of supervision, examines the supervisor's responsibilities and assignments. The general topical areas include techniques of working with people, communications, personnel selection and training, motivation, principles of organization and management, disciplinary methods and performance ratings. Three contact hours.

CJT — Criminal Justice Technology

CJT 2100 Fundamentals of Criminal Investigation (Y)

3 Credit Hours

Criminal investigation covers general investigative principles and techniques used by law enforcement. This fundamental course in the most important phases of criminal investigation deals with the following branches of crime including methods of investigation, note taking, report writing, handling the crime scene, interrogations, admissions and confessions, missing persons, undercover assignments and such specific offenses as arson, narcotics, larceny, burglary, robbery and forgery. Three contact hours.

CJT 2801 Introduction to Private Security

3 Credit Hours

This course is a study of history, nature and role of private security, including; education and training, combating internal threats, information security, risk management, physical security, emergency management, legal issues, and security management. Three contact hours.

COP — Computer Programming

COP 1000 Introduction to Programming and Algorithm Design (Y)

3 Credit Hours

Prerequisite: MAT 1033 with a grade of "C" or better or satisfactory score on the mathematics placement test. This is an essential first course for data processing majors. It will introduce the fundamentals of computer usage, covering topics such as editor functions, files (batch and interactive) and program compilation and execution. Students will be taught algorithm design using structured flow chart and pseudo-coding techniques. The programming language Pascal will be introduced and used throughout the course to supplement the theoretical

foundations that are being built.
Four contact hours: three lecture hours, one laboratory hour.

COP 1342 UNIX Systems

Administration

4 Credit Hours

Prerequisites: CGS 1560, CDA 1522, or equivalent experience. This course prepares students to administer UNIX networks. In-depth hands-on practice will supplement lecture on theory, concepts and terminology. This course may also include preparation for vendor certification. Topics include installation, device configuration, file systems, network services, printing, user accounts and groups, shells, and file access. Four contact hours: three lecture hours; one laboratory hour.

COP 2120 COBOL

Programming (Y)

3 Credit Hours

Prerequisites: CGS 1060 and COP 1000. COBOL (Common Business Oriented Language) is the programming language specifically designed to solve business problems. Students will solve elementary to moderately complex business problems by writing COBOL programs, submitting programs for compilation and running on the College's computer system and thoroughly debugging programs until the output is perfect. Four contact hours: three lecture hours, one laboratory hour. (CBE)

COP 2121 Advanced COBOL Programming

3 Credit Hours

Prerequisite: COP 2120 or equivalent experience. COBOL (Common Business Oriented Language) is the programming language designed to solve business problems. Students will solve moderately complex business problems by writing COBOL programs, submitting programs for compilation and running on the College's computer system and thoroughly debugging programs

until the output is perfect. Four contact hours: three lecture hours, one laboratory hour. (CBE)

COP 2160 RPG

Programming — AS/400

3 Credit Hours

Prerequisites: COP 1000 and CGS 1062. Students will write, compile and run RPG programs that deal with program-defined and externally defined files and combinations thereof. They will create source programs using the Source Entry Utility (SEU) and create data definitions through Data Definition Utility (DSS and IDDU). Appropriate command language (CL) will be emphasized. Students will write a series of programs using various combinations of RPG coding specification forms for a variety of applications including random file updating. The processing method for this course will be primarily batch. Four contact hours: three lecture hours, one laboratory hour.

COP 2162 Advanced RPG

Programming — AS/400

3 Credit Hours

Prerequisite: COP 2160. This course is a continuation of RPG Programming AS/400. In this course, students will learn to work with program-defined files and external files, including full procedure files. Concepts will be presented on how to update indexed sequential files in various formats randomly and sequentially utilizing file and subfile processing techniques. Students will learn how to design display screens using Screen Design Aid and using the structured programming instruction set. Program development and data description techniques will be emphasized. Four contact hours: three lecture hours, one laboratory hour.

COP 2200 FORTRAN

Programming (Y)

3 Credit Hours

Prerequisite: MAT 1033 with a grade of "C" or better or satisfactory score on the mathematics placement test (Engineering

Technology students may substitute CET 1461). This comprehensive study of a scientific programming language, which is also used in business applications in batched job processing environments, emphasizes file manipulation, including disk, files and efficient programming techniques, interactive programming and simulation. Lab problems will include business, engineering and scientific applications. Four contact hours: three lecture hours, one laboratory hour.

COP 2220 C Programming (Y)

3 Credit Hours

Prerequisite: COP 1000. This course will instruct students in the fundamentals of C program development including algorithm design, program definition, coding, testing and debugging. Modularity will be learned, using programmer-defined functions. C is a highly portable language and is adaptable to different computers. Most popular micro-computer software packages are written in C. Students will develop C programs to solve real world problems. Four contact hours: three lecture hours, one laboratory hour.

COP 2332 Introduction to Windows Programming Using Visual Basic

4 Credit Hours

Prerequisite: COP 1000. This is a first course in Windows programming. Visual Programming techniques are presented using the Microsoft Visual Basic programming language. Topics include event-driven programming concepts, Visual Basic data and logic structures, objects, properties, methods, subroutines, functions, and the visual basic design environment. Four contact hours: three lecture hours, one laboratory hour.

COP 2333 Advanced Windows Programming Using Visual Basic

4 Credit Hours

Prerequisite: COP 2332. This course covers the advanced aspects of Windows Programming using Visual Basic. Topics

include using data control and data access objects, advanced database development, Dynamic Link Libraries, Active X, and Internet-aware applications. Four contact hours: three lecture hours, one laboratory hour.

COP 2334 Object-Oriented Programming with C++ (Y)

3 Credit Hours

Prerequisite: COP 2220. This course will provide students with a working knowledge of object-oriented programming using C++. It will review structures, functions with parameter passing and pointers. Projects, classes, inheritance and polymorphism will be covered with many examples. Students will develop programming projects to reinforce the concepts presented in class and for use in "real world" situations. Four contact hours: three lecture hours, one laboratory hour.

COP 2540 Data Management and Job Control Language

3 Credit Hours

Prerequisite: COP 2120. This course covers data organization, access methods and job control language that are relevant to the mainframe environment. The use of utility programs as components of an application system to build and maintain files will also be covered. Topics will include an introduction to databases and database management systems. Four contact hours: three lecture hours, one laboratory hour.

COP 2612 Microcomputer Operating Systems Concepts

3 Credit Hours

Prerequisite: CGS 1060, CGS 1570 or equivalent work experience. This course requires substantial lab time on microcomputers to learn about and apply the operating system functions and commands that are valuable or necessary in a working environment. Students will review the basics of initializing diskettes and move on to programming language, copying, file management, backup

and recovery, sort and other routines. Operating systems reviewed in this course are MS DOS and UNIX. Other topics include multi-user systems, data communications and establishing interfaces involving microcomputers, minicomputers and mainframes. Four contact hours: three lecture hours, one laboratory hour.

COP 2700 Database Concepts and Design — AS/400

3 Credit Hours

Prerequisites: CGS 1062 and COP 2160. Basic design and coding methods required to implement a relational database in application programs using a midrange computer system are taught in this course. The main topics are directed toward those users who have responsibility for designing and creating relational databases on a midrange computer system. Also included will be an examination of SQL as a facility for defining, manipulating and controlling data in a relational database. Four contact hours: three lecture hours, one laboratory hour.

COP 2701 Database Design and Programming for Microcomputers

4 Credit Hours

Prerequisite: COP 1000, CGS 2542 or prior database experience. The objective of this course is to teach individuals to design and develop database applications and to write database programs in a fourth generation dBASE programming language. This language is embedded in several popular database products including FoxPro, dBASE IV, dbFAST, etc., and is the underlying language in many database packages running in the Windows and DOS operating systems environments. Four contact hours.

COP 2702 Modern Database Management with Oracle (Y)

4 Credit Hours

Prerequisite: COP 1000 or programming experience and CGS 1100 or database experience. This course is designed to

familiarize individuals with modern database technologies using the SQL relational database language. A series of database application projects using Oracle software is designed to build familiarity with E-R database modeling, database creation, database maintenance, and database optimization. Database architectures including the client/server model and distributed database model are presented. The objective is to build a working knowledge and hands-on familiarity with modern database technologies. Four contact hours: three lecture hours; one laboratory hour.

COP 2800 Object Oriented Programming with JAVA (Y)

4 Credit Hours

Prerequisite: COP 1000. This course will provide students with an introduction to object oriented programming using the JAVA language. It will introduce the concept of object oriented programming and the basics of designing JAVA applets for the World Wide Web. The course includes JAVA data types, functions, structures and methods, as well as classes and inheritance. JAVA graphics methods and classes will also be explored. Students will develop programming projects to reinforce the concepts and gain hands-on experience with the language. Four contact hours: three lecture hours, one laboratory hour.

COT — Computing Theory

COT 1000 Data Processing Mathematics

3 Credit Hours

Prerequisites: COP 1000 and MAT 0024 with a grade of "C" or better or satisfactory score on mathematics placement test. This is a foundation course for computer and information system majors. Topics include binary, octal and hexa-decimal numbers, fixed point storage and arithmetic, the real number system, approximations, accuracy

and precision, scientific notation, floating point notation and storage, and logical forms and operation. Computer laboratory exercises will be used to demonstrate the topics and techniques involved. Four contact hours: three lecture hours, one laboratory hour. (CBE)

CPO — Comparative Politics

CPO 2002 Introduction to Comparative Government (Y)

3 Credit Hours

This course consists of a comparison of the institutions and the economic systems of capitalism and socialism associated with the political systems of specific countries. Three contact hours.

CRW — Creative Writing

CRW 2000 Imaginative Writing (Y)

3 Credit Hours

Prerequisite: ENC 1101. This course develops students' capacity for imaginative writing in prose and/or poetry. The course includes critical discussion of students' work and of selected literary techniques and individual conferences. Three contact hours.

CTE — Clothing and Textiles

CTE 1310 Basic Clothing

Construction (Y)

3 Credit Hours

Prerequisite: CTE 1300. This course includes the selection and use of commercial patterns, pattern alterations, zipper and waistband application, collar application, set-in sleeves with cuffs, planning and construction of garments, and the development of basic construction skills. The course also includes the selection of suitable accessories. Four contact hours: two lecture hours, two laboratory hours.

CTE 1340 Advanced Clothing

Construction (Y)

3 Credit Hours

Prerequisite: CTE 1310. This course presents to participants the problems encountered in fitted garment construction.

Students will exhibit skill in figure analysis, pattern alterations and advanced clothing construction techniques. Four contact hours: two lecture hours, two laboratory hours.

CTE 1350 Tailoring I

3 Credit Hours

Prerequisite: CTE 1340 or equivalent. This course, designed for students who are interested in creating individual fashions, which meet the students' special preferences and requirements, emphasizes an individualized approach to custom design, fit, advanced construction and tailoring techniques. Four contact hours: two lecture hours, two laboratory hours.

CTE 1401 Basic Textiles (Y)

3 Credit Hours

This course, a study of fabrics used for clothing and home furnishings, emphasizes fibers, yarns, constructions, designs and finishes that determine qualities and the performance of a fabric. This course also includes the use and care of fabrics and cost factors. Four contact hours: two lecture hours, two laboratory hours.

CTE 1731 Fashion Illustration (Y)

3 Credit Hours

This course is designed to provide students with the basic skills in sketching the fashion figure and apparel. Emphasis is placed on simple methods of drawing and coloring. Varied media and rendering techniques are explored. Four contact hours: two lecture hours, two laboratory hours.

CTE 1812 Retail Merchandising (Y)

3 Credit Hours

This is a basic course designed to provide students with an overview of the retailing industry, including organization, operation, environmental influence on the industry, store location, layout and design, and entrepreneurship. Three contact hours.

CTE 1821 Merchandising

Mathematics (Y)

3 Credit Hours

This course is designed to provide students with an exploration of the financial management of retail stores in terms of dollar and unit figures. Study includes terms, pricing, turnover, shortages, gross margin, buying plan, stock-sales ratio, retail methods of inventory, expenses, profit and loss, and operating statements. Three contact hours.

CTE 1827 Retail Buying (Y)

3 Credit Hours

Prerequisite: CTE 1812. This course is designed to provide students with an in-depth study of buying functions and techniques. Emphasis will be placed on determining consumer demand as well as planning, selection, controlling and evaluating purchases. Three contact hours.

CTE 1840 Merchandising

Information

3 Credit Hours

This course provides students with the ability to analyze quality of materials, construction and design of merchandise in all price ranges. Consumer demands and trends will also be studied. Three contact hours.

CTE 1854 Product Technology

3 Credit Hours

This course is designed to provide students with an understanding of how product technology can be used as a competitive advantage in the market place. Emphasis will be placed on legal responsibilities, sources of information, quality/price relationships, and product analysis. Consumer demands and trends will also be studied. Students will research product information specific to their identified career areas. Three contact hours.

CTE 1856 Retail Salesmanship (Y)

3 Credit Hours

This course provides students with an in-depth understanding of the personal selling process as it specifically relates to retail

sales. Emphasis will be on successful personal selling techniques, multiple and suggestive selling, and personal service, as they relate to the merchandising of apparel, accessories, and home furnishings and accessories. Three contact hours.

CTE 2200 Wardrobe Styling (Y)

3 Credit Hours

This course provides for the development of competency in planning individual and family wardrobes. Factors to consider in purchasing wardrobe items are stressed as well as the care, maintenance and updating of various wardrobe components. Emphasis will be placed on the psychological and social factors influencing dress and the relationship of physical appearance to clothing selection. Attention will be given to the effectiveness of clothing choices in professional situations. The course includes experiences in the application of elements and principles of design to wardrobe coordination. Three contact hours.

CTE 2712 Designing for Special Needs (Y)

3 Credit Hours

Prerequisite: CTE 1340. This course is designed to assist students in becoming aware of the emotional needs and physical limitations of special needs individuals and develop the competencies to design and fit garments to adapt to these needs and limitations. Four contact hours: two lecture hours, two laboratory hours.

CTE 2743 Pattern Drafting for Fashion Design (Y)

3 Credit Hours

Corequisite or prerequisite: CTE 1340. This course is intended for students with prior experience in clothing construction who are interested in designing garments. Major concepts of the course include elements and principles of design and their application both to fashion and to designing and constructing a

garment. Four contact hours: three lecture hours, one laboratory hour.

CTE 2751 Draping for Fashion Design (Y)

3 Credit Hours

Prerequisites: CTE 1340 and CTE 2743. This course is intended for students with previous experience in clothing construction who are interested in designing garments using the draping method. This method is considered useful in that many design details can better be achieved through the draping of muslin on a dressform. Different principles and techniques involved in draping will be explained and used. Four contact hours: three lecture hours, one laboratory hour.

CTE 2851 Sales Promotion (Y)

3 Credit Hours

This course provides students with an in-depth study of the techniques and methods used for advertising and promotion. Study includes advertising, special events, publicity, fashion shows and personal selling. Emphasis is placed on cost and effectiveness of the various forms of promotion. Three contact hours.

CTE 2852 Product Presentation (Y)

3 Credit Hours

This course is designed to provide students with technical and practical knowledge needed to effectively display goods through floor layouts and displays. While themes and techniques change regularly, students will learn basics and fundamentals that can be readily applied to multiple situations. Three contact hours.

CTE 2853 Fashion Show Production

3 Credit Hours

This course provides an in-depth view of the steps required and decisions necessary to produce a fashion show. Emphasis will be placed on the promotional impact and effectiveness of fashion shows as well as the planning and actual production of a formal fashion show. Three contact hours.

CTE 2862 Store Planning and Design

3 Credit Hours

This course provides students with an in-depth analysis of store location and layout factors. Analysis includes factors affecting all aspects of store operation, site selection, leasing considerations, interior space allocations, exterior features, fixturing, store ambience and lighting considerations. Three contact hours.

CTE 2880 Marketing Internship (Y)

7 Credit Hours

Prerequisite: completion of all other program requirements. This course is a supervised on-the-job training program. Students will be required to work a minimum of 400 total hours for a minimum of 12 weeks in an approved retail business. This cooperative education experience will provide students the opportunity to practically apply knowledge gained in the prerequisite courses. On-site visitations will be made by the instructor to monitor students' progress and performance. Additionally, students will attend a two-hour on-campus seminar every other week, emphasizing employment skills. Thirty-three contact hours: one lecture hour, thirty-two hours on-the-job experience.

CTE 2891 Marketing Career Development

2 Credit Hours

This course is designed to provide students with the practical skills to more effectively market themselves to potential employers in the sales and marketing industry. Topics include career exploration in the marketing industry, resume writing, job interviewing, personal appearance, human relation skills, business ethics, professional association membership and portfolio development. Two contact hours.

CTE 2955 Fashion Marketing and Field Study Tours

3 Credit Hours

Prerequisite: CTE 1812 or consent of professor. This course will tour firms representing various

aspects of the fashion industry. Itineraries will include visits to designers, manufacturers, buying offices, retailers and promotion agencies. On-campus classes will be required before and after the tours. Costs for travel, lodging, food and admissions will be charged to enrolled students. Students may repeat for credit three times when the market site visited is different. Three contact hours.

DAA — Dance Activities

DAA 1200 Ballet Technique I (Y)

3 Credit Hours

This beginning level ballet class is specifically designed for students with little or no previous ballet training. Primary focus is placed on the basic fundamentals of ballet technique, correct placement of the body, and comprehension of the vocabulary of ballet technical terms. Three contact hours.

DAA 1201 Ballet Technique II (Y)

3 Credit Hours

Prerequisite: DAA 1200 or equivalent. This ballet course is a continuation of Ballet Technique I. It is specially designed to develop technical strength and proficiency in classical ballet. It will extend students' vocabulary of technical terms and expand their comprehension of classical ballet as an art form by exposure to dance performances and the cognitive teaching of its development. Emphasis is placed on the understanding of the correct placement of the body. Three contact hours.

DAA 1300 Ballroom Dancing I (Y)

1 Credit Hour

This survey course is designed to introduce beginning students to the different branches (i.e. smooth, rhythm, Latin) of ballroom dancing. Emphasis is on basic techniques such as foot positions, body alignment, leading/following, balance and timing in the following dances: Foxtrot, Waltz, Tango, Rhumba, Cha-Cha-Cha, and Swing. In

addition, a brief overview of the history of ballroom dancing will be provided. No previous dance experience is necessary for successful completion of the class. Two contact hours: one lecture hour, one activity hour.

DAA 1301 Ballroom Dancing II (Y)

2 Credit Hours

Prerequisite: DAA 1300 or consent of professor. This course is a continuation of Ballroom Dancing I. It will review and perfect the six dances already known as well as introducing the Mambo and Hustle. In addition, this course will introduce the interrelated comfortable social dancing and a more advanced technique. Two contact hours: one lecture hour, one activity hour.

DAA 1308 Ballroom Dancing III (Y)

2 Credit Hours

Prerequisite: DAA 1301 or consent of professor. This course is a continuation of Ballroom Dancing II. It will review and cover all dances known as well as introducing Viennese Waltz and Samba. Students will be able to perform dances with advanced technique and a more developed personal style. Two contact hours: one lecture hour, one activity hour.

DAA 1340 Folk Dance (Y)

1 Credit Hour

This course consists of the exploration and enjoyment of the fundamental steps, positions and formations of the popular American and ethnic folk and round dances. Two contact hours (activity).

DAA 1380 Recreational Dance (Y)

1 Credit Hour

This course consists of the introduction and practice of the basic dance skills for enjoyment and recreation. Course content includes round, folk, square, social and current dancing. Two contact hours (activity).

DAA 1500 Basic Jazz Technique (Y)

3 Credit Hours

This class will provide the novice dancer the fundamentals of classic jazz dancing with an

emphasis on musical theatre. In addition to learning such basic principles as proper body alignment, balance, and syncopation, an overview of the history of jazz dance will be provided. No dance experience is necessary for successful completion of the class. Three contact hours.

DAA 1600 Tap Dance (Y)

3 Credit Hours

This course will introduce students to basic skills in tap dance. This class will provide beginning skills necessary for musical theater performance. Three contact hours.

DAA 2000 Fundamentals of Dance Techniques (Y)

3 Credit Hours

This introductory course is intended to train students in the basic techniques of the major genres of dance. The course provides background and history of each dance style balanced with a practical experience in the studio. Students also explore and develop specific exercises for physical alignment, self-awareness, coordination, strength, flexibility, and versatility. Three contact hours.

DAA 2160 Contemporary/Modern Dance Techniques and Composition I (Y)

3 Credit Hours

This introductory studio course is intended to train students in beginning levels of technique in modern dance. Emphasis is placed on creative exploration of movement, and experimentation with the dynamics of movement. Development also includes readings, observation, and discussion. Students also explore and develop specific exercises for physical alignment, self-awareness, coordination, strength, flexibility, and versatility. Three contact hours.

DAA 2161 Contemporary/Modern Dance Techniques II (Y)

3 Credit Hours

Prerequisite: DAA 2160 or consent of professor. This class is a continuation of Contemporary/Modern Dance Techniques I.

Emphasis is on defining and expanding movement awareness through modern dance technique and improvisation. Students will continue to develop and refine technical and performance skills. An overview of the history of modern dance is included. Three contact hours.

DAA 2480 Dance Repertory (Y)

2 Credit Hours

Prerequisite: DAA 1200, DAA 2160 or consent of professor. This dance repertory course provides an opportunity for students to be involved in the creation and performance of new, as well as previously choreographed works by faculty and guest artists. There will be a series of master classes, lecture demonstrations regarding the creative process, and an opportunity to learn a wide variety of movement styles. Students in this class have made a commitment to learn a repertory of dances that have been selected or created to challenge and expand their abilities. An opportunity will be available to perform these works in a formal or informal concert setting. Two contact hours.

DEH — Dental Hygiene

DEH 1001C Introduction to Clinical Procedures

3 Credit Hours

Corequisite: DEH 1002C. This course is designed to acquaint students with their role as dental hygienists. It provides the necessary instruction and supervised practice in the dental operatory environment. Topics include infection control, instrument sterilization, care of dental equipment, and basic skills development in procedures for delivering services for the oral exam and prophylaxis. Five contact hours: one lecture hour, four laboratory hours.

DEH 1002C Dental Hygiene Instrumentation

4 Credit Hours

Corequisite: DEH 1001C. This course is designed to introduce dental hygiene students to the theory and practical skills

necessary for the fundamentals of dental hygiene instrumentation combined with clinical sessions that would require students to demonstrate proficiency in utilizing dental hygiene instruments. Skills are performed primarily on mannequins and peers. Six contact hours: two lecture hours, four laboratory hours.

DEH 1720 Preventive Dentistry

2 Credit Hours

This course is designed for students to apply principles and perform clinical activities for the prevention of oral disease, including data collection, application of preventive agents and home care instruction. This is a combined course with clinical experience, classroom interaction and field experience to provide students with the methods and material for teaching dental health in the schools and clinic. Two contact hours.

DEH 1800C Clinical Dental Hygiene I

6 Credit Hours

Prerequisites: DEH 1001C and DEH 1002C. This course is a continuation of the Introduction to Clinical Procedures and Instrumentation. It is a didactic and clinical course composed of lectures, and actual clinical experience with patients. The purpose of this course is to provide students with clinical hygiene practice for continuing refinement of technical skills and an opportunity to gain extensive experience in the areas of dental hygiene education. Ten contact hours: two lecture hours, eight clinical hours.

DEH 1802C Clinical Dental Hygiene II

7 Credit Hours

Prerequisite: DEH 1800C. This course is a continuation of the practical application of the competencies and skills acquired in Introduction to Clinical Procedures, Instrumentation, and Clinical Dental Hygiene I. Time is devoted to providing oral prophylaxis care for patients who present varying classifi-

cations of prophylaxis needs. The course emphasizes the continuing refinement of the techniques and skills in performing an oral prophylaxis including Gracey curets in root planing, periodontal and dental charting, radiographic techniques and interpretations, dietary analysis, and efficiency and care in the management of patients, including those with special needs. Thirteen contact hours: one lecture hour, twelve clinical hours.

DEH 2507C Dental Hygienists

Expanded Duties

2 Credit Hours

This course, designed to teach dental hygiene students expanded functions as permissible by the Florida State Dental Practice Act, will include new procedures as traditional expanded functions are ratified by the Department of Professional Regulations, Board of Dentistry (Chapter 21G-16). This course will also include manipulation of dental materials utilizing dental hygiene techniques. Three contact hours: one lecture hour, two laboratory hours.

DEH 2602 Periodontics

2 Credit Hours

This course, designed to give students a detailed study of the factors involved in periodontal pathology and its etiology, reviews in detail the anatomy, physiology and histology of the periodontium. The course emphasizes diagnosis, prognosis and treatment of patients with periodontal involvement and management of patients returning for maintenance care. The course also teaches procedures and techniques for soft tissue curettage, periodontal dressing placement and removal, and suture removal. Two contact hours.

DEH 2701 Community Dentistry

3 Credit Hours

This course incorporates the principles, practices, methods and visual aids used in teaching preventive dentistry to the public. Field experiences in elementary schools, public health centers, nursing homes and centers for

individuals with disabilities will be utilized. Four contact hours: two lecture hours; two field hours.

**DEH 2804C Clinical
Dental Hygiene III
7 Credit Hours**

Prerequisite: DEH 1802C. This course, a continuation of Clinical Dental Hygiene II, emphasizes the continuing refinement and increased efficiency of clinical skills including complete prophylaxis procedures, radiographs, tact and management of patients, individual responsibilities, achievement in responsibility toward the community, the profession and dentistry in general. Students should achieve an advanced level degree of proficiency. Thirteen contact hours: one lecture hour, twelve clinic hours.

**DEH 2806C Clinical
Dental Hygiene IV
8 Credit Hours**

Prerequisite: DEH 2804C. This course is a continuation in refinement of practical application of the competencies and the proficiencies in skills learned in all of the past clinical didactic courses. Emphasis is on improved efficiency of performance and quality of care. Students should achieve an exit level degree of proficiency. Fifteen contact hours: one lecture hour, fourteen clinic hours.

**DEH 2820 Dental Emergencies and
the Medically Compromised Patient
2 Credit Hours**

Corequisite: certification in basic life support for the health care professional (CPR) or consent of the instructor. This course provides students with practice and theory in basic emergency procedures with dental hygiene treatment methodologies for the medically compromised patient. Emphasis is placed on the role of the dental auxiliary in recognizing and preventing possible emergency situations. Two contact hours.

**DEP — Developmental
Psychology**

**DEP 2004 Human Growth
and Development (Y)
3 Credit Hours**

This course consists of the study of the development of the individual throughout the life cycle, including child, adolescent and adult patterns of behavior with attention to physical, intellectual, cognitive, personality and social development. Three contact hours. (CBE)

**DEP 2102 Child Psychology (Y)
3 Credit Hours**

Prerequisite: PSY 1012. This course consists of a developmental study of children from birth to the adolescent years. The course stresses practical applications with their implications for the parent and teacher, as well as for the evolving individual. Three contact hours. (CBE)

**DEP 2302 Adolescent Psychology (Y)
3 Credit Hours**

Prerequisite: PSY 1012. This course consists of the study of human development in the adolescent years with emphasis on development, relationships and culture. Three contact hours.

**DEP 2401 Adult Psychology (Y)
3 Credit Hours**

This course examines the physical, social, intellectual and personal characteristics of the human being during early, middle and late adulthood. The course will investigate key events in adult life, such as marriage, choice of occupation, parenthood and retirement, along with other developmental tasks and stages. Three contact hours.

DES — Dental Support

**DES 1021C Dental Anatomy
3 Credit Hours**

This course is a comprehensive study of the form and function of the teeth. Also included is the study of head and neck anatomy, nerve and blood supply to teeth and musculature of the face. Laboratory sessions will be

coordinated to include the study of the human dentition, surrounding tissues and the skull. Four contact hours: two lecture hours, two laboratory hours.

**DES 1030 Oral Histology
and Embryology
1 Credit Hour**

This course provides a study of embryonic development and microscopic anatomy of the face and oral cavity, including the teeth, supporting structures, salivary glands, other surrounding structures and TMJ. One contact hour.

**DES 1100C Dental Materials
and Laboratory
2 Credit Hours**

This course is a series of lecture-demonstrations designed to acquaint dental assistant/dental hygiene students with the nomenclature, proper manipulation, and application of the materials used in the laboratory and clinical practice of dentistry. Three contact hours: one lecture hour, two laboratory hours.

**DES 1220C Dental Radiology
3 Credit Hours**

This course is designed to teach the proper use of dental X-ray equipment, including radiation safety in the taking, processing and mounting of dental radiographs, both intra-oral and extra-oral. This course also includes evaluation techniques, identifying landmarks and deviations from the normal and the filing of dental radiographs. Four contact hours: two lecture hours, two laboratory hours.

**DES 2042 Oral Pathology
2 Credit Hours**

This course gives students a detailed understanding and knowledge of the causes and mechanisms of oral disease, oral trauma and oral developmental anomalies. It relates this knowledge to the systematic physiology of the body. Two contact hours.

DES 2050 Pharmacology and Oral Medicine

2 Credit Hours

This course gives students a detailed study of the principles, characteristics, actions, reactions and uses of anesthetics, drugs, medicaments and preparations used to prevent, control and treat diseases. Two contact hours.

DIE — Dietetic

DIE 1201 Clinical Nutrition, Phase II

3 Credit Hours

Students will acquire knowledge and skills in applying the principles of dietary modifications for specific physiological disorders. The course is closely related to the practices of local hospitals and extended care facilities. Three contact hours.

DIE 1204 Clinical Nutrition, Phase I

3 Credit Hours

Prerequisite: HUN 1201. This course includes a study of roles of the dietetic technician in providing nutrition care to patients. Mathematical calculations, medical terminology, laboratory tests, nutrition assessments, care plans, follow up and documentation in medical records used by dietetic technicians are included. Three contact hours.

DIE 2120 Supervision and Personnel Management for Dietetics

3 Credit Hours

Prerequisites: DIE 1201 and FSS 1221. Students will analyze the dietetic and food service management practices for non-commercial health facilities. Students will examine staffing; personnel recruitment and development; food service organization and supervision; supervision in client nutrition services; leadership methods; personnel training and evaluation. Students will do group case studies, site visits and prepare personnel projects. Three contact hours.

DIE 2270 Clinical Nutrition, Practicum I Lab/Clinical

3 Credit Hours

Prerequisite: DIE 1201. This course is a continuation of Clinical Nutrition Phase II, further developing counseling/interviewing skills related to the preparation of nutrition care plans in relation to life span and to certain disease states. Clinical activities in health care facilities support classroom studies. Related physiology is included. Eleven contact hours: one lecture hour, ten field experience hours.

DIE 2271 Clinical Nutrition, Practicum II Lab/Clinical

3 Credit Hours

Prerequisite: DIE 2270. This course continues development of counseling/interviewing skills related to the preparation of nutrition care plans for additional disease states. Clinical activities in health care facilities support classroom studies. Related physiology is included. Eleven contact hours: one lecture hour, ten field experience hours.

ECO — Economics

ECO 2013 Principles of Economics I (Y)

3 Credit Hours

This course in macroeconomics presents the foundations of economic analysis, the theory of economic growth, development and stabilization, current economic issues and the monetary theory. Three contact hours. (CBE)

ECO 2023 Principles of Economics II (Y)

3 Credit Hours

Prerequisite: ECO 2013 or consent of professor. This course in microeconomics is a continuation of Principles of Economics I and includes a study of the tools for economic analysis, the price theory of the market system, the theory of the firm, the theories of production and distribution, and international trade. Three contact hours. (CBE)

EDF — Education Foundations

EDF 1005 Introduction to Education (Y)

3 Credit Hours

This course is a comprehensive and realistic look at the nature of students and how they learn; the role of teachers, the teaching process, and teaching as a career; and schools as social and political institutions in our society. Some field experience required. Three contact hours.

EDF 2085 Teaching Diverse Populations (Y)

3 Credit Hours

This course is designed to study multicultural education. Emphasis is on such dimensions of diversity as culture, ethnicity, race, language, social class, exceptionally, gender, age, and sexual orientation and their implications for educational policy, curriculum and methodology. Field experience is required. Three contact hours.

EDG — Education General

EDG 2940 Observing and Recording Child Behavior

6 Credit Hours

Prerequisites: CHD 1220 and EEC 1001. This course is designed for students to observe, record and analyze young children's behavior in pre-school settings. The course includes a two-hour seminar and eight hours of supervised weekly experiences in a variety of community child care facilities. This course is useful for CDA (Child Development Associate) documentation. Ten contact hours: two lecture hours, eight laboratory hours.

EDG 2941 Supervised Student Participation

6 Credit Hours

Prerequisites: CHD 1220, CHD 1710, EDG 2940, EEC 1001, EEC 1200 and EEC 1202. This course is designed for students to apply acquired knowledge and skills through supervised work experiences in child care facilities. The course includes a

two-hour seminar and eight hours supervised field experiences weekly. This course is useful for CDA (Child Development Associate) documentation. Ten contact hours: two lecture hours, eight laboratory hours.

EDP — Educational Psychology

EDP 2002 Educational Psychology (Y)

3 Credit Hours

Prerequisite: PSY 1012. This course presents the theoretical principles underlying successful classroom practices and assists students in translating that knowledge into classroom use. Three contact hours. (CBE)

EEC — Education: Early Childhood

EEC 1001 Introduction to Early Childhood Education

3 Credit Hours

This course introduces basic principles and practices involved in guiding the young child. The course includes history and objectives of early childhood programs, child care issues, center licensing standards, and classroom activity planning. The course includes Module I of the HRS child care worker training course and is useful for CDA (Child Development Associate) documentation. Three contact hours.

EEC 1200 Overview of Early Childhood Curriculum

3 Credit Hours

Prerequisite: EEC 1001. This course acquaints students with basic principles and resources for music, art, language arts and social studies activities for the young child. The course includes planning and methodology for child care teachers in a day care setting. This course is useful for CDA (Child Development Associate) documentation. Three contact hours.

EEC 1202 Program Development in Early Childhood Education

3 Credit Hours

Prerequisite: EEC 1001. This course acquaints students with basic principles and resources

for health, safety, nutrition, mathematics, science and movement education activities for the young child. The course includes teacher planning and methodology. The course includes Module II of the HRS child care worker training course and is useful for CDA (Child Development Associate) documentation. Three contact hours.

EET — Electronic Engineering Technology

EET 1035 Fundamentals of DC/AC Electricity (Y)

3 Credit Hours

Prerequisite: MAT 1033 or satisfactory score on placement test. Corequisite: MAC 1105. This is an introductory course in basic electricity intended for the engineering technology programs. It consists of the concepts, laws and definitions encountered in DC and AC electric circuits. Laboratory exercises are required. Four contact hours: three lecture hours, one laboratory hour. (CBE)

EET 1037 DC/AC Network Analysis

3 Credit Hours

Prerequisites: EET 1035 and MAC 1105. Corequisite: MAC 1114. This course covers the network analysis techniques used in DC and AC circuits. The course is quantitative in nature and makes liberal use of algebra and trigonometry. It is assumed that students enrolling in this course have an understanding of the fundamentals of DC and AC electricity. The course includes instruction in BASIC and incorporates computer analysis techniques. Four contact hours: three lecture hours, one laboratory hour.

EET 1144 Solid-State Devices (Y)

3 Credit Hours

Prerequisites: EET 1035 and MAC 1105. This course is an introduction to the solid-state devices and circuits encountered in present day electronic equipment. Devices covered include, but are not limited to, diodes,

transistors, op-amps and thyristors. Four contact hours: three lecture hours, one laboratory hour. (CBE)

EET 2147 Solid-State Circuit

Analysis (Y)

3 Credit Hours

Prerequisites: EET 1037 and EET 1144. Mathematical and functional analysis of the solid-state circuits encountered in present day electronic equipment are the main concerns of this course. It also considers some design concepts including a section on printed circuit board design. Four contact hours: three lecture hours, one laboratory hour.

EET 2324 Communications

Electronics

3 Credit Hours

Prerequisites: EET 2147 and CET 1114. This introductory course in the specialized field of communications electronics includes the fundamental concepts of communications circuits and signal modulation. This course is intended for students who have already acquired a solid foundation in electricity and electronics and desire to specialize in communications electronics. Four contact hours: three lecture hours, one laboratory hour. (CBE)

EET 2940 Biomedical Practicum

4 Credit Hours

Prerequisites: EET 2147, EST 2112 and EST 2436. This course is designed to provide students with the essential electronic troubleshooting and clinical skills necessary to function as competent biomedical equipment technicians in a hospital setting. The course will be conducted at various local hospitals and will consist of supervised device circuit analysis, troubleshooting training and on-the-job training with practicing BMETs. Eight contact hours: all laboratory.

EHD — Education: Hard of Hearing and Deaf

EHD 1000 Orientation to Deafness 3 Credit Hours

This course is an introduction and orientation to the physical, psychological, educational, legal, and social aspects of deafness. The course will deal with the impact of deafness on the individual and family, as well as the social patterns of the deaf community and culture. It will also describe historical and changing attitudes toward the culture of the deaf. Three contact hours.

EHD 1400 Introduction to Interpreting 4 Credit Hours

Prerequisites: SPA 1380 and SPA 1382. This course is an introduction to the basic theories, guidelines, principles and practices of interpreting, including the role of the interpreter, professional behavior and the ethics of interpreting. Environmental considerations of communication and interpreting will be discussed. The course also includes a practice component for the development of beginning interpreting skills and will parallel with the theoretical models. Four contact hours.

EHD 1402 Issues in Educational Interpreting 6 Credit Hours

Prerequisite: EHD 1406. This course is designed to provide advanced level interpreter training students with an introduction to the sign systems and processes used in the public school K-12 and postsecondary educational settings. The role and ethics of the educational interpreter, technical and educational sign vocabulary, and use of transliteration and interpreting in varying situations will be the focus of the course. Advanced training in expressive and receptive interpreting skills and drill and practice will increase the speed and fluency of the interpreting process. Six contact hours.

EHD 1404 Interactive Transliterating 3 Credit Hours

Prerequisite: EHD 1406. Corequisite: EHD 1407. This course is designed to provide skill development for expressive and receptive transliterating through drill, practice and role play activities. Students will practice from audio taped, video taped and live material and will learn the techniques of self-assessment through video taping. Three contact hours.

EHD 1406 Interactive Interpreting I 6 Credit Hours

Prerequisite: EHD 1400. This course is a continuation of Introduction to Interpreting. This course reinforces skill development and the expressive and receptive skills of intermediate level of interpreting through drill, practice and role play activities. Students will practice from audio taped, video taped and live voice materials, and will learn the techniques of self-assessment through video taping. The course also offers a practical component for the development of intermediate interpreting skills. Course practice materials will parallel the theoretical models. Six contact hours.

EHD 1407 Interactive Interpreting II 4 Credit Hours

Prerequisite: EHD 1406. This course is a continuation of Interactive Interpreting I. This course provides advanced in-depth discussion and application of techniques and principles for specific interpreting situations and expanded concentration on advanced expressive and receptive manual communication skills. Students will use live models, video tapes and interaction with deaf community members to improve their expressive and receptive intermediate interpreting manual communication skills. Four contact hours.

EHD 1930 Special Topics in Interpreting 2 Credit Hours

Prerequisite: EHD 1406. Corequisite: EHD 1942. This course is designed to be taken in conjunction with interpreting internship during the last semester of the program. Special topics, including business practices, professional conduct and the professional role of the interpreter during internship and employment will be the emphasis of the course. Student interpreters will have the opportunity to apply problem solving approaches to problems encountered during the internship. Two contact hours.

EHD 1941 Interpreting Practicum 2 Credit Hours

Prerequisites: EHD 1404 and EHD 1406. This course provides intermediate and advanced interpreting students with an opportunity to observe the interpreting process in various professional work situations and to gain knowledge of community agencies and resources which serve the deaf community. Students will schedule regular observation hours and according to their level of interpreting skill assist agency staff in normal duties. Practicum experiences are to take place during school/work hours and require a minimum of two hours per week. Two contact hours.

EHD 1942 Interpreting Internship 4 Credit Hours

Prerequisite: EHD 1941. Corequisite: EHD 1930. This course provides an opportunity for advanced level interpreting students to be assigned for one semester to agencies and organizations which serve deaf people. Internship placement will provide working experience, practical application of the theoretical role of professional service providers and an introduction to the duties and responsibilities of interpreters in the community. Four contact hours.

EHD 1945 Evaluation Preparation
1 Credit Hour

Prerequisite: EHD 1941. This course is designed to assist students in refining skills in order to successfully pass the state assessment evaluation systems for interpreters. One contact hour.

**EME — Education:
Technology and Media**

**EME 2040 Introduction to
Educational Technology (Y)**
3 Credit Hours

This course is an introduction to the classroom applications of educational technologies. The course includes a survey of educational hardware and software. Topics include multimedia, interactive media, ethics and legal issues and the Internet. Four contact hours: three lecture hours, one laboratory hour.

**EMS — Emergency
Medical Services**

**EMS 1059 First Responders:
Emergency Care Training**
2 Credit Hours

Corequisite: completion of a health care provider level CPR course, HED 0300 will meet this requirement. Designed specifically for non-medical individuals who wish to learn basic life saving skills, this course provides students with the basic skills necessary to save a life, minimize patient discomfort and prevent further injury. Upon successful completion of this course, students are qualified in basic life support and prepared to enter Fundamentals of Emergency Medical Care, as prerequisite skills are a part of the course content. This course may not be used as an elective by students entering the A.S. or paramedic certificate program. Two and one-half contact hours: two lecture hours, one-half laboratory hour.

**EMS 1119 Fundamentals of
Emergency Medical Care**
6 Credit Hours

Prerequisite: EMS 1059 or consent of professor. Corequisite: EMS 1401. This course, designed to prepare individuals for initial employment as EMTs, includes current techniques practiced by a first-level EMT providing emergency medical care. On successful completion of this course and the corequisite EMS 1401, students are qualified to take the State Registry Examination for EMT Level I. Six contact hours.

**EMS 1401 Fundamentals of
Emergency Medical Care
Clinical Experience**
3 Credit Hours

Prerequisite: EMS 1059 or comparable medical experience. Corequisite: EMS 1119. This course consists of demonstrations of emergency procedures for life-threatening problems which will be practiced in the College laboratory. Clinical rotation in a local hospital emergency care facility is a requirement for this class. Seven contact hours: four laboratory hours, one and one-half clinical hours, one and one-half rescue field experience hours.

EMS 2271 EMT-Paramedic Phase I
6 Credit Hours

Prerequisites: EMS 1119, EMS 1401, BSC 2085C, BSC 2086C and MAT 0024 or satisfactory score on placement test. Corequisite: EMS 2271L. The first of a three-term sequence of instruction for the EMT-paramedic. EMT, human systems and patient assessment, shock and fluid therapy, respiratory system and management of emotional crisis are studied. Six contact hours.

**EMS 2271L EMT-Paramedic
Phase I Lab/Clinical**
6 Credit Hours

Prerequisites: EMS 1119, EMS 1401, BSC 2085C and MAT 1033 or placement into MAT 1033 based on placement test. Corequisites: EMS 2271 and

BSC 2086C. The clinical program consists of a three-term sequence. This clinical segment includes an emergency room and psychiatric in-hospital rotation. Laboratory and clinical application of experience are a continuation of EMT-Paramedic Phase I. Fourteen contact hours: four laboratory hours, six clinical hours, four rescue field experience hours.

EMS 2272 EMT-Paramedic Phase II
6 Credit Hours

Prerequisites: EMS 2271, EMS 2271L and BSC 2086C. Corequisite: EMS 2272L. This course is a continuation of EMT-Paramedic Phase I. The unit of study includes modules addressing the cardiovascular system, general pharmacology, the central nervous system and OB/GYN emergencies. Six contact hours.

**EMS 2272L EMT-Paramedic
Phase II Lab/Clinical**
6 Credit Hours

Prerequisites: EMS 2271 and EMS 2271L. Corequisite: EMS 2272. This course, a continuation of EMT-Paramedic Phase I, will include emergency room rotation and an intensive care and critical care in-hospital rotation. Fourteen contact hours: four laboratory hours, six clinical hours, four rescue hours.

EMS 2273 EMT-Paramedic Phase III
4 Credit Hours

Prerequisites: EMS 2272 and EMS 2272L. Corequisite: EMS 2273L. The last part of the three-term sequences of EMT-paramedic instruction includes soft tissue injuries, musculoskeletal system, medical emergencies, psychological emergencies, pediatric and neonate transport, and management of emotional crisis. Four contact hours.

**EMS 2273L EMT-Paramedic
Phase III Lab/Clinical**
8 Credit Hours

Prerequisites: EMS 2272 and EMS 2272L. Corequisite: EMS 2273. The last part of the three-term sequence of clinical experiences requires riding a mobile

intensive care unit and hospital rotation in a local surgical facility. Sixteen contact hours: two laboratory hours, fourteen clinical hours.

**EMS 2311 Management of
Emergency Medical Services**
3 Credit Hours

Prerequisites: EMS 2273 and EMS 2273L. This course is designed to prepare managers in the EMS profession. Topics include leadership and administrative skills, legal issues, budgeting and personnel management. Three contact hours.

**EMS 2761 Emergency
Medical Services Education**
3 Credit Hours

Prerequisites: EMS 2273 and EMS 2273L. This course is an application of education theories and practices in the emergency medical service profession. Three contact hours.

ENC — English Composition

**ENC 0001 Introduction
to Composition A**
4 Credit Hours

(College preparatory studies course)
(This course does not apply toward the associate's degree.)

Prerequisite: satisfactory score on placement test. This course is an introductory course in composition designed to help students gain greater proficiency in basic writing skills. The course assesses the level at which students are writing to discover individual areas of deficiency in writing skills and provides the necessary instruction to help them overcome these deficiencies. As a result of carefully planned learning experiences, students should be able to write clear, adequately-developed, logically-organized, effective sentences which conform to the conventions of standard American English. This is a college preparatory course and does not apply toward the associate's degree. Four contact hours.

**ENC 0021 Introduction to
Composition B**
4 Credit Hours

(College preparatory studies course)
(This course does not apply toward the associate's degree.)

Prerequisite: ENC 0001 with a grade of "C" or better or satisfactory score on placement test. This course is an introductory course in composition designed to help students gain greater proficiency in basic writing skills. The course assesses the level at which students are writing to discover individual areas of deficiency in writing skills and provides the necessary instruction to help them overcome these deficiencies. As a result of carefully planned learning experiences, students should be able to write clear, adequately-developed, logically-organized, effective paragraphs which conform to the conventions of standard American English. This is a college preparatory course and does not apply toward the associate's degree. Four contact hours.

ENC 1101 English Composition I (Y)
3 Credit Hours

Prerequisite: satisfactory score on reading and writing placement tests. This course embodies the fundamentals of effective expression with emphasis on the various forms of expository writing, logical and imaginative thinking, and reading for understanding. The course provides instruction in sentence structure, diction, organization of short essays and correct usage of standard American English. This course includes CLAST writing competencies and serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

ENC 1102 English Composition II (Y)
3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. As a continuation of English Composition I, this course includes the study and practice in research

writing and writing competencies. This course covers CLAST writing competencies and serves to meet the Gordon Rule writing requirement. Three contact hours.

**ENC 1132 Introduction to
Critical Writing (Y)**
3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. As additional preparation for argumentation and research, this course sharpens students' critical thinking skills and improves their ability to compose analytical, interpretive and evaluative essays in response to selected reading assignments. This course is designed for students who have successfully completed ENC 1101 but seek additional preparation for ENC 1102. Successful completers of ENC 1102 should not enroll in this course. Three contact hours.

**ENC 2103 CLAST Review: Reading,
Essay and English Language Skills (Y)**
1 Credit Hour

Prerequisites: ENC 1101, ENC 1102 and REA 1105 (if required). This course is designed for students who desire a brief, comprehensive review of the essential communications skills including reading, writing and grammar. It is recommended for students who are preparing for the CLAST, students who are retaking CLAST and students who are seeking a refresher course in communications skills. One contact hour.

**ENC 2105 CLAST Review: English
Language Skills and Essay (Y)**
1 Credit Hour

Prerequisites: ENC 1101 and ENC 1102. This course is designed for students who desire a brief, comprehensive review of the essential communication skills including essay writing and grammar. It is recommended for students who are preparing for the CLAST, for students who are retaking CLAST, and for students who are seeking a refresher course in communication skills. One contact hour.

ENC 2210 Technical Report Writing (Y)
3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This is a communications course giving primary emphasis to writing for the professions. The course stresses the use of factual information in descriptive, analytical and researched recommendation reports. The course also provides instruction in writing effective and timely letters, memoranda and informational reports, developing graphs and illustrations, and presenting oral reports. Three contact hours. (CBE)

ENC 2301 Advanced Writing (Y)
3 Credit Hours

Prerequisite: ENC 1102 or ENC 2210. This course is designed to help perfect writing skills developed in freshman composition and to prepare students for sustained writing. Emphasis will be on clarity and elegance (without ostentation) of style. Close readings of samples of good, sophisticated writing will provide the basis for discussion of style and rhetorical principles. Three contact hours.

ENL — English Literature

ENL 2012 English Literature to 1750 (Y)
3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course introduces the main literary traditions from Beowulf through the Restoration and the 18th century. It provides a study of the most characteristic writings of these periods. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

ENL 2022 English Literature Since 1750 (Y)
3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course introduces the main literary traditions from the Romantic and Victorian periods to the present. It provides a study of the best and most characteristic

writings of these periods. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

ENS — English as a Second Language (for Non-Native Speakers)

ENS 1201 ESL Speech — Level II (Y)
3 Credit Hours

Prerequisite: listening placement test score at Level II or successful completion of ESL college-prep series. Corequisites: ENS 1221, ENS 1241, ENS 1261 and ENS 1281. This course will give students practice in the appropriate usage of idioms and expressions and phonetic patterns in spoken English. Students will practice both listening comprehension and conversational patterns through individual and group presentations. Students will engage in individual laboratory practice, group exercises, short lectures and conversations which will enhance their speaking and listening vocabularies, grammatical speech patterns and oral comprehension. Strong emphasis will be placed on phonological theory and practice. Three contact hours.

ENS 1221 ESL Reading — Level II (Y)
3 Credit Hours

Prerequisite: reading placement test score at Level II or successful completion of ESL 0121. Corequisites: ENS 1201, ENS 1241, ENS 1261 and ENS 1281. This course gives students practice in gaining increased vocabulary as well as reading speed and comprehension at both the literal and inferential levels. Reading activities include skimming for main ideas, scanned and speed reading. It will also place emphasis on techniques of vocabulary development as well as techniques identifying basic forms of paragraph development. It will include activities which encourage students to further develop their oral and written proficiency in English. Three contact hours.

ENS 1241 ESL Writing — Level II (Y)
3 Credit Hours

Prerequisite: writing sample at Level II or successful completion of ESL 0141. Corequisites: ENS 1201, ENS 1221, ENS 1261 and ENS 1281. This course gives students practice in writing unified, coherent paragraphs. Students will learn how to develop and write specific types of paragraphs, such as process, explanation, comparison/contrast, and course/effect. In addition students will practice using correct grammatical structures, punctuation and spelling. Three contact hours.

ENS 1261 ESL Structure — Level II (Y)
3 Credit Hours

Prerequisite: structure placement test score at Level II or successful completion of ESL 0161. Corequisites: ENS 1201, ENS 1221, ENS 1241 and ENS 1281. This course gives students the opportunity to develop skill in the use of English grammar in basic patterns involving interrogative, declarative and exclamatory sentences. It emphasizes verb tenses, irregular parts of speech and other features of grammar. Activities will involve oral and written exercises in sentence transformation/combination, communicative interaction, and controlled writing. Three contact hours.

ENS 1281 ESL Combined Skills — Level II (Y)
3 Credit Hours

Prerequisite: placement test scores at Level II or successful completion of ESL college-prep series. Corequisites: ENS 1201, ENS 1221, ENS 1241 and ENS 1261. The purpose of the combined skills course is to focus on the integration of the communication skills taught in ENS 1201, ENS 1221, ENS 1241 and ENS 1261. Students will participate in learning activities which promote spontaneous use of language in oral and written form. Students will develop personal strategies for analyzing

and correcting their pronunciation, listening, speaking and writing problems. Through their carefully structured tasks, teachers will systematically analyze and correct student errors in ways to promote personal growth and increased proficiency. The materials used to integrate the skills in this course will promote appreciation of the students' own cultures as well as the understanding of American values and customs. Three contact hours.

ENS 1301 ESL Speech — Level III (Y)
3 Credit Hours

Prerequisite: listening placement test score at Level III or successful completion of ENS 1201. Corequisites: ENS 1321, ENS 1341, ENS 1361 and ENS 1381. This course stresses the practice of the principles and methods involved in oral/aural communications. Students will engage in purposeful and sometimes guided discussions on a variety of topics. In addition, students will be given the opportunities to practice listening and notetaking skills through video taped authentic lectures by FCCJ professors. Individual laboratory practice in pronunciation, stress, intonation and listening skills for academic purposes is an integral part of this course. Three contact hours.

ENS 1321 ESL Reading — Level III (Y)
3 Credit Hours

Prerequisite: reading placement test score at Level III or successful completion of ENS 1221. Corequisites: ENS 1301, ENS 1341, ENS 1361 and ENS 1381. Students learn to read materials that will increase their vocabulary, develop their critical thinking skills, improve their understanding of American culture and prepare them for entrance into mainstream courses. The readings will not only instruct students in comprehension techniques but also will give instruction in various aspects of American culture. Various library exercises will introduce students to the

campus library and teach them how to use the resources. Three contact hours.

ENS 1341 ESL Writing — Level III (Y)
3 Credit Hours

Prerequisite: writing sample at Level III or successful completion of ENS 1241. Corequisites: ENS 1301, ENS 1321, ENS 1361 and ENS 1381. This course is designed to refine students' writing skills. Students learn the step-by-step process method of paragraph and essay writing with an emphasis on four-paragraph essays. The use of correct grammatical form, mechanics and punctuations is emphasized. Students will practice writing essays in different organizational patterns throughout the semester. Three contact hours.

ENS 1361 ESL Structure — Level III (Y)
3 Credit Hours

Prerequisite: writing sample at Level III or successful completion of ENS 1261. Corequisites: ENS 1301, ENS 1321, ENS 1341 and ENS 1381. This course is designed to provide review and reinforcement of basic English structures. It includes certain grammatical features of high frequency in English. Students will review verb tenses and be able to perform written and oral transformations of complex English structure patterns. The desired outcome is for students to improve their performance in all skill areas. Three contact hours.

ENS 1381 ESL Combined Skills — Level III (Y)
3 Credit Hours

Prerequisite: placement test scores at Level III or successful completion of ENS 1200 series. Corequisites: ENS 1301, ENS 1321, ENS 1341 and ENS 1361. The purpose of the combined skills course is to focus on the integration of the communication skills taught separately in ENS 1301, ENS 1321, ENS 1341 and ENS 1361. Students will participate in learning activities which promote spontaneous use of language in oral and

written form. Students will develop personal strategies for analyzing and correcting their pronunciation, listening, speaking and writing problems. Through their carefully structured tasks, teachers will systematically analyze and correct student errors in ways to promote personal growth and increased proficiency. The materials used to integrate the skills in this course will promote appreciation of the students' own cultures as well as the understanding of American values and customs. Three contact hours.

ESL — English as a Second Language — Preparatory

ESL 0101 ESL Speech — Level I
3 Credit Hours

(College preparatory studies course)
(This course does not apply toward the associate's degree.)

Prerequisite: listening placement test score at Level I. Corequisites: ESL 0121, ESL 0141, ESL 0161 and ESL 0181. This course stresses the fundamentals of speech for non-native speakers of English. It focuses on improving spoken English for increased intelligibility and also focuses on improving listening skills for greater understanding of spoken English. The course provides instruction in the production of speech sounds, stress, intonation and rhythm in spoken English. Three contact hours.

ESL 0121 ESL Reading — Level I
3 Credit Hours

(College preparatory studies course)
(This course does not apply toward the associate's degree.)

Prerequisite: reading placement test score at Level I. Corequisites: ESL 0101, ESL 0141, ESL 0161 and ESL 0181. The purpose of the course is to instruct students in techniques for grasping sentence and paragraph meaning. Students will learn word meanings in context and will increase their vocabulary. They will develop skills in determining literal meaning with minimal use of their bilingual

dictionaries. The course will focus on increasing reading comprehension. It will lead students through increasingly complex reading passages to help them progress from literal meanings toward critical reading and thinking. Further, it will provide opportunities, through reading, to understand important ideas and values in American life. Three contact hours.

ESL 0141 ESL Writing — Level I

3 Credit Hours

(College preparatory studies course)

(This course does not apply toward the associate's degree.)

Prerequisite: writing sample at Level I. Corequisites: ESL 0101, ESL 0121, ESL 0161 and ESL 0181. The first half of the course will focus on controlled writing practice, beginning at the sentence level. Students will write short descriptions and narratives based on personal experience. This intensive writing practice serves to help establish a purpose for writing and give students confidence in their ability to do so. The second half of the course will introduce students to writing as a process. They will practice, individually and in groups, writing paragraphs that demonstrate their competency in using the process, the format and the standards of acceptable writing. Additional rhetorical modes may be introduced. Three contact hours.

ESL 0161 ESL Structure — Level I

3 Credit Hours

(College preparatory studies course)

(This course does not apply toward the associate's degree)

Prerequisite: structure placement test score at Level I. Corequisites: ESL 0101, ESL 0121, ESL 0141 and ESL 0181. The purpose of the course is to present in meaningful sequence the grammar of the English language with a view toward linking the systematic study of the grammar to language use in purposeful communication. Students will apply the grammar points learned

to the listening, speaking and writing activities in the corequisite classes. Three contact hours.

ESL 0181 ESL Combined Skills —

Level I

3 Credit Hours

(College preparatory studies course)

(This course does not apply toward the associate's degree.)

Prerequisite: placement test score at Level I. Corequisites: ESL 0101, ESL 0121, ESL 0141 and ESL 0161. The purpose of the combined skills course is to focus on the integration of the communication skills taught in ESL 0101, ESL 0121, ESL 0141 and ESL 0161. Students will participate in learning activities which promote spontaneous use of language in oral and written form. Students will develop personal strategies for analyzing and correcting their pronunciation, listening, speaking and writing problems. Through their carefully structured tasks, teachers will systematically analyze and correct student errors in ways to promote personal growth and increased proficiency. The materials used to integrate the skills in this course will promote appreciation of the students' own cultures as well as an understanding of American customs and values. Three contact hours.

EST — Electronic Specialty Technology

EST 1412 Biomedical

Technology and Techniques

3 Credit Hours

Prerequisites: EET 1035 and BSC 2085C. This course, designed to introduce students to the hospital, biomedical equipment manufacturers and the contract maintenance organizations, emphasizes the organizational structure of the hospital and identifies the role of the BMET within this framework. The course will also introduce students to the literature in professional journals covering facets of the BMET's job with particular emphasis on instrument critiques, electrical safety standards and

new products. Finally, the course will utilize a system approach in analyzing how technology is applied in the health-care setting, from the medical and administrative management viewpoints. Systems analyzed will include intensive care unit, cardiovascular diagnostic laboratory and operating rooms. Three contact hours.

EST 2112 Electrical-Electronic

Control Systems

3 Credit Hours

Prerequisites: EET 2147 and CET 1114. This course consists of the study of the operation and control of industrial equipment and processes including motors and the controlling systems involved in their operation and protection. Four contact hours: three lecture hours, one laboratory hour.

EST 2436 Biomedical Instrumentation I

3 Credit Hours

Prerequisites: CET 1114, EET 2147 and EST 1412. This course introduces students to the biomedical equipment used in patient vital signs measurement and monitoring, respiratory system measurement and monitoring, and the clinical environment in which these devices are used. Students will learn external operating characteristics of devices as well as internal circuitry. Students will utilize these concepts in verifying device performance, in performing necessary calibration and in learning preventive and corrective maintenance techniques. Four contact hours: two lecture hours, two laboratory hours. (CBE)

EST 2438 Biomedical

Instrumentation II

3 Credit Hours

Prerequisite: EST 2436. This course, a continuation of the study of biomedical instrumentation, introduces students to the remaining biomedical equipment of significance typically utilized in the health care setting, i.e. in the operating room, the labor and delivery room, radiology, nuclear medicine, radiation

therapy and clinical laboratory. Students will learn the external operation of devices, their internal electronic circuitry and the clinical environment in which they are used. Students will utilize these concepts in the lab to verify device performance, to perform calibration and to learn preventive and corrective maintenance techniques. Four contact hours: two lecture hours, two laboratory hours. (CBE)

EST 2603 Robotics
3 Credit Hours

Prerequisites: CET 2123, EST 2112 and ETG 2502. This course covers the fundamentals of operation, construction, repair and servicing of robots from the technician's point of view. Along with the prerequisite courses, it prepares technicians to install and maintain robots and other related automated industrial equipment. Hands-on exercises with trainer robots in the areas of assembly, troubleshooting and programming are required for all students. Four contact hours: three lecture hours, one laboratory hour.

ETC — Engineering Technology: Civil

ETC 2220 Soils and Foundations
3 Credit Hours

Prerequisite: ETG 2530. This course covers the criteria used in the selection, design and construction of the elements of a structure that transfers its total load to the underlying formations. Theoretical aspects considered and treated are analysis of subsoil conditions, bearing capacity and settlement analysis, character of natural soil deposits, earth pressure and retaining wall theory, and stability of slopes and subgrades. This course also covers the basic types of prevalent foundations, their design and behavior characteristics. Four contact hours: three lecture hours, one laboratory hour.

ETC 2450 Concrete
3 Credit Hours

Prerequisite: ETI 1420. The course is a study of the fundamentals of concrete and its use as an engineering material. Topics included in the course are the design of concrete mixtures, use of admixtures, placement, special types of concrete and the field-laboratory procedures used to achieve quality control. The course consists of lectures and laboratory. Four contact hours: two lecture hours, two laboratory hours.

ETC 2500 Highway Drafting and Route Design
3 Credit Hours

Prerequisite: CGS 2470. This course is concerned with the elements of a transportation roadway and their functions, the effects of traffic and functions, the effects of traffic and vehicular characteristics on road design, length of highway, curvature and elevation of roadbeds and earthwork computations applied to highway route design. Four contact hours: two lecture hours, two laboratory hours.

ETD — Engineering Technology: Drafting

ETD 1100 Engineering Drawing (Y)
3 Credit Hours

This survey course consists of the principles and practices involved in making and reading engineering drawings with emphasis on lettering, industrial symbolism, orthographic projection and multiview representation. This course also includes instruction and practice in descriptive geometry. Five contact hours: two and one-half lecture hours, two and one-half laboratory hours. (CBE)

ETD 2350 CAD — Advanced
3 Credit Hours

Prerequisite: CGS 2470. The course presents 3D drawings and AutoLISP concepts for increasing drawing/design productivity. The basics of AutoLISP, development of files, functions, and applications of advanced

techniques are presented. Five contact hours: two lecture hours, three laboratory hours.

ETD 2536 CAD — Mechanical Electrical
3 Credit Hours

Prerequisite: CGS 2470. The course deals with the use of AutoCAD and/or similar software for mechanical-electrical drawing and design applications. The emphasis in the course is on the use of computer graphics for the preparation of mechanical-electrical drawings. Commercial as well as industrial structures are included. Five contact hours: two lecture hours, three laboratory hours.

ETD 2538 CAD — Architectural
3 Credit Hours

Prerequisites: TAR 2120 and CGS 2470. This course covers the use of AutoCAD and/or similar software for architectural design and plan preparation. Emphasis in the course is on developing an understanding of AutoCAD and architectural software and applying this understanding to architectural practice. Residential as well as commercial applications are presented. Five contact hours: two lecture hours, three laboratory hours.

ETD 2542 Structural Drafting
3 Credit Hours

Prerequisite: TAR 2120. This course is a study of the required steel and concrete plans for building and the preparation of the shop details from those plans. Given the structural design of a building, students will prepare both the structural plan and the shop details necessary for the fabrication of the structural members. Four contact hours: two lecture hours, two laboratory hours.

ETD 2548 CAD — Civil
3 Credit Hours

Prerequisite: CGS 2470. This course deals with the use of AutoCAD and similar software for the preparation of engineering drawings as they relate to site planning, land development

and other civil engineering drawings. Emphasis in the course is on developing an understanding of computer graphics software and applying this understanding in the preparation of engineering drawings. Five contact hours: two lecture hours, three laboratory hours.

ETG — Engineering Technology: General

ETG 2502 Engineering Mechanics (Y) 3 Credit Hours

Prerequisite: MAC 1114. This course is an introduction to the basic laws of mechanics and includes a study of force, motion, moments, couples, static equilibrium, centroids, friction, work and energy. The laboratory portion of the course will emphasize the practical aspects of the above topics and will include exercises in measurements, drive systems, linkages, support members, etc. Four contact hours: three lecture hours, one laboratory hour. (CBE)

ETG 2530 Testing and Strength of Materials (Y) 3 Credit Hours

Prerequisites: ETG 2502 and ETI 1420. This course is a study of the basic concepts involved in determining the resistance of engineering materials of various loads with emphasis on the applied use of various formulae for a systematic analysis. The laboratory portion of the course involves actual stress testing with stress testing equipment. Four contact hours: three lecture hours, one laboratory hour.

ETI — Engineering Technology: Industrial

ETI 1400 Introduction to Mechanical Systems and Electricity 3 Credit Hours

This course is intended for machine operators in an industrial setting. It covers basic theory and applications of mechanical systems and electrical power of these systems. This is a required course for majors in the pulp and paper A.S. degree program.

Four contact hours: three lecture hours, one laboratory hour.

ETI 1420 Engineering Materials and Processes (Y) 3 Credit Hours

This course is a study of the leading materials used in engineering and building construction. It examines the materials in terms of their properties, forming processes and applications. Three contact hours.

ETI 1491 Pulping I 3 Credit Hours

This course provides an introduction to the pulp and paper industry. It includes a historical overview as well as plant science, operations and equipment. Three contact hours.

ETI 1492 Pulping II 3 Credit Hours

This course provides an introduction to the various bleaching processes used in the pulp and paper industry. It includes the preparation of bleach chemicals and paper making stock as well as a limited look at the recycle process. Three contact hours.

ETI 1493 Pulping III 3 Credit Hours

This course provides an introduction to paper making machines and machine operations in the pulp and paper industry. It also includes the machine stock preparation and finishing and shipping operations. Three contact hours.

ETI 1494 Pulping IV 3 Credit Hours

This course is designed to make students aware of environmental concerns as applied to the pulp and paper industry. Three contact hours.

ETI 1700 Occupational Safety (Y) 3 Credit Hours

This course imparts the knowledge essential to safe practices in industry. Included in the course are an examination of current industrial safety management methods and the major provisions of the Occupational Safety and Health Act. Three contact hours. (CBE)

ETI 2781 Industrial Supervision (Y) 3 Credit Hours

The purpose of this course is to prepare students for a role in the world of work as they assume responsibilities leading toward supervisory positions and management. Three contact hours. (CBE)

ETM — Engineering Technology: Mechanical

ETM 1700 Air Conditioning Fundamentals 3 Credit Hours

Corequisite: MAC 1140. This course covers the basic principles of air conditioning technology including heat pumps. The basic underlying theory and principles are presented. They include fluids and pressures, pressure-enthalpy relationships, heat transfer, psychrometrics and the relationships between air properties and comfort. Various technical options currently available in terms of system components and design are introduced. Three contact hours.

ETM 2310 Fluid Mechanics 3 Credit Hours

Prerequisites: MAC 1114 and ETI 1420. This course deals with fluid properties, fluid statics, buoyancy and stability, flow of fluids in pipes and open channels, flow measurement and forces due to fluids in motion. Four contact hours: three lecture hours, one laboratory hour. (CBE)

EUH — European History

EUH 1000 Western Civilization Through 1589 (Y) 3 Credit Hours

This course consists of a survey of the cultural beginnings of civilization and the diffusion and accumulation of culture through the Reformation. Three contact hours. (CBE)

EUH 1001 Western Civilization From 1589 to the Present (Y) 3 Credit Hours

This course in modern western institutions from 1715 to the present day includes the development of modern Europe to

the present. The course includes reading and writing competencies. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

FAD — Home Economics: Family Development

FAD 1230 Family Dynamics 3 Credit Hours

This course studies the interpersonal relationship of personal and family problems including analysis of the basic elements involved in courtship, mate selection, engagement, marriage, parenthood and child development. It also covers topics such as acceptable standards of social behavior, personal appearance, social customs, personality development, human relations and consideration of the various occupational opportunities within the broad field of family, and consumer technology. Three contact hours.

FFP — Fire Fighting and Protection

FFP 1000 Introduction to Fire Protection (Y) 3 Credit Hours

This course is a study of the philosophical and historical backgrounds of fire protection services including the role and responsibilities of the fire service, the organization and function of federal, state, county and private fire protection agencies, a review of municipal fire defenses, fire prevention principles, techniques of fire control, codes and ordinances, the problems of the fire administrator and a survey of professional fire protection career opportunities. Three contact hours. (CBE)

FFP 1100 Fire Service Organization 3 Credit Hours

This course presents the principles of organization and administration in fire protection service, a study of company personnel management and training, fire equipment, communications, maintenance, budgeting,

records and reports, insurance rating systems and public relations. Three contact hours.

FFP 1110 Fire Company Supervision and Management 3 Credit Hours

This course, a review of the structure and functions of a fire company as a component of a municipal organization, stresses the duties and responsibilities of the company officer, including planning, training, records and reports, and employee supervision. Three contact hours.

FFP 1200 Fundamentals of Fire Prevention 3 Credit Hours

The course presents the structure and function of the fire prevention organization including the interpretation and application code regulations, a study of the procedures and techniques of fire prevention, including inspection, surveying and mapping, recognition and elimination of fire hazards, the problems of public relations and the coordination with other governmental agencies. Three contact hours.

FFP 1315 Fire Codes and Standards 3 Credit Hours

In this course students will learn to identify and describe the design deficiencies that are responsible for the spread of fire, heat and smoke in the buildings. They will be able to explain the effects and results of fire protection when incorporated in building construction. Three contact hours.

FFP 1620 Private Fire Protection Systems 3 Credit Hours

This course is a study of private fire and detection systems including fixed extinguishing systems and standard and/or special fire alarms. It also includes a review of the design, installation, maintenance and testing of the systems. Three contact hours.

FFP 2150 Fire Service Instructor 3 Credit Hours

This course is designed for students seeking the State Fire Company Officer I Certification. Students will learn the purpose and types of training necessary in fire department operations. In addition, selection criteria for instructors and utilization of training equipment will be presented. Three contact hours. (CBE)

FFP 2210 Fire Investigation 3 Credit Hours

This course presents the principles of fire investigation including methods of determining area of fire origin, fire cause and fire spread, location and preservation of evidence, interrogation of witnesses, arson detection and arson laws, case preparation and court procedures, and reports and records. Three contact hours.

FFP 2300 Fire Codes and Building Construction 3 Credit Hours

This course includes the study of federal, state and local laws applicable to the fire service, a survey of Fire Codes and Standards of the National Fire Protection Association and the Fire Prevention Code of the American Insurance Association, the role of the State Fire Marshal, and the principles and practices used in building construction. Three contact hours.

FFP 2326 Blueprints Reading and Plans 3 Credit Hours

This course presents the structure and function of the fire prevention through the interpretation and application of blueprints. Using these codes, standards and inspection techniques learned previously, students will review building plans to find errors and omissions, make corrections according to code and identify where each item is located in the blueprints. Three contact hours.

**FFP 2400 Fire Fighting
Tactics and Strategy**
3 Credit Hours

This course covers the basic concepts involved in fire fighting, including fire behavior, size-up, attack principles, utilization of available manpower and equipment, and preplanning fire problems. Emphasis will be on developing thinking skills in relation to crises. Three contact hours.

FFP 2500 Hazardous Materials I
3 Credit Hours

This course presents the basic fundamentals of chemistry used in fire science types of chemicals and processes, and laws at federal, state and local levels pertaining to use, storage and transportation of chemicals. Topics also covered include hazards of radioactives, precautions to observe in fighting fires involving hazardous materials and laboratory demonstrations of incompatibles. Three contact hours.

FFP 2501 Hazardous Materials II
3 Credit Hours

Prerequisite: FFP 2500. This course is a continuation of Hazardous Materials I and is divided into two sections. The first section deals with why materials explode, why they are unstable and how they react with water, air and each other. The second section explores toxicity. Three contact hours.

**FFP 2502 Introduction to Hazardous
Materials/Waste Management**
3 Credit Hours

This course is an overview of the environmental impacts resulting from management of hazardous materials. Emphasis is placed on understanding the sources responsible for soil, water and air pollution. Three contact hours.

**FFP 2515 Introduction to
Environmental Law and Policies**
3 Credit Hours

This course introduces the current federal laws that regulate the assessment, use, handling, storage and disposal of hazardous materials. It includes: the

Clean Air Act, Clean Water Act, RCRA Toxic Substance Control Act, Federal Pesticide Act, CERCLA, and SARA. Three contact hours.

**FFP 2520 Sampling and Monitoring
of Hazardous Conditions**
3 Credit Hours

This course teaches how to detect, monitor and measure hazardous conditions including flammability, oxygen deficiency, toxicity, and PH. Sampling, chain of custody, storage, preservation and transportation will be discussed. Three contact hours.

**FFP 2522 OSHA Hazardous Waste
Operation and Emergency Response**
3 Credit Hours

This course covers OSHA 29CFR1910.120 HAZWOPER Regulations. Successful completion of this course is required by the federal government before a worker may enter a hazardous waste site. Three contact hours.

FFP 2523 Hazard Site Analysis
3 Credit Hours

This course teaches students to develop a safety plan and conduct operations around a hazardous waste site or an emergency chemical spill site. Maintaining OSHA compliance will be stressed. Three contact hours.

**FFP 2524 Transportation of
Hazardous Materials**
3 Credit Hours

This course explores regulations involving the transportation of hazardous materials and waste. It includes manifests, generator and transporter standards, DOT hazard classes, placards, labels, markings and spill response. Three contact hours.

**FFP 2526 Oil Pollution
Prevention and Response**
3 Credit Hours

This course explores the Oil Pollution Act of 1990. Topics include prevention, contingency planning, Mutual Act Agreements, liability, and oil spill cleanup. Three contact hours.

**FFP 2600 Fire Fighting
Equipment and Apparatus**
3 Credit Hours

This course covers the principles of pumping, construction and operation of pumps and pumping accessories, driving and pumping practices, principles and operation of aerial ladders, hydraulic systems, water supply, troubleshooting and related subjects. The course also includes the principles of the care, maintenance and operation of fire department vehicles. Subjects covered include theory of internal combustion engines, power development and transmission, torque and horsepower, electrical and brake systems, carburetion, engine tune-up and troubleshooting, characteristics of fuels and lubricants and other related principles of automotive vehicles. Three contact hours.

FIL — Film

FIL 1000 The Movies as Art (Y)
3 Credit Hours

Prerequisite: ENC 1101 or satisfactory score on placement test. This general survey course examines the development of the motion picture as a universal art form, its historical and international background, theme and subject selection and script development, technological equipment and innovations, elements of visual composition, sound and music, acting and directing, and film criticism and analysis. This course examines the motion picture as a universal expression of man's varied cultures and creative expressions. This course includes reading and writing competencies. Four contact hours (lecture/viewing).

**FIL 1100 Introduction to
Screen Writing (Y)**
3 Credit Hours

Prerequisite: ENC 1101. This course includes writing scripts for television and motion pictures and how to effectively market them. Students will learn techniques to guide them from the

germination of an idea to the revision of the final draft. Genres studied include episodic television, long-form television, and motion pictures, with concentration on characters, dialogue, structure, and visualization. Three contact hours.

FIL 1200 Introduction to Film Production (Y)

3 Credit Hours

This introductory course in film production will introduce students to the principles of single-camera story telling using 16mm film as the medium of expression. Students will learn basic filming and editing techniques, as well as the fundamentals of assisting on major 35mm feature productions. Six contact hours: three lecture hours, three laboratory hours.

FIL 1250 Film and Video Post-Production (Y)

3 Credit Hours

Prerequisite: FIL 1200. This course provides an introduction to the fundamentals of editing digital video, 16mm motion picture film, multitrack audio, and other audio and visual elements, including both cel (film) and computer animation, into a finished product. Techniques are learned on both linear video and film editors and on non-linear computer-based editing systems. Six contact hours: two lecture hours, four laboratory hours.

FIN — Finance

FIN 2000 Principles of Finance (Y)

3 Credit Hours

This course consists of the study of investment characteristics of stocks and bonds, the securities market, introduction to securities analysis, commercial banks, the federal reserve system, inflation, deflation and money supply, and the history and nature of money and financial management. Three contact hours.

FIN 2100 Personal Finance (Y)

3 Credit Hours

This course is a study of economic and personal goals including personal budgeting, credit buying, borrowing money, banking facilities, the nature of investments, life insurance, casualty insurance, medical insurance, home ownership, stocks and bonds, and retirement plans. Three contact hours.

FOS — Food Science

FOS 1201 Sanitation and Safety Management

3 Credit Hours

Students will explore the scientific rationale for sanitation and safety practices which are enforced for group protection in institutions and food service facilities. Students will identify causative agents of food-borne illnesses and demonstrate preventive techniques by adhering to sanitation standards. The course emphasizes methods of accident and fire prevention. Three contact hours. (CBE)

FRE — French Language

FRE 1000 Conversational French (Y)

3 Credit Hours

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used; students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work).

FRE 1120 Beginning French I (Y)

4 Credit Hours

This beginning course consists of the fundamentals of French speech and grammar taught by integrating the basic communication skills of hearing and understanding, speaking, reading and

writing. Five contact hours: four lecture hours, one unsupervised laboratory hour. (CBE)

FRE 1121 Beginning French II (Y)

4 Credit Hours

Prerequisite: FRE 1120 or equivalent. This course is a continuation of Beginning French I. Five contact hours: four lecture hours, one unsupervised laboratory hour. (CBE)

FRE 2200 Intermediate French I (Y)

3 Credit Hours

Prerequisite: FRE 1121 or equivalent. This course includes reading from modern and classic French authors, grammar review and conversation. Four contact hours: three lecture hours, one unsupervised laboratory hour. (CBE)

FRE 2201 Intermediate French II (Y)

3 Credit Hours

Prerequisite: FRE 2200. This course is a continuation of Intermediate French I. Four contact hours: three lecture hours, one unsupervised laboratory hour. (CBE)

FSS — Food Service Systems

FSS 1100 Menu and Marketing Management

3 Credit Hours

Students will acquire knowledge and demonstrate skills in menu planning, costing and pricing menu items, and designing menu format. The course will utilize effective merchandising methods in food display, advertising and interior decorating and emphasizes positive public relations techniques. Three contact hours.

FSS 1120 Management of Food and Beverage Purchasing

3 Credit Hours

Students will acquire the fundamentals involved in purchasing food and beverages in quantity. The course emphasizes standardizing, grading and estimating, selecting, receiving and storing foods and beverages, as well as the practical application

in writing specifications and in developing purchasing techniques. Three contact hours.

FSS 1200 Culinary Terminology and Procedures
1 Credit Hour

This course in culinary terminology and procedures will introduce students to standard kitchen phrases. Students will identify and describe equipment used in the kitchen and identify and describe basic cooking procedures. The course will also include the importance of use of standard kitchen measurement terminology and recipe conversion. One contact hour.

FSS 1202 Food Production I
3 Credit Hours

Students will acquire knowledge and skill in the preparation of food. Included are basic principles and techniques of food preparation, management of resources, use of recipes, use and care of equipment and evaluation of food products. The course emphasizes safety and sanitation practices. Eight contact hours: two lecture hours, six laboratory hours. (CBE)

FSS 1221 Food Production II
3 Credit Hours

Prerequisite: FSS 1202. Students will focus on the knowledge and preparation of meats, poultry, seafood, as well as starches, fruits and vegetables. Students will utilize all dry and moist methods of cooking. Menu selection and balance will be studied. The course emphasizes safety and sanitation procedures. Students will operate kitchen equipment and tools. Eight contact hours: two lecture hours, six laboratory hours.

FSS 1240 American Regional Foods
3 Credit Hours

Prerequisite: FSS 1221. Students will plan and prepare menus that demonstrate various American regional and modified service styles. They will utilize principles from Food Production II to plan and cost the menu, convert recipes, prepare a work

schedule and a summary report. Eight contact hours: two lecture hours, six laboratory hours.

FSS 1242 International Foods
3 Credit Hours

Prerequisite: FSS 1221. In this course students will study and practice a la carte menu preparation for fine dining room service. Students will study the classical/international menus of Europe and the Orient. Special focus will be given to place presentation, portion control and expediting. Eight contact hours: two lecture hours, six laboratory hours.

FSS 1246 Baking
3 Credit Hours

Students will acquire knowledge of the composition and properties of baking ingredients. They will utilize the proper equipment and tools, and standardize recipes to prepare yeast breads, rolls, pastries and cakes in the food service laboratory. The instructor will evaluate the products prepared based on established food service standards. Eight contact hours: two lecture hours, six laboratory hours.

FSS 1248 Garde-Manger
3 Credit Hours

Students will acquire knowledge and demonstrate skills in the application of special garde-manger techniques used in ice and tallow sculpturing. The class will observe dexterity in the proper use of tools to produce dinner and ice sculptured showpieces. Eight contact hours: two lecture hours, six laboratory hours.

FSS 2284 Catering and Buffet Management
3 Credit Hours

Prerequisites: HFT 1265 and FSS 1221. This course provides future managers with skills in catering and buffet operation functions. Students will discuss, plan and execute a variety of catering concepts which include marketing principles and contracts, food costs, preparation of menus, serving styles and dining area layouts. Eight contact

hours: two lecture hours, six laboratory hours.

FSS 2300 Supervision and Personnel Management
3 Credit Hours

Students will develop and demonstrate skills necessary to the managerial procedures and functions of a food service operation. The course emphasizes personnel selection, interviewing techniques, supervision, organization, and planning and evaluation. Three contact hours.

FSS 2942 Culinary Management Internship I
3 Credit Hours

Students will participate in work related experience in the food service industry. Student interns will demonstrate occupational preparation and work habits as prescribed from course theories and labs. Twenty contact hours: one-half hour (one hour every other week) lecture, ten field experience hours.

FSS 2943 Culinary Management Internship II
3 Credit Hours

Prerequisite: FSS 2942. Students will participate in a supervised internship at an advanced level. This internship will be designed to provide students with opportunities to enhance technical skills in a specific culinary area. Twenty contact hours: one-half hour (one hour every other week) lecture, ten field experience hours.

GEA — Geography: Regional Areas

GEA 1000 World Geography (Y)
3 Credit Hours

This introductory course deals with humanity's relationship to the natural environment in the various climatic, regional and economic areas of the world and the interrelationships. Three contact hours.

GEA 2200 Geography of North America (Y)

3 Credit Hours

The regional geography of North America, USA, Canada and Mexico examines the population distribution and physical landscape of North America with an emphasis on understanding important geographical aspects of these three modern countries. Three contact hours.

GEA 2270 Geography of Florida (Y)

3 Credit Hours

This course is designed to study important geographical aspects of the state of Florida. This course is concerned with physical, historical, population, economic, political and future geography of this state within the United States. Three contact hours.

GEA 2400 Geography of Latin America (Y)

3 Credit Hours

This course examines the physical, cultural, and historical geography of Latin America relating to contemporary patterns and issues such as population, economics and the environment. Three contact hours.

GEA 2630 Geography of the Middle East (Y)

3 Credit Hours

This course deals with important geographical aspects of the Middle East. This course is concerned with physical, historical, population, economic, political and future geography of this region. Three contact hours.

GEB — General Business

GEB 1011 Introduction to Business (Y)

3 Credit Hours

This course is an introduction to business systems and procedures. The orderly presentation of the subject matter provides students with the framework for further study in the field or the background for practical application in business and industry. Three contact hours. (CBE)

GEO — Geography: Systematic

GEO 2074 Geography for Teachers (Y)

3 Credit Hours

Prerequisite: GEA 1000. This course upgrades, improves and updates content information for elementary and secondary geography teachers. Three contact hours.

GEO 2200 Physical Geography (Y)

3 Credit Hours

This course is a survey of the physical environment relevant to studies in earth sciences and regional geography. The natural occurrences, distribution and interrelationships of basic elements of the physical environment such as climates, meteorology and landforms are examined. Three contact hours.

GEO 2370 Conservation of Resources (Y)

3 Credit Hours

This survey course of natural and human resources of the world places special emphasis on the United States with an intensive study of the wise use and wasteful exploitation of these resources. Three contact hours.

GEO 2420 Cultural Geography (Y)

3 Credit Hours

This course studies the ways cultures vary from place to place. Emphasis is placed on spatial diffusion, human-environmental interaction, and cultural landscapes. Three contact hours.

GER — German and Germanic Languages

GER 1000 Conversational German (Y)

3 Credit Hours

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used. Students are expected to work independently in the language lab and with audio tapes. This course is

designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work).

GER 1120 Beginning German I (Y)

4 Credit Hours

This beginning course consists of the fundamentals of German speech and grammar taught by integrating the basic communication skills of hearing and understanding, speaking, reading and writing. Five contact hours: four lecture hours, one unsupervised laboratory hour. (CBE)

GER 1121 Beginning German II (Y)

4 Credit Hours

Prerequisite: GER 1120 or equivalent. This course is a continuation of Beginning German I. Five contact hours: four lecture hours, one unsupervised laboratory hour. (CBE)

GER 2200 Intermediate German I (Y)

3 Credit Hours

Prerequisite: GER 1121. This course is a thorough review of the principles of grammar. This review will be integrated with compositions and conversation planned to develop a basic active vocabulary and facility in communicating in written and spoken German. Four contact hours: three lecture hours, one laboratory hour. (CBE)

GER 2201 Intermediate German II (Y)

3 Credit Hours

Prerequisite: GER 2200. This course is a continuation of Intermediate German I. Four contact hours: three lecture hours, one laboratory hour. (CBE)

GLY — Geology

GLY 1001 Earth and Space Science (Y)

3 Credit Hours

This course acquaints students with the development of science, the integrating principles and theories in the earth sciences, the practice of the scientific method and with a useful knowledge of selected areas of

geology, astronomy and meteorology. Presentation involves lectures, demonstrations and films. The course is for general education and is not designed essentially as an introductory or preparatory course for any of the specific sciences. Three contact hours.

GLY 1001L Earth and Space Science Laboratory (Y)

1 Credit Hour

Prerequisite/Corequisite: GLY 1001. This is a lab course designed to supplement GLY 1001. Students will learn to identify rocks and minerals, interpret geologic maps and explore the concepts of oceanography, earth dynamics and astronomy. Two contact hours (laboratory).

GLY 1010 Physical Geology (Y)

3 Credit Hours

Corequisite: GLY 1010L. Physical Geology for majors and non-majors is the study of the earth. This course covers structure and land forms, modifying agents and processes, characteristic rocks and minerals and a brief study of the surrounding atmosphere and the earth as a planet. Three contact hours. (CBE)

GLY 1010L Physical Geology Laboratory (Y)

1 Credit Hour

Corequisite: GLY 1010. This course includes laboratory activities designed to supplement GLY 1010. Students will study rocks and minerals, earth history, fossils, structural features of the earth and various earth forms as related to certain geologic processes with the aid of rock and mineral samples, topographic maps and aerial photographs. Two contact hours (laboratory).

GRA — Graphic Arts

GRA 1500 Theory of Printing Processes (Y)

5 Credit Hours

Recommended corequisite: GRA 1502. This lecture course is designed to give an introduction to major processes of the printing industry. Career possibilities

within printing and related industries are examined. Organizational relationships within a printing firm as well as working relationships between the vendor and buyer are studied. Included in the course are all methods of typesetting, mechanical art preparation, quality control methods, printer's math and proofreading. Five contact hours. (CBE)

GRA 1502 Printing Processes — Laboratory

4 Credit Hours

Recommended corequisite: GRA 1500. This laboratory course is designed to be an introduction to and experience in the basic skills of three of the major processes of the printing industry, emphasizing basic design techniques, computer typesetting and mechanical art preparation. Also introduced are darkroom and proofing techniques. Eight contact hours (theory/laboratory). (CBE)

GRA 1503 Theory of Lithographic Processes

5 Credit Hours

Recommended corequisite: GRA 1504. This lecture course, designed to give an introduction to several of the major processes of the lithographic industry, includes process camera operation including line and halftone photography, negative stripping, platemaking and offset press operation. Also introduced are paper and ink manufacture and characteristics. Five contact hours. (CBE)

GRA 1504 Lithographic Processes Laboratory

4 Credit Hours

Recommended corequisite: GRA 1503. This laboratory course, designed to give an introduction to and experience in the basic skills of several of the major processes of the lithographic industry, includes process camera operation including line and halftone photography, negative stripping and platemaking, various proofing processes, offset

press operation and related bindery functions. Eight contact hours (theory/laboratory). (CBE)

GRA 1530 Typography: History and Terminology (Y)

3 Credit Hours

Prerequisite: GRA 1504. This introductory course will cover type in relationship to its history, classification, measurement, nomenclature and terminology. Students will develop an understanding of the application of typography as it relates to visual communication. Four contact hours: three lecture hours, one laboratory hour.

GRA 1531 Typography and Design I (Y)

3 Credit Hours

Prerequisites: GRA 1530, GRA 1543 and GRA 1821. This studio course's purpose is to provide graphic design students with a basic understanding of typographic form and communication. Students will gain an understanding of the design process and the use of typography in visual communication through an examination of type forms and their relationship to spatial organization and content. Four contact hours: three lecture, one laboratory hour.

GRA 1540 Layout and Design (Y)

3 Credit Hours

This course teaches the technique of preparing layouts to be used for customer approval. Exploration of the creative process, visual appeal, basic design techniques and various targeting strategies are pursued. Students will be exposed to the various stages of the design process including thumbnail sketches, layouts, comprehensives and final art. Students will work with computers as well as the traditional tools of the art room. Three contact hours. (CBE)

GRA 1543 Principles of Graphic Design (Y)

3 Credit Hours

Recommended prerequisite: ART 1300C. This introductory level studio course is an in-depth

study of graphic design fundamentals and terminology. The course will stress the problem-solving process used by the graphic designer and discuss the profession of graphic design and visual communication. Students will develop proficiency in the knowledge and application of the elements of design including color, line, texture, and shape as well as the principles including contrast, balance, form relationships in space and repetition. Four contact hours: three lecture hours, one laboratory hour.

GRA 1544 Graphic Design I
3 Credit Hours

Prerequisites: GRA 1531, GRA 1801 and GRA 2577. This studio course applies graphic design concepts through a series of projects for single and multipage layouts in two-dimensional space. Students will build on skills learned in prerequisite courses and will select appropriate media either traditional, electronic or a combination of both for problem solving. The profession of graphic design will be emphasized through lectures, field trips and the language of visual communication. Four contact hours: three lecture hours, one laboratory hour.

GRA 1545 Graphic Design II (Y)
3 Credit Hours

Prerequisite: GRA 1544. This intermediate level studio course extends the communication issues covered by the projects in the previous prerequisite course for single and multipage design to include both two and three dimensional media. This course will emphasize problem solving for various media. Also students will cover the language and profession of graphic design through lectures and field trip. Four contact hours: three lecture hours, one laboratory hour.

GRA 1546 Graphic Design III (Y)
3 Credit Hours

Prerequisite: GRA 1545. This advanced level studio course is an in-depth exploration of two- and three-dimensional media

and the potential creative use of contemporary technology in visual communication. This course includes experimentation in multipage print projects, computer animation, multi-media and environmental signage. The course will include lecture and field trips. Four contact hours: three lecture hours, one laboratory hour.

GRA 1800 Introduction to Computer Graphics
3 Credit Hours

Recommended prerequisites: GRA 1502 or GRA 1504. This course is designed to familiarize graphic design and graphic art students with the basic hardware and software components of the Macintosh computer system for electronic publishing. Students will be familiarized with commercial graphic design and printing issues as applied to a computerized publishing system. Four contact hours: three lecture hours, one laboratory hour.

GRA 1801 Computer Illustration and Design
3 Credit Hours

Prerequisite: GRA 1800 or equivalent experience. This course is designed to give graphic design and graphic art students an introduction to computer illustration using an object oriented drawing application. The course will enable students to create technical drawings, logotypes, business graphics, and art for other media. Software used is Adobe Illustrator. Four contact hours: three lecture hours, one laboratory hour.

GRA 1821 Desktop Publishing for Graphic Design
3 Credit Hours

Prerequisite: GRA 1800 or Macintosh experience. This course is designed to give graphic design and graphic arts students an understanding of desktop publishing using a page layout application. Students will import text and graphics from other programs and sources (e.g., scanned images and object oriented draw programs) and work with color trapping

and separation. Students will demonstrate knowledge of vocabulary appropriate to desktop publishing. Software used is QuarkXpress. Four contact hours: three lecture hours, one laboratory hour.

GRA 2508 Color Theory (Y)
3 Credit Hours

Recommended prerequisite: GRA 1530. This course covers the study of major color theories, physical properties of color, psychological aspects of color perception, and color communication and symbolism in graphic design. The practical aspects of color reproduction in printing and electronic media are covered through discussions and projects. Four contact hours: three laboratory hours, one laboratory hour.

GRA 2571 Camera Operation and Film Processing
3 Credit Hours

Prerequisite: GRA 1504. Corequisite: GRA 1540. This course presents the technique of operating the process camera for the reproduction of line and halftone copy negatives, contact printing, preparation of darkroom chemicals, and developing graphic arts films and papers. Safety and quality issues are stressed as well as inventory control and production management. Six contact hours (theory/laboratory). (CBE)

GRA 2573 Advanced Camera Operation and Film Processing
5 Credit Hours

Prerequisite: GRA 2571. This advanced course provides for skill development in the technique of operating the process camera for the reproduction of line and halftone copy negatives, contact printing, preparation of darkroom chemicals, and developing graphic arts films and papers. The course emphasizes the application of basic techniques toward greater job complexity, increased quality and increased productivity. Safety and management issues are addressed. Ten contact hours (theory/laboratory). (CBE)

GRA 2577 Electronic Imaging I
3 Credit Hours

Prerequisite: GRA 1800 or equivalent experience. This course is designed to give graphic design and graphic art students an introduction to pixel based editing using an image processing application. Students, upon completion of the course, will be able to provide post production for pre-press, color separation and halftones. Software used is Adobe Photoshop. Four contact hours: three lecture hours, one laboratory hour.

GRA 2578 Electronic Imaging II
3 Credit Hours

Prerequisite: GRA 2577. In this course graphic design and graphic art students gain an in-depth understanding of digital pre-press and computer color theory using an image processing application. This should enable students to produce digital grayscale and color images. Software used is Adobe Photoshop. Four contact hours: three lecture hours, one laboratory hour.

GRA 2601 Negative Stripping and Offset Platemaking
3 Credit Hours

Prerequisite: GRA 1504. Corequisite: GRA 1540. This course teaches the basic techniques for stripping up offset negatives and positives for proper press position, separating for color, and for exposing and developing offset press plates. Areas addressed include multiple exposures, pin register and various quality control elements including various proofing techniques. Six contact hours (theory/laboratory). (CBE)

GRA 2602 Advanced Negative Stripping and Offset Platemaking
5 Credit Hours

Prerequisite: GRA 2601. This advanced course provides for skill development in the technique of stripping up offset negatives and positives for proper press position, separating for color, and exposing and developing offset press plates. Knock out/drop-ins, multiple

exposure and multiple color stripping techniques are explored as well as various proofing techniques. This course emphasizes the application of basic techniques toward greater job complexity, increased quality and increased productivity. Ten contact hours (laboratory). (CBE)

GRA 2635 Offset Press Operation
3 Credit Hours

Prerequisite: GRA 1504. Corequisite: GRA 1540. This course teaches the basic technique of setting up, operating, and maintaining duplicators and off-set presses in the 10x15, 11x17 and 14x20 inch ranges. Production management and cost saving strategies are explored. Quality control techniques are taught. Six contact hours (theory/laboratory). (CBE)

GRA 2638 Advanced Offset Press Operation
5 Credit Hours

Prerequisite: GRA 2635. This advanced laboratory course provides for skill development in the technique of setting up, operating, and maintaining duplicators and offset presses in the 10x15, 11x17 and 14x20 inch ranges. This course emphasizes multiple color printing, quality control issues and communication skills between press operator and client. This course emphasizes the application of basic techniques toward greater job complexity, increased quality and increased productivity. Ten contact hours (theory/laboratory). (CBE)

GRA 2740 Producing Multimedia (Y)
3 Credit Hours

Prerequisite: CGS 2525 or permission of instructor. This course covers the following topics: the past, present and future of multimedia, software/hardware requirements, fundamentals of design for screens and applications, multimedia elements and development of authoring tools. A major emphasis of the course is the creation of well-designed and executed

multimedia modules. Four contact hours: three lecture hours, one laboratory hour.

GRA 2841 Web Page Design for the Internet
4 Credit Hours

Prerequisites: GRA 1800 or equivalent experience and GRA 2577 or equivalent experience. This course provides an introduction to web browsers (Netscape) basic web-page design software (Pagemill and Homepage) and simple HTML code. Participants will learn techniques on creating effective Web presentations, and Internet planning and marketing strategies. Students will learn how to "hang" and maintain their own web sites. These topics will be customized to the technical level of the participants. Four contact hours: three lecture hours, one laboratory hour.

GRA 2905 Directed Independent Study for Graphic Arts
2 Credit Hours

This course should be taken by students nearing completion of the printing program. A community related project that will utilize most of the skills acquired through the printing/graphic arts areas will be assigned and directed by the instructor and the "end user" of the printed project. Four contact hours.

GRA 2945 Practicum
6 Credit Hours

This course provides experience in the business/industrial setting under actual production standards. Eighteen contact hours (practicum). (CBE)

HFT — Hotel and Restaurant

HFT 1000 Introduction to Hospitality Management
3 Credit Hours

This course is an overview of the hospitality industry which is composed of lodging, food and beverage, transportation, retail outlets, and special events. The management of hotels, motels, restaurants, kitchens, travel agencies, theme parks, casinos, and country clubs are introduced. This orientation course presents

the history, organization, opportunities and challenges that exist in the many careers that make up the dynamic world of hospitality management. Examples of selected topics include: pioneers and leaders in hotel, restaurant and culinary management; independent and chain hotels, restaurants franchising and management contracts, cultural diversity, ethics and quality service management. Three contact hours. (CBE)

HFT 1250 The Management of Hotel/Motel Operations
3 Credit Hours

This course acquaints students with the operation of a hotel or motel including front office procedures in registering, accounting for and checking out guests, promotional and sales practices, housekeeping, interior decoration, purchase of furniture, carpeting, linens and supplies, maintenance and engineering of a practical nature, facilities specifications, purchasing and storage. Three contact hours. (CBE)

HFT 1265 Restaurant Management
3 Credit Hours

This course examines the basic principles of dining room service and management; and applies those principles to the operation of the FCCJ public fine dining room, The Mallard Room. Topics include types of dining room service, dining room organization, quality service standards, dining room operations, beverage service and continuous dining room cost. Eight contact hours: two lecture hours, six laboratory hours.

HFT 1300 Hotel/Motel Housekeeping Management
3 Credit Hours

This course will provide an overview of the fundamentals of housekeeping techniques and management. It describes functions, tools and practices for future housekeeping managers. Three contact hours.

HFT 1410 Front Office Management — Hotel/Motel
3 Credit Hours

This course guides students through all the skills, including directing the activities and solving the complex problems, needed to properly manage the front office of a hotel/motel. The course also acquaints students with the operation of all the departments as they apply to their primary responsibility of selling rooms and serving guests. Three contact hours. (CBE)

HFT 1434 Club Operations Management
3 Credit Hours

Prerequisites: HFT 1000 and FSS 2300. This course introduces students to the specialized field of club management. It presents club organization, characteristics of club members and committees, marketing of the club, food and beverage operations, managing the club house and recreational activities. This course presents the history, the opportunities and the future of club management. Three contact hours.

HFT 1503 Marketing and Sales Management
3 Credit Hours

Prerequisite: HFT 1250. This course is designed to provide students with basic knowledge and practical experience which will enable them to develop strategic marketing plans for hotel/motel properties. Three contact hours.

HFT 1600 Hospitality Law
3 Credit Hours

This course will provide an awareness of the rights and responsibilities that the law grants to or imposes upon hotel keepers. It also emphasizes the importance of satisfying legal obligations. Three contact hours.

HFT 2700 Tourism
3 Credit Hours

Prerequisite: HFT 1000. This course consists of a study of tourism, which includes travel and the entire hospitality field:

hotels, motels, resorts, restaurants, camping and all the supportive services for travelers and vacationers. This course develops an understanding of the travel modes and enables students to become knowledgeable and responsive to the developments and the economic approaches that are necessary for a travel manager. Three contact hours.

HFT 2750 Convention Operations Management
3 Credit Hours

Prerequisites: HFT 1250 and HFT 1265. This course defines the convention and group business market. It describes the marketing and sales strategies to attract markets with specific needs and explains techniques to meet those needs as part of meeting and convention service. Three contact hours.

HFT 2941 Hospitality Internship I
3 Credit Hours

Prerequisites: HFT 1250, FSS 1202 and FSS 2300. This course consists of on-the-job experience supplied by the hotel/motel restaurant industries. Job placement will be dependent upon the availability of participating hospitality institutions. The course consists of 10 hours per week of on-the-job instruction accompanied by a one-hour seminar per week. Eleven contact hours: one lecture hour, ten field experience hours.

HFT 2942 Hospitality Internship II
3 Credit Hours

Prerequisite: HFT 2941. This course, an extension of Hospitality Internship I, consists of on-the-job work experience supplied by the hotel, motel and restaurant industries. Students will concentrate on a specific area or function that is career-goal oriented. Job placement will be dependent upon availability of participating hospitality institutions. The course consists of 10 hours per week of on-the-job instruction accompanied by

a one-hour seminar per week. Eleven contact hours: one lecture hour, ten field experience hours.

HIS — General History

HIS 1907 Honors Survey of History (Y) 3 Credit Hours

Prerequisites: outstanding performance in AMH 2010 and AMH 2020 or EUH 1000 and EUH 1001 and recommendation by the department. This independent survey in one or more selected fields of history incorporates extensive research and in-depth readings as well as developing interest and skill in the preparation of historical analysis and presentation in anticipation of further studies at the upper division college level in history or related fields. Three contact hours.

HLP — Health, Leisure and Physical Education

HLP 1081 Health Analysis and Improvement (Y) 2 Credit Hours

This course is designed to introduce the principles and concepts of exercise physiology, values of exercise and information about nutrition and stress management as they relate to optimal health and the lifelong process of wellness. It involves lectures, assessment of students' current health/fitness status, an individualized training program, a computerized diet analysis and an introduction to varied activities designed to improve the components of physical fitness. Two contact hours.

HSC — Health Science

HSC 1100 Health Education (Y) 3 Credit Hours

This course consists of a study of health-related problems which are of major importance to our society with emphasis on the study and examination of drugs, tobacco, alcohol, sex and on general principles involved in our present understanding of health-related areas. Three contact hours. (CBE)

HSC 1531 Medical Terminology (for Health Professions) (Y) 3 Credit Hours

This course is designed to provide a basic working knowledge of medical terminology and medical abbreviations for students entering the health fields. The course will cover word analysis of the terminology for the various body systems and selected specialties, spelling of common medical terms and pronunciation of common medical terms. Three contact hours. (CBE)

HSC 2400 Standard First Aid and CPR (Y) 3 Credit Hours

This course meets the needs of individuals who have an opportunity to give first aid care, whether in their daily routine or special activities. Upon successful completion of the course, students earn the National Safety Council Certification. Three contact hours.

HUM — Humanities

HUM 2021 Humanities Forum (Y) 3 Credit Hours

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course is a general introduction to western humanities emphasizing the study of values as expressed in the philosophies and arts of particular historical epochs. The epochs treated may vary from year to year. This course includes reading and writing competencies. Three contact hours.

HUM 2211 Humanities: The Foundations (Y) 3 Credit Hours

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course consists of the study of life and creative expressions from their origins in early cultures of the Mediterranean regions through medieval Europe as surveyed through the visual arts, music, literature, philosophy and social history. The course examines the interaction of cultural experiences that developed and were passed

on to later peoples. This course provides a basic foundation for study of all humanities courses and includes reading and writing competencies. Three contact hours.

HUM 2236 Humanities: Mainstreams of Cultures, 15th to 20th Century (Y) 3 Credit Hours

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course consists of the study of life and creative expressions in Europe from the Medieval/Renaissance period to the 20th century as surveyed through the interrelationships of the visual arts, music, literature, philosophy and social history. The course provides transition between the study of the early and the modern cultures focusing on the European Renaissance, Enlightenment and 19th century as they relate to other world developments. The course includes reading and writing competencies. Three contact hours.

HUM 2251 Humanities: 20th Century Cultural Perspectives (Y) 3 Credit Hours

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course consists of the study of life and creative expressions of Western culture in its relationship with other world cultures as surveyed through social history, the impact of science and technology on human values and the history of ideas manifested in the arts and letters from the beginning of the 20th century to the present. The course includes reading and writing competencies. Three contact hours.

HUM 2410 Humanities of Asia (Y) 3 Credit Hours

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course surveys Asian cultures and their creative expressions through the media of visual arts, music, literature and philosophical thought. This course includes reading and writing competencies. Three contact hours.

HUM 2450 Humanities in the Americas (Y)**3 Credit Hours**

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course consists of the study of life and creative expressions in the Americas as surveyed through the media of visual arts, music, literature, philosophy and social history. This course includes reading and writing competencies. Three contact hours. (CBE)

HUM 2472 Intercultural Explorations (Y)**3 Credit Hours**

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course is a study of human nature, human society and human rights in a specified cultural setting through the humanities, religion, drama, music, dance, the visual arts, myths and legends, and their place in affecting social policies and a culture's vision of its future. Cultures will vary. This course includes reading and writing competencies. Students may repeat this course for credit three times when the cultural setting is changed. However, it can satisfy only three hours in Category B of the General Education Requirements. Additional courses, if taken, must stand as electives only. Particular cultural settings are shown by suffix letter to the humanities designation as follows: HUMA 2472 Greece, HUMB 2472 China, HUMC 2472 Middle East, HUMD 2472 Japan, HUME 2472 France, HUMF 2472 Latin America, HUMG 2472 Soviet Union, HUMH 2472 Spain, HUMI 2472 Germanic Cultures and HUMJ 2472 Phillipines Culture. Three contact hours.

HUM 2511 Music and Art of the Romantic Era (Y)**3 Credit Hours**

Prerequisite(s): MUL 1010 and/or ARH 1000. This course will concentrate on the great outpouring of musical genius at work in the 19th century and the equally inspiring work of the artists of the time. The major

composers, painters and sculptors will be studied and the common characteristics which they share will be explored. Class lectures will be supplemented with films, videos and compact discs to be reviewed outside class. The course is open to all students, but a background in either music or art is desirable. Three contact hours.

HUM 2931 Humanities Seminar (Y)**1 Credit Hour**

Prerequisite: ENC 1101 or satisfactory score on placement test. This course utilizes primary source material from a broad spectrum of arts and sciences to engage students in critical analysis and discussion and to develop communication skills. The course is structured around the Paideia seminar methodology and is facilitated by trained Paideia seminar leaders. Students may only repeat this course three times for credit. One contact hour.

HUN — Human Nutrition**HUN 1003 Weight Management Through Nutrition and Fitness****3 Credit Hours**

This course is designed for students to acquire basic principles of nutrition, behavioral analysis and exercise and apply them to the development and implementation of a weight management plan. Three contact hours.

HUN 1201 Human Nutrition (Y)**3 Credit Hours**

Students will acquire the basic principles of nutrition and develop skill in applying the recommended dietary allowances to all age groups. The course emphasizes key food nutrients, consumer information regarding food economy, quality food purchasing and maximum nutrition for the life cycle. Three contact hours.

HUN 1203 Culinary Nutrition**3 Credit Hours**

Prerequisite: FSS 1221. Culinary nutrition combines a study of the basic principles of nutrition with demonstrations of practical application for the food production

industry. Students will study the characteristics and functions of nutrition, the effect of food processing on nutrients, body performance, nutrition and the American diet. In lab students will analyze nutrients in recipes and menus; the use of good nutrition to help prevent disease; and plate presentations utilizing the food guide pyramid. Five contact hours: two lecture hours, three laboratory hours.

HUN 1410 Pediatric Nutrition**3 Credit Hours**

Prerequisite: HUN 1201. This course is a study of nutrition from birth through adolescence. Nutritional requirements, daily food needs, assessment of nutritional status, important nutrition concerns, inborn errors of metabolism, food allergies, chronic diseases, nutrition education and responsibilities of health personnel are included. Three contact hours.

HUN 1471 Geriatric Nutrition**3 Credit Hours**

Prerequisite: HUN 1201. This course is a study of nutrition in older adults. Aging, nutritional requirements, nutritional assessment, dietary planning, nutrition related problems, chronic diseases and responsibilities of health personnel are included. Three contact hours.

HUS — Human Services**HUS 1345 Introduction to Alcohol and Other Drug Addictions****3 Credit Hours**

This course introduces students to the various classes of drugs, their signs and symptoms, and the physiological and psychological processes of addiction. Major concepts associated with these processes will be reviewed. The three major service modalities (prevention, intervention and treatment) will be introduced. Three contact hours.

HUS 1500 Legal and Ethical Aspects of Alcohol and Other Drug Services
4 Credit Hours

Prerequisite: HUS 1345. This course enables students to understand the legal basis for alcohol and other drug services in Florida. The alcohol and drug state statutes and their administrative rules are reviewed. Civil Rights requirements, confidentiality compliance standards and professional ethics will be presented. Four contact hours: three lecture hours, one laboratory hour (clinical).

HUS 2502 Special Issues in Addictions
4 Credit Hours

Prerequisites: HUS 1345, HUS 2682 and HUS 2683. Students will review special critical issues and special populations associated with addiction counseling and prevention. Gender and cultural issues will be explored. Various lifestyles and their relationship to addiction and counseling will be explained. Profiles of risk groups will be examined as well. Four contact hours: three lecture hours, one laboratory hour (clinical).

HUS 2520 Theoretical Aspects of Human Behavior and Addiction Counseling
4 Credit Hours

Prerequisite: HUS 1345. This course enables students to understand some of the more influential theories associated with human behavior/personality theory and addiction. Four contact hours.

HUS 2682 Addiction Counseling: Core Functions I
4 Credit Hours

Prerequisite: HUS 1345. This course enables students to master the core functions of screening, intake and assessment, study the process of identifying problems, establishing goals and deciding on a treatment plan. Additionally, students will learn how to respond to an individual's needs during acute emotional and physical distress. Four

contact hours: three lecture hours, one laboratory hour (clinical).

HUS 2683 Addiction Counseling: Counseling Theories Core Functions II
4 Credit Hours

Prerequisite: HUS 2682. This course enables students to master the core functions of making appropriate referrals by studying the relationship in which the counselor helps the client mobilize resources to resolve his/her problems and/or modify attitudes and values. Additionally, students will learn how to achieve established goals through the coordination of multiple service plans, bringing services, agencies or people together within a planned framework. Five contact hours: four lecture hours, one laboratory hour (clinical).

IDS — Interdisciplinary Studies

IDS 1935 Interdisciplinary Studies Seminar (Y)

1 Credit Hour

The IDS seminar provides a structured opportunity for students and professors to participate in special programs, work together in the development of IDS projects and interact in an interdisciplinary environment. Students may repeat the course. Two contact hours.

IND — Interior Design

IND 1020 Principles of Interior Design (Y)

3 Credit Hours

The content of this studio course includes an in-depth study of the elements and principles of design. Students will develop proficiency in the knowledge and application of the elements including color, line, texture, ornament, shape, space — as well as the principles including scale and proportion, balance, rhythm, emphasis and unity and in designing interior spaces. The course will also explore employment opportunities. Four contact hours: two lecture hours, two laboratory hours.

IND 1100 History of Interiors I (Y)
3 Credit Hours

Students will acquire the ability to identify furniture styles, architectural details, and ornamental motifs from the time of our primitive beginnings through the Renaissance period. Research conducted by students is an integral segment of the course. Three contact hours.

IND 1130 History of Interiors II (Y)
3 Credit Hours

Prerequisite: IND 1100. Students will acquire the ability to identify furniture styles, architectural details, and ornamental motifs from the Renaissance period through the 20th century. Research conducted by students is an integral segment of the course. Three contact hours.

IND 1420 Materials and Sources
3 Credit Hours

This course is a study of the materials of interior design and sources of each. Topics include textiles, floor and wall coverings, furniture, window treatments and accessories. This course includes estimation and installation of materials, and specification guidelines. Three contact hours.

IND 1606 Functions and Psychology of Space
3 Credit Hours

Prerequisite: IND 1020. This studio course analyzes social interactive environments, private and work spaces for residential environments. The psychological use of space, efficiency of traffic patterns, and effectiveness of design are also explored. Students will read, evaluate, modify and execute a floor plan based upon the requirements for the space zones. The course also will explore the multiples of background modifications for visual impact on the total design of an interior space. Students will learn basic drafting skills. Four contact hours: two lecture hours, two laboratory hours.

IND 1935 Building and Barrier Free Codes

2 Credit Hours

This course addresses contract documents, as well as, building interior systems that apply to the interior environment. The content also examines standards related to life safety, building codes, barrier free and testing. Two contact hours: one lecture hour, one laboratory hour.

IND 2150 Why Preservation? (Y)

3 Credit Hours

This course is designed to make students aware of the growing efforts in this country to preserve, protect and utilize our built environment. The course covers the history of the preservation movement, its social, economic, legal and aesthetic ramifications, with an emphasis on preservation in our local area. Three contact hours.

IND 2155 Fundamentals of Restoration and Preservation

3 Credit Hours

This course is designed to introduce students to the design and restoration of older houses. It reviews all the steps necessary to successfully restore a house from preliminary financial and planning problems through the interior and exterior restoration, with the emphasis on how it should look and how it should work. Three contact hours.

IND 2160 Architectural Style

3 Credit Hours

This course includes a comparative analysis of American architecture based on elements of construction. The course emphasizes Jacksonville's unique contributions in the twentieth century. Three contact hours.

IND 2222 Commercial Interiors

3 Credit Hours

Prerequisites: IND 1606, IND 1420, IND 2301 and IND 1935. This course is designed as an approach to developing design solutions for commercial spaces. The course also addresses planning and managing medium to

large interior projects. Four contact hours: two lecture hours, two laboratory hours.

IND 2224 Residential and Commercial Design

3 Credit Hours

Prerequisites: IND 1606, IND 2310, IND 1935 and TAR 2120. This laboratory course, designed to provide skill development in planning residential and commercial interiors from blueprints to the final assembly of all furnishings, emphasizes commercial furnishings, fabrics, building codes and fire regulations. This course also synthesizes working drawings, specifications, and competency in budgeting. Four contact hours: two lecture hours, two laboratory hours.

IND 2301 Perspective Renderings — Housing

3 Credit Hours

This course places emphasis on planning and executing renderings, and the techniques of one and two point linear perspective as they apply to interior space and its furnishings. In this introductory course, students will develop skills in graphically conveying their design concepts into visual illustrations. Four contact hours: two lecture hours, two laboratory hours.

IND 2310 Graphic Presentation Techniques (Y)

3 Credit Hours

Prerequisite: IND 2301. Professionalism of graphic illustration is the focus of this course. Students will explore various media for graphic interior design presentations, such as pencils, markers and watercolor renderings. Projects will also include axonometric drawings. Four contact hours: two lecture hours, two laboratory hours.

IND 2410 Specialized Design: Kitchen Planning

3 Credit Hours

Prerequisite: IND 1606. This laboratory course is designed to provide specialized training in the area of kitchen planning. The course will enable students

to create a final assembly of materials, trades, specifications, plans and contracts necessary for presentation. Three contact hours.

IND 2433 Lighting Design

3 Credit Hours

Prerequisite: IND 1606. This course will cover all of the aspects of lighting design practice as outlined by the Illuminating Engineering Society of North America and the International Association Of Lighting Designers. Creative applications will be explored, and a final presentation will be required. Three contact hours.

IND 2502 Marketing Techniques for the Interior Designer

3 Credit Hours

Prerequisites: IND 1420, IND 1606 and IND 1935. Utilization of marketing techniques in selling interior design materials is the focus of this course. To develop skills in providing consumer information to the client, students will plan and execute marketing strategies utilizing visual aids and display areas. Three contact hours.

IND 2931 Inter-relationship of Design With Environments

3 Credit Hours

Prerequisite: interior design major or approval from interior design adviser. This course will provide a wide range of design experiences through lectures, group discussions, research and field tours. Topics which will be explored are special populations, economic and psychological factors, as well as environmental concerns. Architectural styles with an emphasis on preservation and renovation will be stressed. To receive credit for this course, students must complete a thesis paper. These papers will be submitted to the Journal of Interior Design and Research (JIDER) for possible publication. Additional costs will be required by students for trips. Three contact hours.

**IND 2945 Interior Design
Internship and Seminar**
5 Credit Hours

Prerequisite: approval of the program adviser. After completion of professional courses, students will work on the job as interns under the supervision of qualified personnel in interior design firms within the community. Course theories and skills will be applied in this work experience. The internship training program requires 15 weeks for a total of 300 hours. A two-hour classroom seminar will be held bimonthly on campus. Twenty-one contact hours: one lecture hour, twenty field experience hours.

INR — International Relations
INR 2002 International Relations (Y)
3 Credit Hours

This course is a study of the nature of the international political system with emphasis on the concepts of national interest and power with respect to the relations of nation states. This course examines the function and role of international organizations. Three contact hours.

**ISC — Interdisciplinary
Science — Natural**

**ISC 1001 Fundamentals of
Natural Science (Y)**
3 Credit Hours

This course, designed to allow students to study processes of science, concepts of science, natural phenomena and/or current problem areas, consists of selected topics studied in terms of their relationship and significance to the various science disciplines. This course is not designed as an introductory or preparatory course for any specific science. Three contact hours.

**ISS — Interdisciplinary
Social Sciences**

**ISS 1120 Origins of American
Society (Economic, Political and
International Institutions) (Y)**
3 Credit Hours

This course is an examination of American political institutions, American economic institutions and America's leadership in the world. This course includes a study of the United States Constitution. The course includes reading and writing competencies. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

ITA — Italian Language

ITA 1000 Conversational Italian (Y)
3 Credit Hours

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used. Students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work).

JOU — Journalism

**JOU 2100 Newspaper
Reporting and Writing (Y)**
3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course will introduce basic newspaper reporting procedures, including writing news leads, organizing stories, interviewing techniques and ethics. The role of the reporter will also be addressed. Since computer training will be included, it is recommended that students have basic typing skills before enrolling in this course. Practice in actual reporting will be gleaned from writing for the student newspaper. Three contact hours.

**JOU 2200 Newspaper Editing
and Design (Y)**
3 Credit Hours

Prerequisite: JOU 2100. This course includes the basic rules of editing including accuracy, brevity, clarity and style coupled with the designing of the newspaper pages using art, photos and headlines. Three contact hours.

LAH — Latin American History

**LAH 2000 History of the
Americas (Y)**
3 Credit Hours

This course consists of a study of the nations of the Western Hemisphere including Canada from colonial times to the present with special emphasis on Latin America. Three contact hours.

LEI — Leisure

**LEI 1262 Outdoor
Adventure Initiatives (Y)**
2 Credit Hours

This outdoor adventure course provides students with personal growth opportunities through a series of initiative challenges. It is designed to develop self-knowledge, self-esteem and the social skills required for positive group interaction. It will also provide students with the experience of functioning as members of a highly supportive group. Two contact hours: one lecture hour, one activity hour.

**LEI 1263 Wilderness
Adventure Training (Y)**
3 Credit Hours

This is a coeducational course which provides the opportunity for students to acquire the knowledge and skills for adventuring into and through the wilderness. Expeditions (day and overnight) are included. A cost for the expeditions will be assessed. Four contact hours.

LEI 1264 Wilderness Backpacking (Y)
2 Credit Hours

Prerequisite: LEI 1263 or instructor's consent. This course is a coeducational course which provides the opportunity for students to acquire the knowledge and skills to safely hike and backpack. Backpacking expeditions (day and overnight) are included. A cost for the expeditions will be assessed. Three contact hours: one and one-half lecture hour, one and one-half activity hour.

LEI 2268 Introduction to Outdoor Adventure Leadership (Y)
3 Credit Hours

This course provides the foundation for developing outdoor leadership and group dynamics in a practical wilderness setting. Emphasis will be involved in students acting as both leaders and as members of a group operating in an expedition environment. A cost for activities and trips will be assessed. Three contact hours.

LIN — Linguistics

LIN 2670 English Grammar: Usage and Mechanics (Y)
3 Credit Hours

Prerequisite: ENC 0021 or satisfactory score on the placement test. This course provides a brief history of the English language, an overview of developments in American English, instruction in dictionary usage, and an intensive study of traditional American English grammar usage and mechanics for those students who wish to improve both their understanding and use of standard American English. This course also includes CLAST writing competencies with emphasis on preparation for the CLAST English language skills exam. The course does not replace a college preparatory course which students may be required to take. Three contact hours.

LIS — Library Sciences

LIS 2001 Use of Books and Libraries (Y)

1 Credit Hour

This course is designed to provide students with the basic knowledge concerning the use of library materials and research methods. Students will be taught to use reference materials and given hands-on assignments. One contact hour (lecture/activity/lab).

LIS 2002 Electronic Access to Information (Y)

1 Credit Hour

This course is an introduction to the learning resource centers. It is designed to provide students with basic knowledge concerning electronic access to information, the use of library materials and research strategies. Students will be taught to use a variety of information resources, including LINCC, the Information Gateway, Internet and a selection of CD-ROM databases and will have hands-on access to these materials. One contact hour.

LIT — Literature

LIT 2000 Introduction to Literature (Y)

3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course emphasizes reading selections for understanding, appreciation and written analysis of selected works. The course considers the major literary forms and their distinctive characteristics and conventions, principle literary themes and different critical approaches. The purpose of the course is to increase personal satisfaction in literature and to prepare students for further literary study. This course includes reading, speaking and writing competencies. Three contact hours. (CBE)

LIT 2100 Great Ideas in World Literature (Y)

3 Credit Hours

Prerequisites: ENC 1101 with a grade of "C" or better. This

course surveys universal themes and ideas in representative masterpieces of the world's literary traditions from ancient times into the 20th century. The selections in translations reflect man's perennial search for meaning in attempting to define relationships to self, society and the universe. This course includes reading and writing competencies. Three contact hours.

LIT 2370 The Bible as Literature (Y)
3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course is a study of the development of the Bible and its influence on literature and humanity. Three contact hours.

LIT 2380 Introduction to Women in Literature (Y)
3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course surveys 19th and 20th century men and women writers depicting traditional and contemporary images of women. This course encourages an appreciation of how literature by and about women has contributed to the development of fiction and poetry in the English language. This course includes reading, speaking and writing competencies. Three contact hours.

LIT 2930 Special Topics in Literature: An Introduction to Multicultural Literature (Y)
2 Credit Hours

Prerequisite: ENC 1101. This course is problem-, issue-, subject-centered in its approach to the field of literature. It provides an awareness of and appreciation for major themes, movements and writers through an in-depth study of specific literary works as they relate to the special topic. The selected topic will have a multicultural emphasis. The course may be repeated only three times for credit. Consult newspaper schedule for official topics. Two contact hours.

MAC — Mathematics: Calculus and Precalculus

MAC 1105 College Algebra (Y)

3 Credit Hours

Prerequisite: MAT 1033 with a grade of "C" or better or satisfactory score on the placement test. The major topics included in this course are linear equations and inequalities; quadratic equations and inequalities; relations and functions; graphs; systems of equations and inequalities; exponential and logarithmic functions; and applications. A review of algebraic techniques is also included in this course as well as a review of polynomials, factoring, exponents, roots and radicals. MAC 1102 cannot substitute for this course. Three contact hours.

MAC 1114 College Trigonometry (Y)

3 Credit Hours

Prerequisite: MAC 1105 with a grade of "C" or better or a strong high school algebra background. The major topics in this course are circular functions, solving triangles, trigonometric identities and functions, inverse relations and trigonometric equations, complex numbers and polar coordinates. Students with a grade of "C" or better in MAC 1102 satisfy the prerequisite. Three contact hours. (CBE)

MAC 1140 Precalculus Algebra (Y)

4 Credit Hours

Prerequisite: MAC 1105 with a grade of "C" or better or satisfactory score on the placement test. The major topics included in this course are linear equations and inequalities, quadratic equations and inequalities, relations, functions and graphs, exponential and logarithmic functions, systems of equations and inequalities, higher degree polynomial equations, matrices and determinants, applications, sequences, series and the binomial theorem, and mathematical proof. A review of algebraic techniques and operations as well as a review of exponents, radicals, complex numbers and absolute

value is also included in this course. Students with a grade of "C" or better in MAC 1102 satisfy the prerequisite. Four contact hours. (CBE)

MAC 2233 Calculus for Business and Social Sciences (Y)

3 Credit Hours

Prerequisite: MAC 1105 or MAC 1140 with a grade of "C" or better or satisfactory score on the placement test. This course is designed for students who plan to major in business or the social sciences. It provides an introduction to differential and integral calculus with emphasis placed on applications from business, economics and the social sciences. This course cannot be used to satisfy degree requirements for students majoring in mathematics or engineering. Three contact hours.

MAC 2253 Calculus for Engineering Technology (Y)

3 Credit Hours

Prerequisite: MAC 1114. A course designed to give students an introduction into differential and integral calculus with emphasis on their application to engineering problems. Analytical geometry will be introduced where needed to clarify the calculus. Three contact hours.

MAC 2311 Calculus With Analytic Geometry I (Y)

4 Credit Hours

Prerequisites: MAC 1140 and MAC 1114 with grades of "C" or better or two years of high school algebra and one semester of high school trigonometry. This course is designed for students who plan to major in mathematics, science, engineering, computer sciences or any other field that requires the study of calculus. It is the first course of a three-course calculus sequence. The major topics in this course are limits and continuity, differentiation of algebraic and trigonometric functions, applications of the derivative, anti-differentiation, introduction to integration and applications of the definite integral. Four contact hours. (CBE)

MAC 2312 Calculus With Analytic Geometry II (Y)

4 Credit Hours

Prerequisite: MAC 2311 with a grade of "C" or better. This is the second course of the three-course calculus sequence. It is a continuation of integration of algebraic and trigonometric functions as well as integration of other transcendental functions, topics from analytic geometry, indeterminate forms and improper integrals, parametric equations and polar coordinates. Four contact hours.

MAC 2313 Calculus With Analytic Geometry III (Y)

4 Credit Hours

Prerequisite: MAC 2312 with a grade of "C" or better. This is the third course in the calculus with analytic geometry sequence. Topics included in this course are infinite sequences and series, vectors and solid analytic geometry, calculus of functions of several variables and multiple integrals with applications. Four contact hours.

MAE — Mathematics Education

MAE 2801 Mathematics for Elementary Education (Y)

3 Credit Hours

Prerequisite: MGF 1106 (previously MGF 1202) or MAC 1105 with a grade of "C" or better. This is not a methods course. It is a mathematics content course designed for elementary education majors. The topics include: sets, numeration systems, problem solving, whole numbers, integers, rational numbers, irrational numbers, real numbers, percent, elementary logic, measurement and informal geometry. Students with a grade of "C" or better in MGF 1202 (currently MGF 1106) satisfy the prerequisite. Three contact hours.

MAN — Management

MAN 2021 Principles of Management (Y)

3 Credit Hours

This course consists of a detailed analysis of the management functions of planning, organizing, staffing, directing and controlling as related to an organization. The orderly presentation of fundamental knowledge in management provides students with the framework for further study in the field or the background for practical application of management principles. Three contact hours. (CBE)

MAN 2300 Human Resources Management (Y)

3 Credit Hours

This course is the study of utilization of human resources to accomplish designated objectives. It includes recruiting, selecting, training, promoting and motivating workers. Three contact hours. (CBE)

MAN 2522 Quality Management (Y)

3 Credit Hours

This course will be examined as a comprehensive managerial responsibility. The various philosophies, concepts, practices and methods of quality management are studied and evaluated using a broad and integrated approach including case studies. Three contact hours.

MAN 2590 Materials Management

3 Credit Hours

Prerequisite: MAT 1033 with a grade of "C" or better, or satisfactory score on the mathematics placement test. This course deals with the planning and control of the flow of materials beginning with acquisition from suppliers and continuing through to distribution to customers. This course includes the basics of production planning, purchasing, production control, inventory control, warehousing and distribution. Three contact hours.

MAN 2800 Small Business Management (Y)

3 Credit Hours

This course is designed for students who are primarily interested in the ownership and management of the small business enterprise. It examines and analyzes the managerial function of planning, organizing, staffing, direction and controlling as applied to the small business. Students also study retailing, wholesaling, manufacturing and service-type business organizations. Three contact hours.

MAP — Mathematics: Applied

MAP 2302 Differential Equations (Y)

3 Credit Hours

Prerequisite: MAC 2312 with a grade of "C" or better. This course consists of a study of the methods of solving ordinary differential equations. The major topics include an introduction to differential equations, first-order differential equations, higher-order differential equations, systems of linear differential equations, the Laplace transform and applications. Three contact hours.

MAR — Marketing

MAR 1011 Principles of Marketing (Y)

3 Credit Hours

This course is an introduction to the process of planning marketing programs for goods and services. Topics covered are marketing management and planning, environment for marketing strategies, market segmentation, market research, consumer buying behavior, product life cycles, pricing, advertising, sales, distribution channels, wholesaling, retailing and international marketing. Three contact hours. (CBE)

MAS — Mathematics: Algebraic Structures

MAS 2103 Elementary Linear Algebra (Y)

3 Credit Hours

Prerequisite: MAC 2312 with a grade of "C" or better. The major topics in this course are

systems of linear equations and matrices, determinants, vectors and vector spaces, linear transformations, eigenvalues and eigenvectors, and applications. Three contact hours.

MAT — Mathematics: General

MAT 0002 Basic Mathematics

3 Credit Hours

(College preparatory studies course)

(This course does not apply toward the associate's degree.)

This course is designed for students who lack the basic skills necessary for success in MAT 0024 Elementary Algebra. It provides instruction and practice in computation involving whole numbers, fractions, decimals, percent and signed numbers. Students must attain a passing score on the exit test for satisfactory completion. Three contact hours.

MAT 0024 Elementary Algebra

4 Credit Hours

(College preparatory studies course)

(This course does not apply toward the associate's degree.)

Prerequisite: MAT 0002 with a grade of "C" or better or satisfactory score on the placement test. This course is designed for students who have had little or no algebra. The major topics in this course are sets, real numbers and their properties, exponents and polynomials, linear equations and linear inequalities, as well as an introduction to factoring, rational expressions, radicals (square roots), and graphing in two variables. Four contact hours.

MAT 1033 Intermediate Algebra

4 Credit Hours

Prerequisite: MAT 0024 with a grade of "C" or better or satisfactory score on the placement test. This course is designed for students who require additional skills in algebra before taking MAC 1105, MGF 1106 or MGF 1107. The major topics include sets and real numbers, linear equations and inequalities with applications, polynomials and factoring, algebraic fractions, exponents, roots and radicals, quadratic equations, relations

and functions, graphs and systems of linear equations with applications. This course does not apply toward the associate in arts degree. Four contact hours. (CBE)

MCB — Microbiology

MCB 2013C Microbiology (Y)

4 Credit Hours

Prerequisite: CHM 1020, 1032C, 1045C, or high school chemistry. In addition, students will benefit by taking Life in Its Biological Environment or Principles of Biology prior to enrolling in this course. This course consists of a study of the protista, viruses, rickettsias and schizomycetes of medical and economic importance. Laboratory exercises introduce bacteriologic techniques and aseptic procedures using various micro-organisms. Six contact hours: three studio hours, three clinical hours. (CBE)

MET — Meteorology

MET 1010 Meteorology (Y)

3 Credit Hours

This course, designed to meet the General Education Requirements in the natural science area, includes the phenomena of weather and climate and the use of atmospheric data to predict the weather. Three contact hours.

MET 1010L Meteorology Laboratory (Y)

1 Credit Hour

Prerequisite/Corequisite: MET 1010. This course includes laboratory experiences to accompany Meteorology. Also included is the experimental study of meteorological problems, phenomena, map construction and analysis and upper air studies. Three contact hours.

MGF — Mathematics: General and Finite

MGF 1106 Mathematics for Liberal Arts I (Y)

3 Credit Hours

Prerequisite: MAT 1033 with a grade of "C" or better or satisfactory score on the placement test. This course is designed for

students who plan to major in fields that do not require an in-depth study of mathematics. The major topics introduced in this course are set theory, symbolic logic, geometry and measurement, introductory combinatorics, probability descriptive statistics, and history of mathematics. The logical reasoning, probability and statistics skills measured by CLAST are among the skills taught in this course. Three contact hours. (CBE)

MGF 1107 Mathematics for Liberal Arts II (Y)

3 Credit Hours

Prerequisite: MAT 1033 with a grade of "C" or better or satisfactory score on the placement test. This course is designed for students who plan to major in fields that do not require an in-depth study of mathematics. The major topics introduced in this course are financial mathematics, exponential growth and decay, numbers and number systems, and elementary number theory. Additional topics include graph theory, modular arithmetic, voting techniques, elementary topology, and non-Euclidean geometry. Fractal geometry may be introduced. It is strongly suggested that students who plan to take MGF 1106 and MGF 1107 complete MGF 1106 first. Three contact hours. (CBE)

MGF 2204 Topics in Finite Mathematics (Y)

1 Credit Hour

Prerequisite: MAT 1033 with a grade of "C" or better or satisfactory score on the placement test. This course introduces students to the basic principles of symbolic logic, the theory of probability, some of the statistical methods used in the collection, presentation, description and interpretation of data, and informal geometry. It is designed to focus attention on the importance of logical thinking, provide a foundation for the mathematical study of uncertainties and familiarize students

with the terminology and concepts of both statistics and informal geometry. This course is intended for students who are planning to take the CLAST and need additional preparation. One contact hour (for 15 weeks) or three contact hours (for five weeks).

MHF — Mathematics — History and Foundations

MHF 2404 Introduction to the History of Mathematics (Y)

3 Credit Hours

Prerequisite: MAC 2311. This course is a chronological study of the evolution of mathematical thought from primitive counting to modern ideas of the 20th century. This course does not satisfy the General Education Requirement for mathematics. Three contact hours.

MKA — Marketing Applications

MKA 1021 Salesmanship (Y)

3 Credit Hours

This course, an introduction to the art of effective salesmanship, analyzes and studies types and problems of psychology of sales situations, buying motives, customer approach and sales techniques. Three contact hours.

MLT — Medical Laboratory Technology

MLT 1022C Introduction to Health Technology

3 Credit Hours

The course enables students to apply basic mathematical concepts, medical laboratory ethics, and basic medical laboratory techniques. Given instruction in introductory clinical laboratory sciences, students will study and practice specimen collection, handling and laboratory safety procedures. Four contact hours (lecture/laboratory). (CBE)

MLT 1300C Hematology

4 Credit Hours

Prerequisite: consent of department. This course emphasizes instruction in the theories and techniques of routine hematology, including the hematopoietic system, clinical correlations and

related laboratory procedures. Peripheral blood cell enumeration, cell identification and morphology, and hemoglobin analysis are emphasized. Six contact hours (lecture/laboratory). (CBE)

MLT 1330C Hemostasis

2 Credit Hours

Prerequisite: consent of department. This course presents the principles and laboratory procedures related to the assessment of hemostasis, including the functions of the vasculature, platelets, coagulation factors and the fibrinolytic system. Three contact hours (lecture/laboratory).

MLT 1405C Medical Microbiology

4 Credit Hours

Prerequisite: consent of department. This course presents students with instruction in the theory, taxonomy, identification, clinical relevance and laboratory procedures associated with the microbiological agents of infectious disease including clinically significant bacteria, mycobacteria, mycoplasma, chlamydia, rickettsia and viruses. Methods of susceptibility testing are also included. Six contact hours (lecture/laboratory). (CBE)

MLT 1440C Parasitology/Mycology

2 Credit Hours

Prerequisite: consent of department. This course presents students with instruction in the taxonomy, life cycles, identification and pathogenesis of the clinically significant parasitic agents. The course also includes the taxonomy, identification, pathogenesis and laboratory procedures associated with the clinically significant fungi. Three contact hours (lecture/laboratory).

MLT 2150C Clinical Correlations

2 Credit Hours

Prerequisites: consent of department. This course presents selected topics in advanced laboratory techniques, together with their significance in the diagnosis of diseases. Students

build on a fundamental knowledge of clinical laboratory analysis and human pathology to understand more complex laboratory diagnostic procedures in the areas of hematology, endocrinology, therapeutic drug monitoring and microbiology. Three contact hours (lecture/laboratory).

MLT 2190C Histology

4 Credit Hours

Prerequisite: consent of instructor. This course will present the study of human organs and tissues for the purpose of developing histotechnological skills. Emphasis will be placed on recognition, composition and functions of the organs and tissues. Macroscopic and microscopic laboratory examination and evaluation of specimens are included. This course may be offered by way of Internet. Six contact hours (lecture/laboratory). (CBE)

MLT 2191 Histotechniques I

4 Credit Hours

Prerequisite: consent of instructor. This course will introduce students to the fundamental principles of histologic technology. Included in this course are the laboratory aspects of specimen preparation, fixation, sectioning and routine staining. Laboratory safety, quality assurance, and general health career concepts are covered. This course may be offered by way of Internet. Four contact hours. (CBE)

MLT 2191L Histotechniques I Lab

1 Credit Hour

Prerequisite: consent of instructor. This course will introduce students to fundamental laboratory skills and safety concepts in histologic technology. Students will learn how to process, embed, cut and stain various types of tissue specimens. Issues of safety and quality assurance will be stressed. Two contact hours (laboratory).

MLT 2192 Histotechniques II

4 Credit Hours

Prerequisite: consent of instructor. This course is a continuation

of Histotechniques I. Students will continue to develop and learn the complex laboratory procedures employed in current histotechnology settings, including special stains, immunohistochemistry, electron microscopy, and cryostat procedures. This course may be offered by way of Internet. Four contact hours. (CBE)

MLT 2192L Histotechniques II Lab

1 Credit Hour

Prerequisite: consent of instructor. This course is a continuation of Histotechniques I Lab and will introduce students to the more complex laboratory skills in histologic technology. Students will focus on special stains, special techniques, troubleshooting routine and special stains, and will be introduced to immunohistochemistry techniques. Issues of safety and quality assurance will be stressed. Two contact hours (laboratory).

MLT 2193C Histopathology

3 Credit Hours

Prerequisite: consent of instructor. This course provides students with the correlations between histotechnological procedures and disease processes. Students will study the changes in tissue that are associated with various disease states and will learn the usefulness of selected special stains and techniques in identifying disease processes. Evaluation of acceptability of tissue procedures will be stressed. This course may be offered by way of Internet. Four contact hours (lecture/laboratory). (CBE)

MLT 2194 Histotechniques III

3 Credit Hours

Prerequisite: consent of instructor. This course is a continuation of Histotechniques II. Students will advance their knowledge of special histologic technology procedures including immunohistochemistry, cytogenetics, and flow cytometry. This course will also include special topics in employment skills, education strategies and management concepts pertaining to histology.

This course may be offered by way of Internet. Three contact hours. (CBE)

MLT 2194L Histotechniques III Lab

1 Credit Hour

Prerequisite: consent of instructor. This course is a continuation of Histotechniques II Lab. Students will explore unique areas of the field of histology, such as flow cytometry and advanced immunohistochemistry. Emphasis will be placed on troubleshooting special stains and procedures. Two contact hours (laboratory).

MLT 2230C Clinical Microscopy

2 Credit Hours

Prerequisite: consent of department. This course instructs students in the evaluation and clinical correlations of urinalysis and selected other body fluids. Included in this course is the study of renal function, renal diseases, cerebrospinal fluid, transudates, exudates, seminal fluid, amniotic fluid and gastric analysis. Three contact hours (lecture/laboratory).

MLT 2500C Clinical Immunology

4 Credit Hours

Prerequisite: consent of department. This course relates the biology of the immune response to the clinical manifestations of selected diseases. Course content includes antigen-antibody reactions, immunoglobulin structures and functions, and lymphocyte interactions. As well, the clinical significance and laboratory procedures related to inflammatory conditions, bacterial and viral pathogens, autoimmune disorders, immunogenetics, and chromosomal disorders are included. Six contact hours (lecture/laboratory).

MLT 2525C Immunohematology

3 Credit Hours

Prerequisite: consent of department. This course relates the concepts of immunology to blood banking procedures using the guidelines of the American Association of Blood Bank (AABB). The

course content includes antigen-antibody reactions, immunoglobulin structures and functions, complement interaction, clinically significant blood group systems, antibody detection and identification, immunologic disease of the newborn, compatibility testing and component therapy. Four contact hours (lecture/laboratory).

MLT 2610C Clinical Chemistry

3 Credit Hours

Prerequisites: consent of department. This course instructs students in the theory, clinical correlations and laboratory procedures related to the study of proteins, enzymes, carbohydrates, lipids, non-protein nitrogen compounds and liver function testing. Included in the course are quality assurance principles, laboratory mathematics and the study of basic instrumentation principles. Four contact hours (lecture/laboratory). (CBE)

MLT 2800L Clinical Practicum I

8 Credit Hours

Prerequisite: MLT 2150C or consent of department. Assigned to a clinical affiliate of the medical laboratory technology program, students will be instructed in current laboratory procedures and instrument use appropriate for developing entry-level career skills. The supervised learning experiences are under the coordination and responsibility of the program faculty. Twenty-seven and one-half contact hours (laboratory).

MLT 2801L Clinical Practicum II

9 Credit Hours

Prerequisite: MLT 2800L. This course is a continuation of Clinical Practicum I. Students continue in their assigned clinical affiliate under the coordination and responsibility of the program. Twenty-seven and one-half contact hours (laboratory).

MLT 2840L Histotechnology

Practicum I

6 Credit Hours

Prerequisite: consent of the instructor. Assigned to both the student lab and to a clinical

affiliate of the histologic technology program, students will be instructed in current laboratory procedures and instrument use appropriate for developing entry-level career skills as a histotechnologist. The supervised learning experiences are under the coordination and responsibility of the program faculty. Eighteen contact hours (laboratory). (CBE)

MLT 2841L Histotechnology

Practicum II

8 Credit Hours

Prerequisite: consent of instructor. This course is a continuation of Histotechnology Practicum I. Students continue in their assigned clinical affiliate under the coordination and supervision of the program. Twenty-four contact hours (laboratory). (CBE)

MMC — Mass Media Communications

MMC 1000 Introduction to Mass Communications (Y)

3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course provides a general introduction to the mass media. It traces the development of print, broadcast, and electronic communications. This course examines the communication process as well as the responsibilities of the mass media. Three contact hours.

MMC 2100 Writing for Mass Communications (Y)

3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course provides basic instruction and practice in developing and writing news stories for print and broadcast media. **Note:** Students should have keyboarding skills and should be familiar with computer word processing. Three contact hours.

MRE — Medical Records**MRE 1000 Health Information Management I (Y)****4 Credit Hours**

Prerequisites: BSC 2086C and HSC 1531. This course is an introduction to the health information management system, the role of the health information professional as a member of the health care team and principles of medical record management, including record content and format. Four contact hours.

MRE 1202 ICD-9-CM Coding Principles and Laboratory (Y)**4 Credit Hours**

Prerequisites: MRE 1000, HSC 1531 and MRE 1430. This course will include various disease and operation classification systems and nomenclature with greater emphasis on ICD-9-CM applications. Four contact hours: three lecture hours, one laboratory hour.

MRE 1430 Concepts of Disease**3 Credit Hours**

Prerequisites: BSC 2085C and BSC 2086C. This course is an integrated approach to specific disease entities affecting the human body. Three contact hours.

MRE 1800 Health Information Practicum I (Y)**2 Credit Hours**

Prerequisites: MRE 1000 and MRE 2640. This course will provide students with a supervised experience in an assigned health care facility's medical records department. Emphasis will be placed on primary medical record functions of record assembly, analysis, medicolegal procedures, preparation records for storage and equipment use. Five contact hours (health care facility).

MRE 2201 Health Information Management II**3 Credit Hours**

Prerequisites: MRE 1000, MRE 2640 and MRE 1800. Corequisite: OST 2335. This course will provide students with a working knowledge and understanding

in the use of acceptable terminology, definitions and formulas necessary to compute standard rates, percentages and averages from inpatient hospital data. Hospital organization and planning of hospital services in relation to community needs and resource management will also be examined. Three contact hours.

MRE 2203 CPT-4 Coding and Reimbursement Issues (Y)**4 Credit Hours**

Prerequisites: MRE 1430, MRE 1000, MRE 1800 and MRE 1202. This course is an integrated approach to develop skills in the area of the Physician's Current Procedural Terminology (CPT-4) system for outpatient procedures performed in an acute care setting or a physician office. Four contact hours.

MRE 2304 Health Information Management III (Y)**3 Credit Hours**

Prerequisites: MRE 2201 and MRE 2810. This course provides major focus on medical record department management, departmental design and supervisory principles and practices. Total quality improvement principles will also be explored. Three contact hours.

MRE 2640 Health Law**3 Credit Hours**

Prerequisites: HSC 1531 and MRE 1000. This course is an in-depth study of federal, state and local laws which govern the preparation and use of records and information in the health care delivery system. Three contact hours.

MRE 2810 Health Information Practicum II (Y)**2 Credit Hours**

Prerequisites: MRE 1000 and MRE 1800. Corequisite: MRE 2201. This course will provide training for students in a well organized and staffed medical record department under the supervision of experienced health information professionals. Five contact hours (clinical).

MRE 2820 Health Information Practicum III**3 Credit Hours**

Prerequisites: MRE 1800, MRE 2201 and MRE 2810. This course is a supervised experience in a medical record department, offering experience in supervision, utilization management, medical review audit and overall chart flow processes. Six contact hours (clinical).

MTB — Technical and Business**MTB 1308 Using the TI Graphing Calculator (Y)****1 Credit Hour**

Prerequisite: MAT 1033 or permission of the instructor. This course provides instruction for using a Texas Instruments graphing calculator. Topics include arithmetic operations, graphs, matrices, statistics, and programming. Students must provide calculators and accompanying manuals. One contact hour.

MUSIC COURSES**MUC — Music: Composition****MUC 1301 Introduction to Electronic Music (Y)****2 Credit Hours**

Prerequisite: consent of professor. This beginning course in the history and practice of electronic music includes laboratory work with tape recorders and synthesizers. Three contact hours (rehearsal).

MUE — Music: Education**MUE 1440 String Techniques (Y)****1 Credit Hour**

Open to music majors, this course teaches basic performance skills on violin, viola, violin-cello or double bass. Two contact hours (rehearsal).

MUE 1450 Woodwind Techniques (Y)**1 Credit Hour**

The course, open to music majors, teaches basic performance skills on clarinet or flute. Two contact hours (rehearsal).

MUE 1460 Brass Techniques (Y)**1 Credit Hour**

This course, open to music majors, teaches basic performance skills on trumpet or trombone. Two contact hours (rehearsal).

MUE 1470 Percussion Techniques (Y)**1 Credit Hour**

Open to music majors, this course teaches basic performance skills on percussion instruments with emphasis on rudimental snare drumming. Two contact hours (rehearsal).

MUG — Music: Conduction**MUG 1201 Basic Conducting (Choral) (Y)****2 Credit Hours**

Prerequisite: MUT 1111 and/or consent of professor. This course provides students with an introduction to basic techniques used in directing choral rehearsals and performances. Three contact hours (rehearsal).

MUH — Music: History**MUH 1018 Jazz Appreciation (Y)****3 Credit Hours**

This course is designed to serve as an introduction to the musical elements, forms and style periods that comprise jazz. Emphasis will be given to jazz artists' lives and their contribution to the art form. Presentational means are intended to both stimulate an appreciation for jazz and to develop listening skills. Three contact hours.

MUH 2051 Folk and Traditional Music of World Cultures (Y)**3 Credit Hours**

This course is for students with little or no previous musical training. It offers an introduction to the study of folk music, emphasizing those cultural sources that have had the most influence on music developing in the Americas: namely Europe, Sub-Saharan Africa, Latin America and North America. Three contact hours.

MUH 2052 Music in Contemporary Cultures (Y)**3 Credit Hours**

Prerequisite: ANT 2410. Open to all students as an elective, this is a survey course to explore the basic methods of how music is maintained within a given culture as an artistic medium and as a source of cultural continuity, reflecting the values of a given culture or society. Three contact hours.

MUH 2110 Survey of Music History (Y)**3 Credit Hours**

Prerequisite: ENC 1101 or satisfactory score on placement test and ability to read music. This course consists of a study of music from the early Medieval period to the present day with an emphasis upon the stylistic trends of each period. This course, recommended for music majors, is also open to other students and includes reading and writing competencies. Three contact hours.

MUH 2561 African-American Music: A Vocal Study (Y)**3 Credit Hours**

Open to all students as an elective, this course studies the origins of the styles of African-American music beginning with its African origins and proceeding to its development in the New World and subsequent influence on America's indigenous music forms through the present day. The course emphasizes vocal idioms, including minstrelsy, blues, rhythm and blues, soul, rock, gospel and jazz. Three contact hours.

MUL — Music: Literature**MUL 1010 Music Appreciation (Y)****3 Credit Hours**

Prerequisite: ENC 1101 or satisfactory score on placement test. This course is an introduction to musical elements, forms and style periods with emphasis on composers' lives, musical characteristics and representative works. Designed to stimulate the students' love for music and to

formulate listening skills. This course includes reading and writing competencies. Three contact hours.

MUM — Music: Commercial**MUM 1600 Recording Techniques I (Y)****3 Credit Hours**

This course is open to all students. It offers beginner basic information in the art of recording vocal and instrumental sound with emphasis on understanding the functions of recording equipment, placement of microphones, making initial recordings of various groups or soloists and the ability to mix down the initial recordings. Six contact hours: two lecture hours, four studio hours.

MUM 1601 Recording Techniques II (Y)**3 Credit Hours**

Prerequisite: MUM 1600. This course is a continuation of Recording Techniques I with emphasis on a more thorough understanding of the function of each piece of equipment in the recording studio. It offers second semester students more advanced information on the mix-down process. This course has a \$15 materials fee. Six contact hours: two lecture hours, four studio hours.

MUN — Music: Music Ensembles**MUN 1130 Symphonic Band (Y)****1 Credit Hour**

Prerequisite: consent of professor/audition. This course, a requirement for all woodwind, brass and percussion majors, includes traditional and contemporary band literature. The music department urges all students with previous experience and consent of the professor to participate. Students may select this course for credit each semester with up to four credits counting toward the A.A. degree. Five contact hours (rehearsal).

MUN 1280 Community Orchestra (Y)
1 Credit Hour

Prerequisite: open by audition to members of the community. The Community Orchestra provides instrumentalists in the College and community an opportunity to perform works representative of a broad spectrum of orchestral literature, refine techniques of ensemble playing and present concerts each term. Membership is by permission of the director and/or audition; string majors must participate. Students may elect to take this course for credit each semester with up to four credits counting toward A.A. degree. Two contact hours (rehearsal).

MUN 1340 Chamber Choir (Y)
1 Credit Hour

Prerequisites: previous choral experience, audition and consent of the director. Corequisite: enrollment in MUNB 1310. The repertoire of the Chamber Choir includes sacred and secular compositions with an emphasis on acapella literature of the 17th through 20th centuries. With membership limited to 15 to 20 singers, students may take this course each semester with up to four elective credits counting toward the A.A. degree. Three contact hours (rehearsal).

**MUN 1380 Community Chorus,
Jacksonville Concert Chorale (Y)**
1 Credit Hour

Prerequisite: open by audition to members of the community. Repertoire for this course includes secular and sacred major works for chorus and orchestra, as well as shorter compositions. Students may elect this course each semester for credit with up to four credits counting toward the A.A. degree or continuing education credit under adult education. Two contact hours (rehearsal).

MUN 1410 String Ensemble (Y)
1 Credit Hour

Prerequisites: open to all students who have experience as players on bowed string instruments and consent of the professor. The department encourages all

students who have experience as players on bowed string instruments to audition. The String Ensemble will perform the standard literature for string ensembles both independently and in conjunction with other performing music organizations. Students may elect to take this course for credit each semester with up to four credits counting toward the A.A. degree. Three contact hours (rehearsal).

MUN 1450 Piano Ensemble (Y)
1 Credit Hour

Prerequisite: open to piano majors and principals with consent of the professor. This course provides students with an introduction to multiple piano skills and chamber music skills. This course may be repeated for credit each semester. Approval of the professor is required for piano minors and non-music majors. Three contact hours (rehearsal).

**MUN 1460 Chamber Music
Ensembles (Y)**
1 Credit Hour

Prerequisite: consent of professor. This course is the study and performance of chamber music literature for small ensembles. Students may select this course for credit each semester with up to four credits counting toward the A.A. degree. Three contact hours (rehearsal).

MUN 1710 Jazz Ensemble (Y)
1 Credit Hour

Prerequisite: consent of the director. Corequisite: MUN 1130 for woodwind, brass and percussion players (unless waived by director). The repertoire includes various styles from jazz and popular literature. Students may select this course for credit each semester with up to four credits counting toward the A.A. degree. Three contact hours (rehearsal).

MUN 1711 Jazz Combo (Y)
1 Credit Hour

Prerequisite: Audition and consent of the professor. Corequisite: MUN 1710 and Principal or Secondary Applied Music. This course is designed to

provide jazz ensemble players with the opportunity to perform and study jazz of all styles in and from a small group perspective. Students may select this course for credit each semester with up to four credits counting toward the A.A. degree. Three contact hours (lecture/discussion).

MUNA 1310 College Chorus (Y)
1 Credit Hour

Open to all College students, this course includes many styles of choral music in the repertoire. Students may elect to take this course for credit each semester with up to four credits counting toward the A.A. degree. Three contact hours (rehearsal).

MUNB 1310 College Chorale (Y)
1 Credit Hour

Prerequisites: consent of the director, previous choral experience and/or audition. The repertoire of the College Chorale includes the more difficult sacred and secular compositions, accompanied and unaccompanied. Students may elect this course for credit each semester with up to four credits counting toward the A.A. degree. Five contact hours (rehearsal).

**MUO — Music:
Opera/Musical Theatre****MUO 1001 Music Theatre
Workshop (Y)**
1 Credit Hour

Prerequisite: open by audition. This course is open by audition to individuals interested in theatre and music in the areas of performance and technical operation. Students may elect to take this course for credit each semester with up to four credits counting toward A.A. degree. One major production each term. Three contact hours (rehearsal).

MUR — Music: Church**MUR 2710 Sacred Choral
Literature (Y)**
3 Credit Hours

This course will equip church musicians with the basic skills for selecting music, familiarity with basic repertoire, efficient rehearsal

techniques and score preparation. Three contact hours.

MUS — Music

MUS 1010 Student Recital (Y)

1 Credit Hour

This course is required for all music majors. In conjunction with one class meeting each week, students must attend an announced number of FCCJ and community related concerts. Each music major enrolled for two hours of applied music is to perform in a student recital upon the decision of their teacher. Meeting hour is flexible to coincide with special performance times. One contact hour.

MUT — Music: Theory

MUT 1001 Introduction to Music Theory (Y)

3 Credit Hours

This course, designed for students whose background and theory placement test scores indicate further preparation is needed for MUT 1111, includes work with elementary music terminology, notation, intervals, scales, chords, rhythm, sight singing and dictation. Three contact hours.

MUT 1111 Music Theory I (Y)

3 Credit Hours

Prerequisite: MUT 1001, satisfactory score on placement test or consent of instructor. Corequisite: music majors must also enroll in MUS 1010, Applied Music and a performing organization; students in MUT 1111 should also enroll in an appropriate Sight Singing/Ear Training course. This course covers the materials and structures of music. Three contact hours.

MUT 1112 Music Theory II (Y)

3 Credit Hours

Prerequisite: MUT 1111, satisfactory score on placement test or consent of instructor. Corequisite: music majors must also enroll in MUS 1010, Applied Music and a performing organization; students in MUT 1112 should also enroll in an appropriate Sight Singing/Ear Training

course. This course covers the materials and structures of music. Three contact hours.

MUT 1241 Sight Singing/Ear Training I (Y)

1 Credit Hour

This course covers the development of skills in sight singing and ear training. Two contact hours.

MUT 1242 Sight Singing/Ear Training II (Y)

1 Credit Hour

Prerequisite: MUT 1241 or consent of instructor. This course covers the development of skills in sight singing and ear training. Two contact hours.

MUT 1641 Jazz Improvisation I (Y)

2 Credit Hours

Prerequisite: consent of instructor. Corequisite: MUN 1710. This course is designed to introduce the concepts of jazz improvisation through chord-scale theory and relationships. The technical application of major scales, pentatonic scales, blues scales and modal scales to fundamental chord progressions will serve as the basis by which to create improvisatory solos. Two contact hours.

MUT 1642 Jazz Improvisation II (Y)

2 Credit Hours

Prerequisite: MUT 1641 and consent of the instructor. Corequisite: MUN 1710. This course is a continuation of Jazz Improvisation I. The course introduces the application of harmonic and melodic scales, diminished scales, whole tone scales and be-bop scales to chord progressions and jazz standards. Chord-scale substitute concepts will provide comprehensiveness to this advanced study. Two contact hours.

MUT 2116 Music Theory III (Y)

3 Credit Hours

Prerequisite: MUT 1112, satisfactory score on placement test or consent of instructor. Corequisite: music majors must also enroll in MUS 1010, Applied Music and a performing organization; students in MUT 2116 should also enroll in an appropriate Sight Singing/Ear Training

course. This course covers the materials and structures of music. Three contact hours.

MUT 2117 Music Theory IV (Y)

3 Credit Hours

Prerequisite: MUT 2116, satisfactory score on placement test or consent of instructor. Corequisite: music majors must also enroll in MUS 1010, Applied Music and a performing organization; students in MUT 2117 should also enroll in an appropriate Sight Singing/Ear Training course. This course covers the materials and structures of music. Three contact hours.

MUT 2246 Sight Singing/Ear Training III (Y)

1 Credit Hour

Prerequisite: MUT 1242 or consent of instructor. This course covers the development of skills in sight singing and ear training. Two contact hours.

MUT 2247 Sight Singing/Ear Training IV (Y)

1 Credit Hour

Prerequisite: MUT 2246 or consent of instructor. This course covers the development of skills in sight singing and ear training. Two contact hours.

MVK — Music: Keyboard

MVKA 1111 Class Piano I (Y)

1 Credit Hour

This course for beginning piano students meets in groups, with emphasis placed on music reading and elementary techniques. This course is required for all music majors, unless exempted. This course is also open to other qualified students. Two contact hours (rehearsal).

MVKB 1111 Class Piano II (Y)

1 Credit Hour

Prerequisite: MVKA 1111. This course is a continuation of Class Piano I and although a requirement for all music majors, the course is open to qualified students with consent of the professor. Two contact hours (rehearsal).

MVKA 2121 Class Piano III (Y)**1 Credit Hour**

Prerequisite: MVKB 1111. This course is a continuation of Class Piano II and although a requirement for all music majors, the course is open to qualified students with consent of the professor. Two contact hours (rehearsal).

MVKB 2121 Class Piano IV (Y)**1 Credit Hour**

Prerequisite: MVKA 2121. This course is a continuation of Class Piano III. Two contact hours (rehearsal).

MVKA 2621 Basic Piano**Pedagogy I (Y)****2 Credit Hours**

This introductory class prepares students for professional, private and class piano teaching at the beginner and early elementary level. Three contact hours (lecture/discussion).

MVKB 2621 Basic Piano**Pedagogy II (Y)****2 Credit Hours**

This class, a continuation of Basic Piano Pedagogy I, prepares students for professional, private and class piano teaching at the upper elementary and intermediate levels through lectures, demonstrations and observations. Three contact hours (lecture/discussion).

MVS — Music: Strings**MVSA 1116 Class Guitar I (Y)****1 Credit Hour**

This basic course, designed for students who are interested in studying classic guitar, includes a study of the development of the instrument, past and present guitar masters, and the music literature for the guitar and technique. Two contact hours (rehearsal).

MVSB 1116 Class Guitar II (Y)**1 Credit Hour**

Prerequisite: MVSA 1116. This course is a continuation of Class Guitar I, perfecting and advancing skills learned therein. Two contact hours (rehearsal).

MVSA 2126 Class Guitar III (Y)**1 Credit Hour**

Prerequisite: MVSB 1116. This course is a continuation of Class

Guitar II, perfecting and advancing skills learned therein. Two contact hours (rehearsal).

MVSB 2126 Class Guitar IV (Y)**1 Credit Hour**

Prerequisite: MVSA 2126. This course is a continuation of Class Guitar III, perfecting and advancing skills learned therein. Two contact hours (rehearsal).

MVV — Music: Voice**MVVA 1111 Class Voice I (Y)****1 Credit Hour**

This course is for singers wishing to further their vocal skills and instrumentalists wishing a fundamental vocal knowledge. The course emphasizes correct diction and tone production with students receiving individual aid. Two contact hours (rehearsal).

MVVB 1111 Class Voice II (Y)**1 Credit Hour**

Prerequisite: MVVA 1111. This course is a continuation of Class Voice I. Two contact hours (rehearsal).

MVVA 2121 Class Voice III (Y)**1 Credit Hour**

Prerequisite: MVVB 1111. This course is for singers wishing to develop vocal skills beyond elementary level of correct diction and tone production. The course is also open to instrumentalists wishing more than a basic vocal knowledge and competency level. This course meets as a class, yet emphasizes individual attention. Two contact hours (rehearsal).

MVVB 2121 Class Voice IV (Y)**1 Credit Hour**

Prerequisite: MVVA 2121. This course is a continuation of Class Voice III. Two contact hours (rehearsal).

APPLIED MUSIC COURSES**MVB — Music: Brasses****Baritone****MVBA 1014 Applied Preparatory Baritone I (Y)****2 Credit Hours**

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background

indicates a need for further preparation. One hour lesson a week.

MVBB 1014 Applied Preparatory Baritone II (Y)**2 Credit Hours**

Prerequisite: MVBA 1014. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

MVBA 1314 Applied Principal Baritone I (Y)**2 Credit Hours**

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 1314 Applied Principal Baritone II (Y)**2 Credit Hours**

Prerequisite: MVBA 1314. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 2324 Applied Principal Baritone III (Y)**2 Credit Hours**

Prerequisite: MVBB 1314. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 2324 Applied Principal Baritone IV (Y)**2 Credit Hours**

Prerequisite: MVBA 2324. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVBA 1214 Applied Secondary
Baritone I (Y)**

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBB 1214 Applied Secondary
Baritone II (Y)**

1 Credit Hour

Prerequisite: MVBA 1214. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBA 2224 Applied Secondary
Baritone III (Y)**

1 Credit Hour

Prerequisite: MVBB 1214. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVBB 2224 Applied Secondary
Baritone IV (Y)**

1 Credit Hour

Prerequisite: MVBA 2224. Fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

**MVBA 1414 Applied Major
Baritone I (Y)**

3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVBB 1414 Applied Major
Baritone II (Y)**

3 Credit Hours

Prerequisite: MVBA 1414. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVBA 2424 Applied Major
Baritone III (Y)**

3 Credit Hours

Prerequisite: MVBB 1414. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVBB 2424 Applied Major
Baritone IV (Y)**

3 Credit Hours

Prerequisite: MVBA 2424. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVW — Music: Woodwinds
Bassoon**

**MVWA 1014 Applied Preparatory
Bassoon I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWB 1014 Applied Preparatory
Bassoon II (Y)**

2 Credit Hours

Prerequisite: MVWA 1014. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWA 1314 Applied Principal
Bassoon I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWB 1314 Applied Principal
Bassoon II (Y)**

2 Credit Hours

Prerequisite: MVWA 1314. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 2324 Applied Principal
Bassoon III (Y)**

2 Credit Hours

Prerequisite: MVWB 1314. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWB 2324 Applied Principal
Bassoon IV (Y)**

2 Credit Hours

Prerequisite: MVWA 2324. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 1214 Applied Secondary
Bassoon I (Y)**

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWB 1214 Applied Secondary
Bassoon II (Y)**

1 Credit Hour

Prerequisite: MVWA 1214. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

**MVWA 2224 Applied Secondary
Bassoon III (Y)**

1 Credit Hour

Prerequisite: MVWB 1214. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWB 2224 Applied Secondary
Bassoon IV (Y)**

1 Credit Hour

Prerequisite: MVWA 2224. This is the fourth semester of private lessons designed for students majoring in any area of music

except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1414 Applied Major Bassoon I (Y)

3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 1414 Applied Major Bassoon II (Y)

3 Credit Hours

Prerequisite: MVWA 1414. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWA 2424 Applied Major Bassoon III (Y)

3 Credit Hours

Prerequisite: MVWB 1414. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 2424 Applied Major Bassoon IV (Y)

3 Credit Hours

Prerequisite: MVWA 2424. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVS — Music: Strings Cello

MVSA 1013 Applied Preparatory Cello I (Y)

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons and designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSB 1013 Applied Preparatory Cello II (Y)

2 Credit Hours

Prerequisite: MVSA 1013. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSA 1313 Applied Principal Cello I (Y)

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 1313 Applied Principal Cello II (Y)

2 Credit Hours

Prerequisite: MVSA 1313. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 2323 Applied Principal Cello III (Y)

2 Credit Hours

Prerequisite: MVSB 1313. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 2323 Applied Principal Cello IV (Y)

2 Credit Hours

Prerequisite: MVSA 2323. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1213 Applied Secondary Cello I (Y)

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 1213 Applied Secondary Cello II (Y)

1 Credit Hour

Prerequisite: MVSA 1213. This is the second semester of private lessons designed for music majors

needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSA 2223 Applied Secondary Cello III (Y)

1 Credit Hour

Prerequisite: MVSB 1213. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 2223 Applied Secondary Cello IV (Y)

1 Credit Hour

Prerequisite: MVSA 2223. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1413 Applied Major Cello I (Y)

3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 1413 Applied Major Cello II (Y)

3 Credit Hours

Prerequisite: MVSA 1413. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSA 2423 Applied Major Cello III (Y)

3 Credit Hours

Prerequisite: MVSB 1413. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 2423 Applied Major Cello IV (Y)

3 Credit Hours

Prerequisite: MVSA 2423. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVW — Music: Woodwinds
Clarinet**

**MVWA 1013 Applied Preparatory
Clarinet I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWB 1013 Applied Preparatory
Clarinet II (Y)**

2 Credit Hours

Prerequisite: MVWA 1013. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWA 1313 Applied Principal
Clarinet I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWB 1313 Applied Principal
Clarinet II (Y)**

2 Credit Hours

Prerequisite: MVWA 1313. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 2323 Applied Principal
Clarinet III (Y)**

2 Credit Hours

Prerequisite: MVWB 1313. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWB 2323 Applied Principal
Clarinet IV (Y)**

2 Credit Hours

Prerequisite: MVWA 2323. This is the fourth semester of private lessons designed for students

majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 1213 Applied Secondary
Clarinet I (Y)**

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWB 1213 Applied Secondary
Clarinet II (Y)**

1 Credit Hour

Prerequisite: MVWA 1213. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWA 2223 Applied Secondary
Clarinet III (Y)**

1 Credit Hour

Prerequisite: MVWB 1213. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWB 2223 Applied Secondary
Clarinet IV (Y)**

1 Credit Hour

Prerequisite: MVWA 2223. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 1413 Applied Major
Clarinet I (Y)**

3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVWB 1413 Applied Major
Clarinet II (Y)**

3 Credit Hours

Prerequisite: MVWA 1413. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVWA 2423 Applied Major
Clarinet III (Y)**

3 Credit Hours

Prerequisite: MVWB 1413. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVWB 2423 Applied Major
Clarinet IV (Y)**

3 Credit Hours

Prerequisite: MVWA 2423. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVW — Music: Woodwinds
Flute**

**MVWA 1011 Applied Preparatory
Flute I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWB 1011 Applied Preparatory
Flute II (Y)**

2 Credit Hours

Prerequisite: MVWA 1011. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWA 1311 Applied Principal
Flute I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWB 1311 Applied Principal Flute II (Y)

2 Credit Hours

Prerequisite: MVWA 1311. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 2321 Applied Principal Flute III (Y)

2 Credit Hours

Prerequisite: MVWB 1311. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWB 2321 Applied Principal Flute IV (Y)

2 Credit Hours

Prerequisite: MVWA 2321. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1211 Applied Secondary Flute I (Y)

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVWB 1211 Applied Secondary Flute II (Y)

1 Credit Hour

Prerequisite: MVWA 1211. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVWA 2221 Applied Secondary Flute III (Y)

1 Credit Hour

Prerequisite: MVWB 1211. This is the third semester of private lessons designed for music majors needing to gain proficiency on

an instrument other than their principal or major. One half-hour lesson a week.

MVWB 2221 Applied Secondary Flute IV (Y)

1 Credit Hour

Prerequisite: MVWA 2221. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1411 Applied Major Flute I (Y)

3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 1411 Applied Major Flute II (Y)

3 Credit Hours

Prerequisite: MVWA 1411. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWA 2421 Applied Major Flute III (Y)

3 Credit Hours

Prerequisite: MVWB 1411. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 2421 Applied Major Flute IV (Y)

3 Credit Hours

Prerequisite: MVWA 2421. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVB — Music: Brasses French Horn

MVBA 1012 Applied Preparatory French Horn I (Y)

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVBB 1012 Applied Preparatory French Horn II (Y)

2 Credit Hours

Prerequisite: MVBA 1012. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVBA 1312 Applied Principal French Horn I (Y)

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 1312 Applied Principal French Horn II (Y)

2 Credit Hours

Prerequisite: MVBA 1312. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 2322 Applied Principal French Horn III (Y)

2 Credit Hours

Prerequisite: MVBB 1312. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 2322 Applied Principal French Horn IV (Y)

2 Credit Hours

Prerequisite: MVBA 2322. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 1212 Applied Secondary French Horn I (Y)

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music

majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBB 1212 Applied Secondary French Horn II (Y)

1 Credit Hour

Prerequisite: MVBA 1212. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBA 2222 Applied Secondary French Horn III (Y)

1 Credit Hour

Prerequisite: MVBB 1212. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBB 2222 Applied Secondary French Horn IV (Y)

1 Credit Hour

Prerequisite: MVBA 2222. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 1412 Applied Major French Horn I (Y)

3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 1412 Applied Major French Horn II (Y)

3 Credit Hours

Prerequisite: MVBA 1412. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBA 2422 Applied Major French Horn III (Y)

3 Credit Hours

Prerequisite: MVBB 1412. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 2422 Applied Major French Horn IV (Y)

3 Credit Hours

Prerequisite: MVBA 2422. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVS — Music: Strings Guitar

MVSA 1016 Applied Preparatory Guitar I (Y)

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSB 1016 Applied Preparatory Guitar II (Y)

2 Credit Hours

Prerequisite: MVSA 1016. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSA 1316 Applied Principal Guitar I (Y)

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 1316 Applied Principal Guitar II (Y)

2 Credit Hours

Prerequisite: MVSA 1316. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 2326 Applied Principal Guitar III (Y)

2 Credit Hours

Prerequisite: MVSB 1316. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 2326 Applied Principal Guitar IV (Y)

2 Credit Hours

Prerequisite: MVSA 2326. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1216 Applied Secondary Guitar I (Y)

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 1216 Applied Secondary Guitar II (Y)

1 Credit Hour

Prerequisite: MVSA 1216. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSA 2226 Applied Secondary Guitar III (Y)

1 Credit Hour

Prerequisite: MVSB 1216. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 2226 Applied Secondary Guitar IV (Y)

1 Credit Hour

Prerequisite: MVSA 2226. This is the fourth semester of private lessons designed for students majoring in any area of music

except performance (e.g. music education, music therapy, etc.).
Two half-hour lessons a week.

**MVSA 1416 Applied Major
Guitar I (Y)**

3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVSB 1416 Applied Major
Guitar II (Y)**

3 Credit Hours

Prerequisite: MVSA 1416. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVSA 2426 Applied Major
Guitar III (Y)**

3 Credit Hours

Prerequisite: MVSB 1416. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVSB 2426 Applied Major
Guitar IV (Y)**

3 Credit Hours

Prerequisite: MVSA 2426. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVW — Music: Woodwinds
Oboe**

**MVWA 1012 Applied Preparatory
Oboe I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWB 1012 Applied Preparatory
Oboe II (Y)**

2 Credit Hours

Prerequisite: MVWA 1012. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWA 1312 Applied Principal
Oboe I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWB 1312 Applied Principal
Oboe II (Y)**

2 Credit Hours

Prerequisite: MVWA 1312. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 2322 Applied Principal
Oboe III (Y)**

2 Credit Hours

Prerequisite: MVWB 1312. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWB 2322 Applied Principal
Oboe IV (Y)**

2 Credit Hours

Prerequisite: MVWA 2322. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 1212 Applied Secondary
Oboe I (Y)**

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWB 1212 Applied Secondary
Oboe II (Y)**

1 Credit Hour

Prerequisite: MVWA 1212. This is the second semester of private lessons designed for music majors

needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWA 2222 Applied Secondary
Oboe III (Y)**

1 Credit Hour

Prerequisite: MVWB 1212. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWB 2222 Applied Secondary
Oboe IV (Y)**

1 Credit Hour

Prerequisite: MVWA 2222. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 1412 Applied Major
Oboe I (Y)**

3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVWB 1412 Applied Major
Oboe II (Y)**

3 Credit Hours

Prerequisite: MVWA 1412. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVWA 2422 Applied Major
Oboe III (Y)**

3 Credit Hours

Prerequisite: MVWB 1412. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVWB 2422 Applied Major
Oboe IV (Y)**

3 Credit Hours

Prerequisite: MVWA 2422. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVK — Music: Keyboard Organ

MVKA 1013 Applied Preparatory Organ I (Y)

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVKB 1013 Applied Preparatory Organ II (Y)

2 Credit Hours

Prerequisite: MVKA 1013. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVKA 1313 Applied Principal Organ I (Y)

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVKB 1313 Applied Principal Organ II (Y)

2 Credit Hours

Prerequisite: MVKA 1313. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVKA 2323 Applied Principal Organ III (Y)

2 Credit Hours

Prerequisite: MVKB 1313. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVKB 2323 Applied Principal Organ IV (Y)

2 Credit Hours

Prerequisite: MVKA 2323. This is the fourth semester of private lessons designed for students

majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVKA 1213 Applied Secondary Organ I (Y)

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVKB 1213 Applied Secondary Organ II (Y)

1 Credit Hour

Prerequisite: MVKA 1213. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVKA 2223 Applied Secondary Organ III (Y)

1 Credit Hour

Prerequisite: MVKB 1213. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVKB 2223 Applied Secondary Organ IV (Y)

1 Credit Hour

Prerequisite: MVKA 2223. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVKA 1413 Applied Major Organ I (Y)

3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVKB 1413 Applied Major Organ II (Y)

3 Credit Hours

Prerequisite: MVKA 1413. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVKA 2423 Applied Major Organ III (Y)

3 Credit Hours

Prerequisite: MVKB 1413. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVKB 2423 Applied Major Organ IV (Y)

3 Credit Hours

Prerequisite: MVKA 2423. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVO — Music: Other Instruments Other

MVOA 1010 Applied Preparatory Other I (Y)

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVOB 1010 Applied Preparatory Other II (Y)

2 Credit Hours

Prerequisite: MVOA 1010. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVOA 1310 Applied Principal Other I (Y)

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVOB 1310 Applied Principal
Other II (Y)**

2 Credit Hours

Prerequisite: MVOA 1310. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVOA 2320 Applied Principal
Other III (Y)**

2 Credit Hours

Prerequisite: MVOB 1310. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVOB 2320 Applied Principal
Other IV (Y)**

2 Credit Hours

Prerequisite: MVOA 2320. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVOA 1210 Applied Secondary
Other I (Y)**

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVOB 1210 Applied Secondary
Other II (Y)**

1 Credit Hour

Prerequisite: MVOA 1210. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVOA 2220 Applied Secondary
Other III (Y)**

1 Credit Hour

Prerequisite: MVOB 1210. This is the third semester of private lessons designed for music majors needing to gain proficiency on

an instrument other than their principal or major. One half-hour lesson a week.

**MVOB 2220 Applied Secondary
Other IV (Y)**

1 Credit Hour

Prerequisite: MVOA 2220. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVOA 1410 Applied Major
Other I (Y)**

3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVOB 1410 Applied Major
Other II (Y)**

3 Credit Hours

Prerequisite: MVOA 1410. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVOA 2420 Applied Major
Other III (Y)**

3 Credit Hours

Prerequisite: MVOB 1410. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVOB 2420 Applied Major
Other IV (Y)**

3 Credit Hours

Prerequisite: MVOA 2420. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVP — Music Percussion
Percussion**

**MVPA 1011 Applied Preparatory
Percussion I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVPB 1011 Applied Preparatory
Percussion II (Y)**

2 Credit Hours

Prerequisite: MVPA 1011. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVPA 1311 Applied Principal
Percussion I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVPB 1311 Applied Principal
Percussion II (Y)**

2 Credit Hours

Prerequisite: MVPA 1311. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVPA 2321 Applied Principal
Percussion III (Y)**

2 Credit Hours

Prerequisite: MVPB 1311. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVPB 2321 Applied Principal
Percussion IV (Y)**

2 Credit Hours

Prerequisite: MVPA 2321. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVPA 1211 Applied Secondary
Percussion I (Y)**

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music

majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVPB 1211 Applied Secondary Percussion II (Y)

1 Credit Hour

Prerequisite: MVPA 1211. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVPA 2221 Applied Secondary Percussion III (Y)

1 Credit Hour

Prerequisite: MVPB 1211. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVPB 2221 Applied Secondary Percussion IV (Y)

1 Credit Hour

Prerequisite: MVPA 2221. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVPA 1411 Applied Major Percussion I (Y)

3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVPB 1411 Applied Major Percussion II (Y)

3 Credit Hours

Prerequisite: MVPA 1411. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVPA 2421 Applied Major Percussion III (Y)

3 Credit Hours

Prerequisite: MVPB 1411. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVPB 2421 Applied Major Percussion IV (Y)

3 Credit Hours

Prerequisite: MVPA 2421. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVK — Music: Keyboard Piano

MVKA 1011 Applied Preparatory Piano I (Y)

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVKB 1011 Applied Preparatory Piano II (Y)

2 Credit Hours

Prerequisite: MVKA 1011. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVKA 1311 Applied Principal Piano I (Y)

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour lesson a week.

MVKB 1311 Applied Principal Piano II (Y)

2 Credit Hours

Prerequisite: MVKA 1311. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour lesson a week.

MVKA 2321 Applied Principal Piano III (Y)

2 Credit Hours

Prerequisite: MVKB 1311. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour lesson a week.

MVKB 2321 Applied Principal Piano IV (Y)

2 Credit Hours

Prerequisite: MVKA 2321. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour lesson a week.

MVKA 1211 Applied Secondary Piano I (Y)

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVKB 1211 Applied Secondary Piano II (Y)

1 Credit Hour

Prerequisite: MVKA 1211. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVKA 2221 Applied Secondary Piano III (Y)

1 Credit Hour

Prerequisite: MVKB 1211. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVKB 2221 Applied Secondary Piano IV (Y)

1 Credit Hour

Prerequisite: MVKA 2221. This is the fourth semester of private lessons designed for students majoring in any area of music

except performance (e.g. music education, music therapy, etc.).
One half-hour lesson per week.

**MVKA 1411 Applied Major
Piano I (Y)**

3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. One hour lesson a week.

**MVKB 1411 Applied Major
Piano II (Y)**

3 Credit Hours

Prerequisite: MVKA 1411. This is the second semester of private lessons designed for students majoring in performance. One hour lesson per week.

**MVKA 2421 Applied Major
Piano III (Y)**

3 Credit Hours

Prerequisite: MVKB 1411. This is the third semester of private lessons designed for students majoring in performance. One hour lesson a week.

**MVKB 2421 Applied Major
Piano IV (Y)**

3 Credit Hours

Prerequisite: MVKA 2421. This is the fourth semester of private lessons designed for students majoring in performance. One hour lesson a week.

**MVW — Music: Woodwinds
Saxophone**

**MVWA 1015 Applied Preparatory
Saxophone I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWB 1015 Applied Preparatory
Saxophone II (Y)**

2 Credit Hours

Prerequisite: MVWA 1015. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWA 1315 Applied Principal
Saxophone I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWB 1315 Applied Principal
Saxophone II (Y)**

2 Credit Hours

Prerequisite: MVWA 1315. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 2325 Applied Principal
Saxophone III (Y)**

2 Credit Hours

Prerequisite: MVWB 1315. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWB 2325 Applied Principal
Saxophone IV (Y)**

2 Credit Hours

Prerequisite: MVWA 2325. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 1215 Applied Secondary
Saxophone I (Y)**

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWB 1215 Applied Secondary
Saxophone II (Y)**

1 Credit Hour

Prerequisite: MVWA 1215. This is the second semester of private lessons designed for music majors

needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWA 2225 Applied Secondary
Saxophone III (Y)**

1 Credit Hour

Prerequisite: MVWB 1215. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWB 2225 Applied Secondary
Saxophone IV (Y)**

1 Credit Hour

Prerequisite: MVWA 2225. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVWA 1415 Applied Major
Saxophone I (Y)**

3 Credit Hours

Prerequisite: placement by audition before the faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVWB 1415 Applied Major
Saxophone II (Y)**

3 Credit Hours

Prerequisite: MVWA 1415. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVWA 2425 Applied Major
Saxophone III (Y)**

3 Credit Hours

Prerequisite: MVWB 1415. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVWB 2425 Applied Major
Saxophone IV (Y)**

3 Credit Hours

Prerequisite: MVWA 2425. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVS — Music: Strings
String Bass

MVSA 1014 Applied Preparatory
String Bass I (Y)
2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSB 1014 Applied Preparatory
String Bass II (Y)
2 Credit Hours

Prerequisite: MVSA 1014. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSA 1314 Applied Principal
String Bass I (Y)
2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 1314 Applied Principal
String Bass II (Y)
2 Credit Hours

Prerequisite: MVSA 1314. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 2324 Applied Principal
String Bass III (Y)
2 Credit Hours

Prerequisite: MVSB 1314. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 2324 Applied Principal
String Bass IV (Y)
2 Credit Hours

Prerequisite: MVSA 2324. This is the fourth semester of private lessons designed for students

majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1214 Applied Secondary
String Bass I (Y)
1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 1214 Applied Secondary
String Bass II (Y)
1 Credit Hour

Prerequisite: MVSA 1214. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSA 2224 Applied Secondary
String Bass III (Y)
1 Credit Hour

Prerequisite: MVSB 1214. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 2224 Applied Secondary
String Bass IV (Y)
1 Credit Hour

Prerequisite: MVSA 2224. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1414 Applied Major
String Bass I (Y)
3 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 1414 Applied Major
String Bass II (Y)
3 Credit Hours

Prerequisite: MVSA 1414. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSA 2424 Applied Major
String Bass III (Y)
3 Credit Hours

Prerequisite: MVSB 1414. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 2424 Applied Major
String Bass IV (Y)
3 Credit Hours

Prerequisite: MVSA 2424. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVB — Music: Brasses
Trombone

MVBA 1013 Applied Preparatory
Trombone I (Y)
2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVBB 1013 Applied Preparatory
Trombone II (Y)
2 Credit Hours

Prerequisite: MVBA 1013. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVBA 1313 Applied Principal
Trombone I (Y)
2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 1313 Applied Principal Trombone II (Y)**2 Credit Hours**

Prerequisite: MVBA 1313. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 2323 Applied Principal Trombone III (Y)**2 Credit Hours**

Prerequisite: MVBB 1313. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 2323 Applied Principal Trombone IV (Y)**2 Credit Hours**

Prerequisite: MVBA 2323. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 1213 Applied Secondary Trombone I (Y)**1 Credit Hour**

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBB 1213 Applied Secondary Trombone II (Y)**1 Credit Hour**

Prerequisite: MVBB 1213. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBA 2223 Applied Secondary Trombone III (Y)**1 Credit Hour**

Prerequisite: MVBB 1213. This is the third semester of private lessons designed for music majors needing to gain proficiency on

an instrument other than their principal or major. One half-hour lesson a week.

MVBB 2223 Applied Secondary Trombone IV (Y)**1 Credit Hour**

Prerequisite: MVBA 2223. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 1413 Applied Major Trombone I (Y)**3 Credit Hours**

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 1413 Applied Major Trombone II (Y)**3 Credit Hours**

Prerequisite: MBVA 1413. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBA 2423 Applied Major Trombone III (Y)**3 Credit Hours**

Prerequisite: MVBB 1413. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 2423 Applied Major Trombone IV (Y)**3 Credit Hours**

Prerequisite: MVBA 2423. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVB — Music: Brasses Trumpet**MVBA 1011 Applied Preparatory Trumpet I (Y)****2 Credit Hours**

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVBB 1011 Applied Preparatory Trumpet II (Y)**2 Credit Hours**

Prerequisite: MVBA 1011. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

MVBA 1311 Applied Principal Trumpet I (Y)**2 Credit Hours**

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 1311 Applied Principal Trumpet II (Y)**2 Credit Hours**

Prerequisite: MVBA 1311. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 2321 Applied Principal Trumpet III (Y)**2 Credit Hours**

Prerequisite: MVBB 1311. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 2321 Applied Principal Trumpet IV (Y)**2 Credit Hours**

Prerequisite: MVBA 2321. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 1211 Applied Secondary Trumpet I (Y)**1 Credit Hour**

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music

majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVBB 1211 Applied Secondary
Trumpet II (Y)**

1 Credit Hour

Prerequisite: MVBA 1211. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVBA 2221 Applied Secondary
Trumpet III (Y)**

1 Credit Hour

Prerequisite: MVBB 1211. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVBB 2221 Applied Secondary
Trumpet IV (Y)**

1 Credit Hour

Prerequisite: MVBA 2221. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVBA 1411 Applied Major
Trumpet I (Y)**

3 Credit Hours

Prerequisite: placement by audition before the entire full-time music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVBB 1411 Applied Major
Trumpet II (Y)**

3 Credit Hours

Prerequisite: MVBA 1411. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVBA 2421 Applied Major
Trumpet III (Y)**

3 Credit Hours

Prerequisite: MVBB 1411. This is the third semester of private lessons designed for students

majoring in performance. Two half-hour lessons a week.

**MVBB 2421 Applied Major
Trumpet IV (Y)**

3 Credit Hours

Prerequisite: MVBA 2421. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVB — Music: Brasses
Tuba**

**MVBA 1015 Applied Preparatory
Tuba I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVBB 1015 Applied Preparatory
Tuba II (Y)**

2 Credit Hours

Prerequisite: MVBA 1015. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVBA 1315 Applied Principal
Tuba I (Y)**

2 Credit Hours

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVBB 1315 Applied Principal
Tuba II (Y)**

2 Credit Hours

Prerequisite: MVBA 1315. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVBA 2325 Applied Principal
Tuba III (Y)**

2 Credit Hours

Prerequisite: MVBB 1315. This is the third semester of private lessons designed for students

majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVBB 2325 Applied Principal
Tuba IV (Y)**

2 Credit Hours

Prerequisite: MVBA 2325. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVBA 1215 Applied Secondary
Tuba I (Y)**

1 Credit Hour

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVBB 1215 Applied Secondary
Tuba II (Y)**

1 Credit Hour

Prerequisite: MVBA 1215. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVBA 2225 Applied Secondary
Tuba III (Y)**

1 Credit Hour

Prerequisite: MVBB 1215. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVBB 2225 Applied Secondary
Tuba IV (Y)**

1 Credit Hour

Prerequisite: MVBA 2225. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVBA 1415 Applied Major
Tuba I (Y)****3 Credit Hours**

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVBB 1415 Applied Major
Tuba II (Y)****3 Credit Hours**

Prerequisite: MVBA 1415. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVBA 2425 Applied Major
Tuba III (Y)****3 Credit Hours**

Prerequisite: MVBB 1415. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVBB 2425 Applied Major
Tuba IV (Y)****3 Credit Hours**

Prerequisite: MVBA 2425. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVS — Music: Strings
Viola****MVSA 1012 Applied Preparatory
Viola I (Y)****2 Credit Hours**

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVSB 1012 Applied Preparatory
Viola II (Y)****2 Credit Hours**

Prerequisite: MVSA 1012. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVSA 1312 Applied Principal
Viola I (Y)****2 Credit Hours**

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVSB 1312 Applied Principal
Viola II (Y)****2 Credit Hours**

Prerequisite: MVSA 1312. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVSA 2322 Applied Principal
Viola III (Y)****2 Credit Hours**

Prerequisite: MVSB 1312. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVSB 2322 Applied Principal
Viola IV (Y)****2 Credit Hours**

Prerequisite: MVSA 2322. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVSA 1212 Applied Secondary
Viola I (Y)****1 Credit Hour**

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVSB 1212 Applied Secondary
Viola II (Y)****1 Credit Hour**

Prerequisite: MVSA 1212. This is the second semester of private lessons designed for music majors

needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVSA 2222 Applied Secondary
Viola III (Y)****1 Credit Hour**

Prerequisite: MVSB 1212. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVSB 2222 Applied Secondary
Viola IV (Y)****1 Credit Hour**

Prerequisite: MVSA 2222. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVSA 1412 Applied Major
Viola I (Y)****3 Credit Hours**

Prerequisite: placement by audition before the full-time music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVSB 1412 Applied Major
Viola II (Y)****3 Credit Hours**

Prerequisite: MVSA 1412. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVSA 2422 Applied Major
Viola III (Y)****3 Credit Hours**

Prerequisite: MVSB 1412. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVSB 2422 Applied Major
Viola IV (Y)****3 Credit Hours**

Prerequisite: MVSA 2422. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVS — Music: Strings
Violin****MVSA 1011 Applied Preparatory
Violin I (Y)****2 Credit Hours**

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVSB 1011 Applied Preparatory
Violin II (Y)****2 Credit Hours**

Prerequisite: MVSA 1011. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVSA 1311 Applied Principal
Violin I (Y)****2 Credit Hours**

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVSB 1311 Applied Principal
Violin II (Y)****2 Credit Hours**

Prerequisite: MVSA 1311. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVSA 2321 Applied Principal
Violin III (Y)****2 Credit Hours**

Prerequisite: MVSB 1311. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVSB 2321 Applied Principal
Violin IV (Y)****2 Credit Hours**

Prerequisite: MVSA 2321. This is the fourth semester of private

lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVSA 1211 Applied Secondary
Violin I (Y)****1 Credit Hour**

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVSB 1211 Applied Secondary
Violin II (Y)****1 Credit Hour**

Prerequisite: MVSA 1211. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVSA 2221 Applied Secondary
Violin III (Y)****1 Credit Hour**

Prerequisite: MVSB 1211. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVSB 2221 Applied Secondary
Violin IV (Y)****1 Credit Hour**

Prerequisite: MVSA 2221. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVSA 1411 Applied Major
Violin I (Y)****3 Credit Hours**

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVSB 1411 Applied Major
Violin II (Y)****3 Credit Hours**

Prerequisite: MVSA 1411. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVSA 2421 Applied Major
Violin III (Y)****3 Credit Hours**

Prerequisite: MVSB 1411. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVSB 2421 Applied Major
Violin IV (Y)****3 Credit Hours**

Prerequisite: MVSA 2421. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVV — Music: Voice
Voice****MVVA 1011 Applied Preparatory
Voice I (Y)****2 Credit Hours**

Prerequisite: placement by audition before the voice faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour of diction included. One hour lesson a week.

**MVVB 1011 Applied Preparatory
Voice II (Y)****2 Credit Hours**

Prerequisite: MVVA 1011. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour of diction included. One hour lesson a week.

**MVVA 1311 Applied Principal
Voice I (Y)****2 Credit Hours**

Prerequisite: placement by audition before the voice faculty. This is the first semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy, etc.).

One hour of diction included.
One hour lesson a week.

**MVVB 1311 Applied Principal
Voice II (Y)**

2 Credit Hours

Prerequisite: MVVA 1311. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour of diction included. One hour lesson a week.

**MVVA 2321 Applied Principal
Voice III (Y)**

2 Credit Hours

Prerequisite: MVVB 1311. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour of diction included. One hour lesson a week.

**MVVB 2321 Applied Principal
Voice IV (Y)**

2 Credit Hours

Prerequisite: MVVA 2321. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour of diction included. One hour lesson a week.

**MVVA 1211 Applied Secondary
Voice I (Y)**

1 Credit Hour

Prerequisite: placement by audition before the voice faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVVB 1211 Applied Secondary
Voice II (Y)**

1 Credit Hour

Prerequisite: MVVA 1211. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVVA 2221 Applied Secondary
Voice III (Y)**

1 Credit Hour

Prerequisite: MVVB 1211. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVVB 2221 Applied Secondary
Voice IV (Y)**

1 Credit Hour

Prerequisite: MVVA 2221. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVVA 1411 Applied Major
Voice I (Y)**

3 Credit Hours

Prerequisite: placement by audition before the voice faculty. This is the first semester of private lessons designed for students majoring in performance. One hour of diction included. Two half-hour lessons a week.

**MVVB 1411 Applied Major
Voice II (Y)**

3 Credit Hours

Prerequisite: MVVA 1411. This is the second semester of private lessons designed for students majoring in performance. One hour of diction included. Two half-hour lessons a week.

**MVVA 2421 Applied Major
Voice III (Y)**

3 Credit Hours

Prerequisite: MVVB 1411. This is the third semester of private lessons designed for students majoring in performance. One hour of diction included. Two half-hour lessons a week.

**MVVB 2421 Applied Major
Voice IV (Y)**

3 Credit Hours

Prerequisite: MVVA 2421. This is the fourth semester of private lessons designed for students majoring in performance. One hour of diction included. Two half-hour lessons a week.

**NUR — Nursing Practice
and Theory**

**NUR 1000C Transitional
Nursing Process I**

9 Credit Hours

Prerequisites: BSC 2085C, BSC 2086C, MCB 2013C, ENC 1101, PSY 1012, DEP 2004, MAC 1102 or any higher level mathematics course, and any one of the following: SYG 2000, humanities (refer to A.S. degree General Education Requirements). This course, designed for and limited to Florida licensed practical nurses, encompasses a review of fundamental concepts of health needs, asepsis, dosage calculation and medication administration. The course includes basic principles of mental health, communication and family nursing with emphasis placed on resocialization of the nurse's role within the framework of the nursing process. This course utilizes simulated and actual nursing care work experiences for application of theoretical concepts. Students receive evaluation in selected clinical skills in the campus nursing laboratory. Twelve contact hours: six lecture hours, six laboratory hours. (Students will receive learning experiences on campus and in a clinical facility.)

**NUR 1021C Nursing Process I –
Fundamentals of Nursing**

10 Credit Hours

Prerequisite: BSC 2086C. Nursing Process I is a study of the principles and techniques that form the foundation for nursing care. The nursing process — assessing, analyzing, planning, implementing and evaluating — serves as the framework for the application of content with emphasis on nursing interventions and adaptations for specific age groups, particularly elderly clients, to meet the basic needs of man in health maintenance. Content and experiences focus on the geriatric client, observations, communication, the interpersonal process, recording, hygienic practices, administration of medications, asepsis, nutrition, elimination,

fluid balance and oxygenation. The course introduces current trends and legal implications of nursing. Fifteen contact hours: five lecture hours, ten laboratory hours. (Students will receive learning experiences on campus and in a clinical facility.) (CBE)

**NUR 1212C Nursing Process II —
Medical Surgical Nursing Care
of the Adult Client I**
10 Credit Hours

Prerequisites: NUR 1021C and MCB 2013C. With Nursing Process I as a foundation, this course moves from the basic client needs in health maintenance to common health problems which require new knowledge and adaptation and includes study of the physical and psychological needs of clients. The course places emphasis on the essential knowledge, understanding and skills necessary to the nursing care of adult clients with medical and surgical conditions and upon the interpersonal process. This course continues the five steps of the nursing process with a higher level of performance expected of students. Sixteen contact hours: four lecture hours, twelve laboratory hours. (Students will receive learning experiences on campus and in a clinical facility.)

**NUR 1703C Transitional
Nursing Process II**
9 Credit Hours

Prerequisite: NUR 1000C. Corequisites: may be enrolled in any course listed under A.S. degree humanities or SYG 2000. A continuation of Transitional Nursing Process I, this course, designed for and limited to Florida licensed practical nurses, introduces students to the use of the nursing process in their newly developing roles when interacting with adult and child clients having interruptions in their physical and psychological health. The course emphasizes demonstration of knowledge, comprehension, application and analysis of the nursing process and includes drug and diet therapy. The course utilizes simulated

and actual nursing experiences related to theoretical concepts and evaluates clinical skills in the campus nursing laboratory. Twelve contact hours: six lecture hours, six laboratory hours (students will receive learning experiences on campus and in a clinical facility).

**NUR 2313C Nursing Process IIIB —
Nursing Care of Children**
6 Credit Hours

Prerequisites: NUR 1212C and DEP 2004. Corequisite: NUR 2420C. With Nursing Process I and II as a basis, Nursing Process IIIB encompasses the study of physical and psychological states of children from infancy through adolescence. This course uses the wellness to illness approach with a focus on the child as a member of a family. Pediatric nursing supports the belief that children, by nature of their growth and development, and physical and emotional differences, have needs in health and illness different from those of adults. Utilizing the nursing process students are able to apply knowledge and skills in solving common recurring health problems. Further, students learn to adapt principles of growth and development to the care of children. Nine and one-half contact hours (lecture/discussion). (Students will receive learning experiences on campus and in a clinical facility).

**NUR 2420C Nursing Process IIIA —
Nursing Care of the
Child Bearing Family**
6 Credit Hours

Prerequisites: NUR 1212C and DEP 2004. Corequisite: NUR 2313C. With Nursing Process I and II as a basis, Nursing Process IIIA encompasses the child bearing cycle as an adaptation of the state of wellness and continues through the neonatal stage of development. Nursing Care of the Child Bearing Family focuses on nursing interventions with families who are experiencing the stresses of the child bearing period. The nursing

care of the child bearing family given by student nurses relies on the belief that special needs and problems occurring at designated points in the growth cycle are outgrowths of the developmental level attained by the individual. This course emphasizes utilizing nursing and the interpersonal process to identify and meet the physiological, sociocultural, and psychological needs of the child bearing family. This course also covers the uncomplicated and the complicated pregnancy, the focus being on the common recurring problems of this period. Laboratory experiences occur in community hospitals and other health agencies. Nine and one-half contact hours (lecture/discussion).

**NUR 2520C Nursing Process IVB —
Psychiatric Nursing**
3 Credit Hours

Prerequisites: NUR 2420C and NUR 2313C. Corequisite: NUR 2730C. This four-week course builds on the mental health concepts presented in each of the previous nursing courses. In varied clinical settings, this course emphasizes the use of the nursing process in the care of adolescent and adult clients with deviant patterns of behavior. (Students will receive learning experiences on campus and in a clinical facility.) Five contact hours (over a four-week period) (lecture/discussion).

**NUR 2730C Nursing Process IVA —
Medical-Surgical Nursing Care
of the Adult Client II**
9 Credit Hours

Prerequisites: NUR 2420C and NUR 2313C. Corequisite: NUR 2520C. This 11-week course is a continuation of the study of commonly recurring health problems of clients from the young adult years through senescence with focus on the illness side of the continuum. The nursing process will serve as the basis for nursing care. Students will give nursing care to clients with medical-surgical disorders. Learning experiences will provide opportunities to utilize previously

acquired knowledge and skills in giving nursing care and functioning as a team member. Recognizing the special status and needs of beginning associate degree nurse practitioners, this course includes a transitional clinical experience. Twenty contact hours: four lecture hours, sixteen laboratory hours (over an 11-week period). (Students will receive learning experiences on campus and in a clinical facility).

OCB — Oceanography: Biological

OCB 2003C Fundamentals of Marine Biology (Y)

4 Credit Hours

Students will benefit by taking Principles of Biology I and/or high school chemistry, physics or Introduction to General Chemistry prior to enrolling in this course. This course consists of a comprehensive survey of marine ecosystems with emphasis on the local flora and fauna. Laboratory includes collection and identification of marine organisms. Six contact hours: three lecture hours, three laboratory hours.

OCE — Oceanography: General

OCE 2001 Survey of Oceanography (Y)

3 Credit Hours

Prerequisite: MAT 1033. Corequisites: MAC 1140 and OCE 2001L. Students will benefit by taking high school chemistry and/or physics prior to enrolling in this course. This course consists of an introductory, comprehensive treatment of physical, chemical and geological aspects of our oceans. Three contact hours.

OCE 2001L Oceanography Laboratory (Y)

1 Credit Hour

Corequisite: OCE 2001. This is a laboratory course intended to supplement Survey of Oceanography and includes field trips for application of oceanographic techniques. Three contact hours (laboratory).

ORH — Ornamental Horticulture

ORH 1808 Exterior and Interior Landscaping

3 Credit Hours

This course provides students with a basic overview of exterior and interior landscaping. Topics include site analysis, selection of plants, lighting requirements and maintenance. Differences between commercial and residential adaptations will be explored. Special emphasis will be given to the North Florida growing season. Three contact hours.

ORI — Oral Interpretation

ORI 2000 Oral Interpretation (Y)

3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course consists of critical analysis and appreciation of literature from both the emotional and the intellectual viewpoints. Designed to enhance students' appreciation of words, ideas and beauty in all forms of literature, this course involves the discussion and application of the techniques of oral reading of poetry, prose and drama. This course serves to meet the Gordon Rule writing requirement. Three contact hours.

OST — Office Systems Technology

OST 1051 Personal Preparation for Business Careers

1 Credit Hour

This course is designed to provide instructions to students to receive employability skills needed to help secure a job with emphasis on job search skills, resume writing and interviewing success. One contact hour.

OST 1100 Keyboarding/Introduction to Word Processing (Y)

3 Credit Hours

The major objectives of the course, designed for students who have little or no typewriting/keyboarding experience, are to learn the keyboard and to develop correct keyboarding techniques. The course introduces basic word processing concepts applied to report

centered texts, letters and memos. Three contact hours. (CBE)

OST 1108 Keyboard Skill/Speed Building (Y)

3 Credit Hours

Prerequisite: OST 1100 or previous keyboarding experience. Computerized diagnostic tests will be used to identify weaknesses in keying speed and accuracy. Speed and accuracy studies will then be designed to build individual keyboarding skills. This course is designed for students who have previous keyboarding experience. Three contact hours. (CBE)

OST 1145 Data Entry Applications

3 Credit Hours

Prerequisite: OST 1100 or satisfactory score (20 wpm) on a keyboarding test. This course provides extensive practice in keying alphabetic, numeric and alphanumeric data. It is designed to build keying skill and to build skill in various data entry applications. Emphasis is placed on accurate inputting of data, whatever the application. Three contact hours. (CBE)

OST 1273 Effective Notetaking

1 Credit Hour

This course is designed to provide students with strategies for improving listening skills, enhancing learning and recall through effective notetaking and applying techniques to improve materials organization. One contact hour.

OST 1324 Business Mathematics Using Calculators (Y)

3 Credit Hours

Prerequisite: MAT 0002 with a grade of "C" or better, or satisfactory score on the placement test. This course consists of a mathematical treatment of financial problems arising in modern businesses. Fundamental mathematical processes are reviewed using electronic calculators. The course covers percentages, simple and compound interest, inventories, depreciation, payroll, commissions, taxes and other

business-related topics. Spreadsheet applications are introduced. Three contact hours. (CBE)

OST 1355 Introduction to Information and Records Management
2 Credit Hours

This course gives students an overview of records used in business, as well as various configurations of record-keeping systems. Students are made aware of how and why information of various types are stored on several kinds of media and how an information system functions. Career opportunities are presented. Emphasis is placed on international filing rules. Two contact hours.

OST 1384 Introduction to Customer Service
3 Credit Hours

This course is an introduction to the basics of customer service technology. Emphasis is on enhancing customer relation skills, building rapport with customers and improving communication and negotiating skills. Students will learn how to respond to customer requirements and to efficiently handle difficult situations. Three contact hours.

OST 1464 Computers in the Medical Office
3 Credit Hours

Prerequisite: OST 1100 or previous keyboarding experience. This course is designed to provide students the skills required to manage patient, procedure and insurance information via the use of database software in a medical office setting. Three contact hours.

OST 1581 Professional Development in the Work Environment
3 Credit Hours

This course is designed to provide techniques for the development of people skills essential for job success. Topics include developing a professional image, ethics, time management, human relations and communications skills, organizational dynamics,

employability skills, conflict management skills and money management. Three contact hours.

OST 1601 Fundamentals of Business Communications
3 Credit Hours

This course is designed to provide the foundation for effective business communications. It will focus on the fundamentals of English and the established standards of usage while emphasizing their importance in the business world. Students will learn listening and verbal skills, and how to format, proofread and edit documents. Three contact hours. (CBE)

OST 1621 Legal Transcription
3 Credit Hours

Prerequisite: OST 2771 or word processing skills. This is a specialized terminology and transcription course to develop proficiency in the skill of transcribing accurately all types of legal dictation with emphasis on accuracy, legal vocabulary and document formatting. **Note:** Students whose keyboarding speed is less than 40 words per minute will have difficulty keeping up and may not perform well on tests. Three contact hours.

OST 2335 Applied Business Communications (Y)
3 Credit Hours

Prerequisite: OST 1601 or ENC 1101. This course is designed to teach the communication skills necessary to speak and write clearly in a business environment. Students will compose business correspondence, develop and give an oral presentation, and develop effective verbal and nonverbal communication and listening skills. Three contact hours.

OST 2402 Administrative Support Systems and Procedures (Y)
3 Credit Hours

Prerequisites: OST 2771, CSG 1570 or CGS 1100, and OST 2335. This capstone course which is taught using a simulated office environment will integrate all of the skills learned in the office management technology

A.S. degree, including critical-thinking and problem-solving skills. An understanding of the roles of administrative support personnel, organization and time management, information and communications systems, meeting and travel planning, reprographics, and report and presentations research and development are included. Three contact hours.

OST 2501 Office Systems Management (Y)
3 Credit Hours

This course applies management principles to planning and controlling office systems. Emphasis is given to organization of office resources, leadership and motivation of office personnel, office environment and design of business information systems. Three contact hours.

OST 2602 Machine Transcription
3 Credit Hours

Prerequisite: OST 2771 or word processing experience. This course provides a simulation of office tasks to aid students in attaining competency in transcribing from machine dictation, in proper and accurate use of language arts, in formatting office papers and in the effective use of current office technology. **Note:** Students whose keyboarding speed is less than 40 words per minute will have difficulty keeping up and may not perform well on tests. Three contact hours.

OST 2771 Word Processing for Windows I (Y)
4 Credit Hours

Prerequisite: OST 1100 or previous keyboarding experience. This course includes concepts of word processing and text editing applications. It includes creating, saving, revising, editing, printing, and using special features in basic word processing files in a Windows environment. **Note:** Students without keyboarding skills may have difficulty completing assignments, and may not perform well on tests. Four contact hours. (CBE)

OST 2773 Word Processing for Windows II (Y)

4 Credit Hours

Prerequisite: OST 2771. This course is designed to teach students how to produce complex documents using advanced word processing functions in a Windows environment. Four contact hours.

OST 2821 Desktop Publishing Using Word Processing

3 Credit Hours

Prerequisite: working knowledge of microcomputers and experience with word processing in a Windows environment. This course is an introduction to desktop publishing using current word processing software. Projects and hands-on practice appropriate to contemporary business needs will be used. Foundation page design skills will be introduced to familiarize students with the concepts of page composition and typography including different type styles and sizes and page formatting techniques. Four contact hours: three lecture hours, one laboratory hour.

OST 2930 Selected Topics in Office Systems Technology

3 Credit Hours

Prerequisite: depends upon topic. Corequisite: depends upon topic. The open-topic format of this course provides an opportunity to address various combinations of topics related to OST curriculum or business industry need. This course may be repeated for credit. Four contact hours: three lecture hours, one laboratory hour.

PCB — Process Biology (Cell/Molecular/Ecology/Genetics/Physiology)

PCB 2033 General Ecology (Y)
3 Credit Hours

Prerequisite: successful completion of a biological or physical science course. This course is an introduction to ecology, principles of ecology with applications to environmental issues and discussion of major terrestrial/aquatic ecosystems. Three contact hours. (CBE)

PEL — Physical Education Acts (General) — Object Centered, Land

PEL 1121 Beginning Golf

1 Credit Hour

This beginning course teaches the basic golf swing and its application to starter clubs. The course also includes golfing etiquette, history, rules and simple strategy. Two contact hours (activity).

PEL 1122 Intermediate Golf

1 Credit Hour

Prerequisite: PEL 1121 or consent of instructor. This intermediate course will be an extension of the beginning course teaching in greater detail in relation to the golf swing, along with a review of etiquette and rules. More focus will be placed on strategy and appropriate sessions. Two contact hours (activity).

PEL 1211 Softball

1 Credit Hour

This course, designed for students who wish to broaden their knowledge of softball and improve their game skills, emphasizes the history of the game, rules, fundamentals, game skills and strategies. Two contact hours (activity).

PEL 1321 Beginning Volleyball

1 Credit Hour

This course teaches the fundamental skills, strategy and knowledge necessary for game and tournament participation. Two contact hours (activity).

PEL 1341 Beginning Tennis

1 Credit Hour

This introductory course covers the history, scoring, game strategy and basic skills, which include footwork, forehand and backhand drives, serve, volley and lob. Two contact hours (activity).

PEL 1342 Intermediate Tennis

1 Credit Hour

Students will benefit by taking Beginning Tennis prior to enrolling in this course. This course is designed for students who have acquired the basic skills and

strategy of tennis and desire to improve their tennis game. Two contact hours (activity).

PEL 1622 Advanced Basketball

1 Credit Hour

This course, designed to teach skills in basketball, includes instruction in offensive and defensive fundamentals, strategy and rules as well as application in game situations. Two contact hours (activity).

PEL 2322 Advanced Volleyball

1 Credit Hour

This course introduces power volleyball techniques, tactics and strategy to students interested in either the competitive or recreational aspect of the game. Two contact hours (activity).

PEM — Physical Education Acts (General) — Performance Centered, Land

PEM 1101 Physical Conditioning

1 Credit Hour

This course, designed to assist men and women in becoming stronger, more flexible, better coordinated and more graceful, includes a program of planned activities such as selected exercises, use of weight equipment and aerobic activities. Two contact hours (activity).

PEM 1109 Circuit Training

1 Credit Hour

This course consists of a planned fitness training program to increase muscular strength and endurance through a planned series of exercises. Two contact hours (activity).

PEM 1320 Beginning Rock Climbing (Y)

2 Credit Hours

This course is designed to expose students to the activity of top-roped rock climbing. The emphasis will be on the selection of appropriate gear and sites, the safe set-up and conducting of a climbing/rappelling experience, and the self-esteem and transferable life skills acquired from effective participation in a team-oriented outdoor adventure pursuit. One four-day field trip is

included. A cost for the activity will be assessed. Three contact hours: one and one-half lecture hours, one and one-half other hours (activity).

PEM 1131 Strength Training (Nautilus/Universal) (Y)

2 Credit Hours

Recommended prerequisite or corequisite: HLP 1081. This course is designed to provide basic strength training principles and individualized programs with emphasis on muscular strength and endurance. It is recommended, and in some cases may be required, that students obtain medical approval prior to participation in the course. Three contact hours: one and one-half lecture hours, one and one-half other hours (activity).

PEM 1146 Beginning Jogging (Y)

2 Credit Hours

Recommended prerequisite or corequisite: HLP 1081. This course introduces basic concerns of beginning joggers such as safety factors, warm-up and cool-down, developing individual style, equipment selection, training principles and injury prevention, and precautions. It is recommended, and in some cases may be required, that students obtain medical approval prior to participation in the course. Three contact hours: one and a half lecture hours, one and one-half other hour (activity).

PEM 1171 Aerobics to Music (Y)

2 Credit Hours

Recommended prerequisite or corequisite: HLP 1081. This course is designed to introduce techniques for improving aerobic capacity exercises with a combination of exercise and dance set to music. Emphasis is more on movement and exercise rather than skill. It is recommended, and in some cases may be required, that students obtain medical approval prior to participation in the course. Three contact hours: one and one-half lecture hours, one and one-half activity hours.

PEM 1301 Track and Field Events

1 Credit Hour

This course includes an introduction to the basic skills and knowledge involved in sprinting, distance running, relays and hurdling. Two contact hours (activity).

PEM 1351 Cycling (Y)

2 Credit Hours

This course introduces basic concerns of cyclists such as equipment/clothing, basic operating skills, traffic, cycling laws/safety, fitness training principles and cycling for commuting, touring, racing and fitness. Students must furnish their own bike. It is recommended and in some cases may be required, that students obtain medical approval prior to participation in the course. Students will be responsible for planning and participating in a two-day (Saturday-Sunday) cycle tour, using a sag wagon to transport food and camping gear. A cost for the trip will be assessed. Three contact hours: one and one-half lecture hours, one and one-half activity hours.

PEN — Physical Education Acts (General) — Water, Snow, Ice

PEN 1251 Adventure Canoeing (Y)

2 Credit Hours

Prerequisite: basic swimming skills. This course is a coeducational course which provides the opportunity for students to acquire the knowledge and skills for safe handling and maneuvering of a canoe both solo and tandem. Canoe expeditions are included. A cost for the expeditions will be assessed. Three contact hours: one and one-half lecture hour, one and one-half activity hour.

PEO — Physical Education Acts (Professional) — Object Centered, Land

PEO 2003 Sports Officiating (Y)

3 Credit Hours

This course, designed to acquaint students with the techniques of officiating team, individual and dual sports, and covers baseball/softball, basketball, track

and field, volleyball, tennis and swimming. Three contact hours.

PET — Physical Education Theory

PET 2000 Introduction to Physical Education (Y)

3 Credit Hours

This course, designed for students interested in physical education as a profession, examines the place, function and contribution of physical education within the total educational program. It also includes consideration of the history, philosophy and issues of physical education. Three contact hours.

PET 2210 Sports Psychology (Y)

3 Credit Hours

This course develops an understanding of the mental aspects of sport performance and learning skills that can be used to enhance sport performance. Three contact hours.

PET 2760 Theory and Practice of Coaching (Y)

3 Credit Hours

This course provides an understanding and background in the fundamentals of coaching. Students completing this course should understand the key concepts and techniques associated with coaching their sport and be able to not only converse knowledgeably about their sport but feel comfortable with a teaching/coaching assignment in their area. Three contact hours.

PGY — Photography

PGY 2401C Photography I

See page 218 of College catalog.

PGY 2410C Photography II

See page 218 of College catalog.

PGY 2104C Creative Photography

See page 218 of College catalog.

PHI — Philosophy

PHI 1103 Practical Logic: A Course in Critical and Creative Thinking (Y) 3 Credit Hours

This course is designed to develop fundamental skills in critical and creative thinking. It stresses the practical application of logical concepts such as the ability to recognize, evaluate and analyze the thinking of others by analyzing language, evaluating evidence and detecting and avoiding inaccurate or fallacious thinking, and the ability to solve problems, make decisions and construct arguments. The course, thus, promotes clear and creative thinking. Three contact hours.

PHI 2010 Introduction to Philosophy (Y) 3 Credit Hours

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course consists of an introduction to philosophical issues organized for the most part on a historical basis. Students encounter some of the perennial problems of philosophy and the types of answers that have been suggested by studying the thought of selected philosophers. This course includes reading and writing competencies. Three contact hours.

PHI 2100 Introduction to Logic (Y) 3 Credit Hours

This course provides a general introduction to logic that combines approximately equal emphasis on the uses and misuses of language, deductive reasoning and inductive reasoning. Some primary objectives are to provide students with an appreciation of the extent and limitations of human knowledge and with tools for valid reasoning and critical thinking. Three contact hours.

PHI 2600 Moral and Political Philosophy (Y) 3 Credit Hours

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course is a survey of the efforts made by philosophers to comprehend that portion of

experience that is concerned with human values and obligations. The course consists primarily of the analysis of selected writings in which philosophers attempt to do such things as characterize the most satisfactory life, specify the basis of moral responsibility, determine the test ability of moral judgments and assess the proper relation between the individual and the state. This course includes reading and writing competencies. Three contact hours.

PHT — Physical Therapy

PHT 1000C Introduction to Physical Therapy 2 Credit Hours

Prerequisites: BSC 2085C, BSC 2086C, MAC 1105, PHY 1020C and admission to the PTA program. Corequisites: PHT 1120C and PHT 1200C. This course introduces students to the health care profession in general and in particular, the physical therapy profession including its history, current status, philosophy and goals. The role and responsibilities of the physical therapist assistant are explored with regard to: the health-care team, organizational structure, cultural diversity, legal and ethical issues, documentation and communication. A laboratory component provides students an opportunity to apply and practice computer skills, experience first hand the value of cultural diversity, experience psychosocial aspects of disability and role play in staged real life professional situations. Three contact hours: two lecture hours, one laboratory hour.

PHT 1120C Functional Anatomy and Kinesiology 6 Credit Hours

Prerequisites: BSC 2085C, BSC 2086C, MAC 1105, PHY 1020C and admission to PTA program. Corequisites: PHT 1000C and PHT 1200. This course presents an in-depth study of the structure and function of the musculoskeletal system. Attention is focused on a knowledge and

understanding of the mechanical aspects of human motion. Kinesiology, as it relates to the function of the musculoskeletal system during therapeutic exercise, functional movement patterns and locomotion is emphasized. Manual muscle testing and goniometry are introduced and examined. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. Manual muscle testing, goniometry, palpation and observational and analysis skills with regards to posture, functional movement patterns of the trunk and extremities, therapeutic exercise and locomotion are addressed. Nine contact hours: two lecture hours, seven laboratory hours.

PHT 1200C Basic Patient Care 6 Credit Hours

Prerequisites: BSC 2085C, BSC 2086C, MAC 1105, PHY 1020C and admission to the PTA program. Corequisites: PHT 1000C and PHT 1120C. This course introduces basic patient care and handling techniques and therapeutic modalities. Fundamental skills that are applicable to a wide range of physical therapy treatment methods are covered. Theory, physiological effects, indications, contraindications and application of various therapeutic modalities are presented in conjunction with selected diseases and conditions. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. Emphasis is focused on manual dexterity and following proper procedure in carrying out patient care. Patient safety and comfort are stressed with each skill addressed. 10 contact hours: three lecture hours, seven laboratory hours.

PHT 1212C Physical Therapy Principles and Procedures**4 Credit Hours**

Prerequisites: PHT 1000C, PHT 1120C and PHT 1200C. Corequisites: PHT 2220C and PHT 2252C. The course examines the principles of physical therapy treatment procedures and modalities used in patient care. Electrotherapy, including electrical stimulation, iontophoresis and biofeedback is covered thoroughly. Theory, physiological effects, indications, contraindication and application of electrotherapeutic modalities in conjunction with selected diseases and conditions are presented. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. The proper procedure utilized in administering each modality and technique is addressed. Patient safety and comfort are stressed with each skill presented. Six contact hours: two lecture hours, four laboratory hours.

PHT 2220C Therapeutic Exercise in Physical Therapy**5 Credit Hours**

Prerequisites: PHT 1000C, PHT 1120C and PHT 1200C. Corequisites: PHT 1212C and PHT 2252C. This course provides an overview of the biomechanical, neurophysiological, and cardiovascular basis for the application of therapeutic exercise. The rationale for and functional basis of therapeutic exercise is correlated with selected diseases and conditions. Range of motion, strengthening, power, endurance, stability, flexibility, pulmonary and aerobic exercise are included. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. The ability to perform each type of exercise correctly and instruct others will be examined. Individual response to exercise will be monitored. Attention will be given to manual dexterity and the correct use and

application of selected techniques and equipment. Seven contact hours: three lecture hours, four laboratory hours.

PHT 2252C Orthopedic Disabilities and Treatment**3 Credit Hours**

Prerequisites: PHT 1000C, PHT 1120C and PHT 1200C. Corequisites: PHT 1212C and PHT 2220C. This course provides a basic knowledge of selected orthopedic disorders and their associated disabilities encountered in physical therapy practice. Emphasis is on the etiology, pathology, clinical picture and physical therapy treatment of diseases and conditions studied. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. Various modalities, techniques and protocols used in the rehabilitation of orthopedic diseases and disorders are covered. Five contact hours: three lecture hours, two laboratory hours.

PHT 2253C Neurological Disabilities and Treatment**4 Credit Hours**

Prerequisites: PHT 2220C, PHT 1212C and PHT 2252C. Corequisites: PHT 2801L, PHT 2301C and PHT 2931. This course is devoted to the study of the nervous system and selected pediatric and adult neurological disorders, coupled with their associated disabilities encountered in physical therapy practice. Emphasis is on the etiology, pathology, clinical picture and physical therapy treatment of diseases and conditions studied. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. Various approaches and techniques used in the rehabilitation of neurological diseases and disorders are covered. Six contact hours: two lecture hours, four laboratory hours.

PHT 2301C Disabilities and Therapeutic Procedures**2 Credit Hours**

Prerequisites: PHT 2220C, PHT 1212C and PHT 2252C. Corequisites: PHT 2801L, PHT 2253C and PHT 2931. This course is devoted to the study of disorders which are not directly related to orthopedics or neurology. The disabilities associated with each disorder are examined. Emphasis is on the etiology, pathology, clinical picture and physical therapy treatment of the diseases and conditions studied. Disorders covered include pulmonary, cardiovascular, burn, chronic illness, geriatric, medical, surgical, obstetric/gynecological and mental. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. Various modalities, techniques and protocols used in the treatment of diseases and disorders presented are covered. Three contact hours: two lecture hours, one laboratory hour.

PHT 2801L Physical Therapy Clinical Practice I**4 Credit Hours**

Prerequisites: PHT 2220C, PHT 1212C and PHT 2252C. Corequisites: PHT 2253C, PHT 2301C and PHT 2931. This course introduces students to basic level physical therapy techniques in the clinical setting. Working under the close supervision of a licensed physical therapist, students begin to correlate didactic and laboratory background learned in previous course work with actual patient care. Students will be assigned to various agencies in the Northeast Florida Area that provide physical therapy services. (40 hours per week for 4 weeks).

PHT 2810L Physical Therapy Clinical Practice II**6 Credit Hours**

Prerequisites: PHT 2801L, PHT 2253C, PHT 2301C and PHT 2931. Corequisite: PHT 2820L. This course allows students to

work with intermediate level physical therapy techniques in the clinical setting. Working under the supervision of a licensed physical therapist, students begin to utilize problem solving skills in the execution of patient care plans. Students will be assigned to various agencies in the Northeast Florida area that provide physical therapy services. (40 hours per week for 5 weeks).

PHT 2820L Physical Therapy Clinical Practice III

6 Credit Hours

Prerequisites: PHT 2801L, PHT 2253C, PHT 2301C and PHT 2931. Corequisite: PHT 2810L. This course provides the student an opportunity to work with advanced level physical therapy techniques in the clinical setting. Working under the supervision of a licensed physical therapist, students develop critical thinking skills and further expand their problem solving abilities in the execution of patient care plans. Students will be assigned to various agencies in the Northeast Florida area that provide physical therapy services. (40 hours per week for 6 weeks).

PHT 2931 Trends in Physical Therapy

2 Credit Hours

Prerequisites: PHT 2220C, PHT 1212C and PHT 2252C. Corequisites: PHT 2801L, PHT 2253C and PHT 2301C. This is a seminar-style course examining the current trends impacting the profession of physical therapy as well as projecting future directions. The role of the professional team, cultural diversity, legal and ethical issues will be reexamined and explored more fully. In addition, interpersonal skills, employment techniques and licensing procedures will be addressed. Two contact hours.

PHY — Physics

PHY 1020C Physics for Liberal Arts with Laboratory (Y)

3 Credit Hours

Corequisite: MAT 1033 or equivalent. This course is a general education course for non-science students and not for those who are planning to major in physics or other sciences. It is a survey of the physical environment as applied to mechanics, thermodynamics, electricity and magnetism, and modern physics with the laboratory an integral part of the learning process. Four contact hours: two lecture hours, two laboratory hours.

PHY 2048C Physics I With Calculus (Y)

5 Credit Hours

Prerequisite: MAC 2311. Corequisite: MAC 2312. This course, designed for students majoring in physics, chemistry and engineering, includes mechanics, conservation principles, rotational and harmonic motions, heat, thermodynamics and waves. Laboratory work will illustrate important principles and develop techniques. Seven contact hours: four lecture hours, three laboratory hours.

PHY 2049C Physics II With Calculus (Y)

5 Credit Hours

Prerequisite: PHY 2048C. Corequisite: MAC 2313. This course, a continuation of Physics I With Calculus, includes electricity, magnetism, light and some areas of modern physics. Laboratory work is similar to and a continuation of the laboratory in Physics I With Calculus. Seven contact hours: four lecture hours, three laboratory hours.

PHY 2053C General Physics I (Y)

4 Credit Hours

Prerequisites: MAC 1140 and MAC 1114 or MAC 2311 with a grade of "C" or better. The course, designed for those students who are majoring in pre-med, physical therapy, pre-optometry, pre-dental, pre-veterinary, biological sciences, technology

and geology, stresses problem-solving abilities. Subject matter includes mechanics, heat and thermodynamics. Six contact hours: three lecture hours, three laboratory hours.

PHY 2054C General Physics II (Y)

4 Credit Hours

Prerequisite: PHY 2053C. This course, a continuation of General Physics I, includes electricity, magnetism, light, waves (sound, light, and so forth) and some areas of modern physics. Laboratory work is similar to and a continuation of the laboratory in General Physics I. Six contact hours: three lecture hours, three laboratory hours.

PHY 2101 Modern Physics (Y)

3 Credit Hours

Prerequisite: PHY 2049C. This course, designed for students majoring in physics, chemistry and engineering, includes special relativity, atomic spectra, quantum mechanics, atomic and molecular structures, introductory solid state, nuclear physics and particle physics. Three contact hours.

PHZ — Physics

PHZ 2113 Mathematical Physics (Y)

3 Credit Hours

Prerequisites: PHY 2048C and PHY 2049C. This course is designed for students majoring in physics, chemistry, engineering or mathematics. It focuses on mathematical methods applied to physical systems. Topics include infinite series, integrals, transforms, vectors, orthogonal functions and differential equations. Three contact hours.

PLA — Para Legal Assistant

PLA 1003 Introduction to Legal Assisting (Y)

3 Credit Hours

This course provides an overview of the purpose and training of legal assistants. It examines the roles of the attorney and the legal assistant and the professional and ethical standards of practice applicable to both. The course briefly surveys the fields of law in

which legal assistants work and the Florida and federal court systems. Three contact hours.

PLA 1080 Legal Interviewing and Communicating
3 Credit Hours

Corequisite: PLA 1003. This course is designed to sharpen oral communication skills. Students receive training in interpersonal communication and interview techniques. Students learn to plan interviews and use interview checklists, as well as to listen effectively. Role playing and videotape are used to assist in the development of verbal skills. Three contact hours.

PLA 1104 Legal Research and Writing I
3 Credit Hours

Prerequisite: PLA 1003. This course provides an understanding of various components of a law library and emphasizes research skills through the use of digests, encyclopedias, reporter systems, codes, Shepards, ALR and other research tools. It also includes basic instruction and practice in legal writing and analysis. Three contact hours.

PLA 1303 Criminal Law and Procedure for Legal Assistants
3 Credit Hours

Prerequisite: PLA 1003. This course is designed for legal assistants who want to work exclusively in criminal law and includes the sources and philosophy of criminal law, the organization of law enforcement, and substantive criminal law, rules and procedures, while emphasizing the drafting of legal documents. Three contact hours.

PLA 1423 Contract Law
3 Credit Hours

Prerequisite: PLA 1003. This course will focus on the theory and principles of contract law to assist students in recognizing the fundamental substantive issues as they arise in a law practice, and basic principles of contract drafting. Three contact hours.

PLA 1931 Selected Topics in Legal Assisting
1 Credit Hour

Prerequisites: depends upon topic. Corequisite: depends upon topic. The open-topic format of this course provides an opportunity to address various combinations of topics related to legal assisting or business industry need. This course may be repeated for credit. One contact hour.

PLA 1933 Selected Topics in Legal Assisting
3 Credit Hours

Prerequisites: depends upon topic. Corequisite: depends upon topic. The open-topic format of this course provides an opportunity to address various combinations of topics related to legal assisting or business industry need. This course may be repeated for credit. Three contact hours.

PLA 2114 Legal Research and Writing II
3 Credit Hours

Prerequisites: grade of "C" or better in ENC 1101 and PLA 1104. This course is a continuation of Legal Research and Writing I and is intended to familiarize both practicing and potential legal assistants with the problems and procedures in legal research and writing. Students learn to prepare various legal documents, including case briefs, legal memoranda and pleadings. Three contact hours.

PLA 2203 Litigation
3 Credit Hours

Prerequisite: PLA 1003. This course covers the process of civil litigation. It defines basic principles of pre-trial procedures and includes a survey of courts and their jurisdiction, investigation of facts, settlement of lawsuits, judgments and post-trial considerations. The emphasis is on drafting legal documents in each of these areas. Three contact hours.

PLA 2236 Alternative Dispute Resolution
3 Credit Hours

Prerequisites: PLA 1003, PLA 2273 and BUL 2130. This course will focus on alternative dispute resolution techniques as a way of resolving legal conflicts. Negotiation, arbitration and mediation will be studied with emphasis on mediation due to its extensive application in the U.S. and particularly Florida. Three contact hours.

PLA 2263 Evidence for the Legal Assistant
1 Credit Hour

Prerequisite: PLA 1003. Corequisites: PLA 2273 and PLA 1104. This course will focus on the practical application of the rules of evidence. Both federal rules of evidence and Florida rules of evidence will be taught. It will concentrate on, and provide insight into, these areas specifically relevant to legal assistants, such as evidence gathered during the investigation and discovery phase of a case. One contact hour.

PLA 2273 Tort Law
3 Credit Hours

Prerequisite: PLA 1003. This course is an in-depth study of tort law, discussing intentional torts, negligence, strict liability, and their defenses. It prepares students to assist attorneys in analyzing and evaluating tort cases. Three contact hours.

PLA 2433 Business Organizations
3 Credit Hours

Prerequisite: PLA 1003. This course provides a basic understanding of agency law, employment law, business contract law and the competencies necessary to assist an attorney in the formation and documentation required to form and operate sole proprietorships, general and limited partnerships and corporations. Three contact hours.

PLA 2465 Debtor/Creditor Law
3 Credit Hours

Prerequisites: PLA 1003 and PLA 1104. This course prepares students to assist attorneys in collection, secured transactions and bankruptcy practice. The bankruptcy study will cover both the debtor and the creditor perspective. Three contact hours.

PLA 2484 Administrative Law
3 Credit Hours

Prerequisites: PLA 1003 and PLA 1104. This course will prepare students for a career with a firm involved in administrative agency practice such as workers' compensation, employment discrimination and Social Security disability. It also prepares students for governmental and private industry work that involves working with administrative regulations. Three contact hours.

PLA 2603 Wills, Trusts and Estates
3 Credit Hours

Prerequisite: PLA 1003. This is a study of the legal aspects of the preparation of wills and trusts as well as the probating of estates. It also covers the procedures involved in accounting, administrations, gifts, life insurance and estate planning. Three contact hours.

PLA 2763 Law Office Procedures
3 Credit Hours

Prerequisite: PLA 1003. This course covers the fundamentals of law office organization and procedure. It includes records management and accounting methods. Major attention is given to the development and use of a systems approach in the law office in order to increase efficiency and reduce legal costs. Three contact hours.

PLA 2793 Technology in the Law Office
3 Credit Hours

Prerequisite: PLA 1003. This course will focus on the use of computer technology in the practice of law. Three contact hours.

PLA 2803 Family Law
3 Credit Hours

Prerequisite: PLA 1003. This course familiarizes practitioners and potential legal assistants with the laws and procedures relating to marriage, separation, dissolution of marriage, annulment, custody and support, adoption, name change, guardianship and paternity. Three contact hours.

PLA 2880 Constitutional Law
3 Credit Hours

Prerequisites: PLA 1003 and PLA 1104. This course is designed to give an overview of the interpretation of the constitutional articles and amendments. Students will explore the three branches of government and the interpretation of the articles that created them and control their functioning. The course will also examine the rights of individuals in society, the changes in society that impact individual rights and the Supreme Court decisions interpreting individual rights. Three contact hours.

POS — Political Science**POS 2041 American Federal Government (Y)**
3 Credit Hours

This course consists of a study of the theory, organization, principles and functioning of the federal government, emphasizing the relationship of the individual to the government. The course includes reading and writing competencies. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

POS 2112 State and Local Government (Y)
3 Credit Hours

This course, consisting of a study of state and local forms of government in the United States, explores the government of Florida as an example of activities and patterns of state government. In addition, the course examines the responsibilities of local government at county and city levels. Three contact hours.

PSC — Physical Science**PSC 1341 Physical Science (Y)**
3 Credit Hours

Students will benefit by taking high school algebra or Elementary Algebra prior to enrolling in this course. This course acquaints individuals with the development of the physical sciences, with the integrating principles and theories in the physical sciences, with the practice of the scientific method and with a useful knowledge of selected areas in mechanics, electricity and magnetism, periodicity and atomic structure, and nuclear phenomena. Presentation involves lectures, demonstrations and films. The course is not essentially an introductory or preparatory course for any specific physical sciences. Three contact hours. (CBE)

PSY — Psychology**PSY 1012 General Psychology (Y)**
3 Credit Hours

This course consists of the description and understanding of an analysis of human behavior through the study of the interaction of individuals in the physical and social environment. Three contact hours. (CBE)

QMB — Quantitative Methods in Business**QMB 2100 Business Statistics (Y)**
3 Credit Hours

Prerequisite: MAC 1105. This course demonstrates how to apply selected statistical techniques to a wide variety of problems and situations arising in the areas of business, economics, finance and management. Three contact hours.

REA — Reading**REA 0006 Basic Reading Skills**
4 Credit Hours

(College preparatory studies course)
(This course does not apply toward the associate's degree.)

Prerequisite: satisfactory score on CPT test. This basic reading course develops phonics, vocabulary, comprehension, learning

strategies and study skills presented through a wide range of interdisciplinary readings. This course is designed for review prior to Reading Skills. Students must satisfy appropriate exit level scores to complete this course successfully. Four contact hours.

REA 0008 Reading Skills

4 Credit Hours

(College preparatory studies course)

(This course does not apply toward the associate's degree.)

Prerequisite: satisfactory score on CPT test. This fundamental reading course develops vocabulary, comprehension, learning strategies and study skills presented through a wide range of interdisciplinary readings. REA 0008 Reading Skills is designed for review prior to REA 0010. Students must satisfy appropriate exit level scores to complete this course successfully. Four contact hours.

REA 0010 Introduction to Reading Techniques

4 Credit Hours

(College preparatory studies course)

(This course does not apply toward the associate's degree.)

Prerequisite: REA 0008 with a grade of "C" or better or satisfactory score on CPT test. This course is designed to enhance basic reading skills and to develop higher level vocabulary and comprehension skills, textbook reading techniques and learning strategies needed for success in college. Students must satisfy appropriate exit level scores to complete this course successfully. Four contact hours.

REA 1105 College Reading/Critical Analysis (Y)

2 Credit Hours

Prerequisite: REA 0010 or satisfactory score on the placement test. This course is a college level reading course that emphasizes critical thinking/comprehension skills needed for success in college. This course will focus on vocabulary, learning strategies, and higher order thinking skills. This course covers CLAST reading competencies. College preparatory reading students are not

exempt from the reading portion of CLAST and must take REA 1105. Two contact hours.

REA 2125 CLAST Review:

Reading Skills (Y)

1 Credit Hour

Prerequisite: REA 1105 (if required). This course is designed for students who desire a brief, comprehensive review of reading skills. It is recommended for students who are preparing for the CLAST, for students who are retaking CLAST, and for students who are seeking a refresher course in reading skills. One contact hour.

REA 2205 Reading for

Speed and Comprehension (Y)

3 Credit Hours

Prerequisite: REA 0010 or a satisfactory score on the placement test. This course is for college students, business and professional people, and other adults who would like to increase their reading rate, gain a higher level of comprehension, expand their vocabulary and improve their test taking skills. Three contact hours.

REE — Real Estate

REE 1040 Real Estate

Principles and Practices (Y)

4 Credit Hours

This course provides students with the fundamentals of real estate and license law under Florida statutes. It includes a study of the business and legal aspects of real estate ownership, contracts, deeds, titles, mortgage instruments, property law and Florida Real Estate Commission governing policies and regulations relative to salespeople. Successful completion of this course and the end of course examination meets the Florida Real Estate Commission requirements to take the state salesperson's examination. Four contact hours. (CBE)

REE 2430 Real Estate Law (Y)

3 Credit Hours

This course offers suggestions as to types of real estate documents, their form and contents

and the mechanics of their use and contains a full legal, detailed exposition of every aspect of modern real estate transactions. Three contact hours. (CBE)

REE 2500 Real Estate Management

3 Credit Hours

Prerequisite: REE 1040 or real estate salesperson's certificate or broker's registration certificate. This course presents a comprehensive coverage of property management with emphasis on basic management concepts which can be applied to apartments, commercial buildings, shopping centers and urban renewal programs and also on creative management techniques for solving problems. Successful completion of this course and the end of course examination meets Florida Real Estate Commission's 45-hour post licensing requirement. Three contact hours. (CBE)

REL — Religion

REL 2000 Introduction to Religion (Y)

3 Credit Hours

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course presents the fundamental concepts of the study of religion. It deals with the origin of religion, the concept of God, death and dying in a religious context, myth, ritual, ethics, doctrine, as well as other topics that are relevant to understanding religion as an academic discipline. Although examples are drawn from various religions, no particular religion is specifically studied. This course includes reading and writing competencies. Three contact hours.

REL 2210 Religious Thought in the Old Testament (Y)

3 Credit Hours

This course is a study of religious thought and instruction in the Old Testament with attention given to the problems of authorship, date, historical setting and textual criticism. Three contact hours.

REL 2240 Religious Thought in the New Testament (Y)

3 Credit Hours

This course studies the life and teachings of Jesus and the beginning of church life and thought as reflected in the New Testament. Three contact hours.

REL 2300 World Religions (Y)

3 Credit Hours

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course consists of a survey of world religions with emphasis upon Hinduism, Buddhism, Judaism, Christianity and Islam. This course includes reading and writing competencies. Three contact hours. (CBE)

REL 2691 Topics In Jewish History (Y)

3 Credit Hours

This course covers topics and events of Jewish history. Topics may include but are not limited to the rise of anti-Semitism, the Holocaust, 19th century nationalism and the rise of Zionism, and archeological perspectives on history. Three contact hours.

RET — Respiratory Therapy

RET 1008 Pharmacology for the Respiratory Therapist

2 Credit Hours

Prerequisite: RET 1485. This course offers students a detailed understanding and knowledge of the basic factors involved in the field of pharmacology for the respiratory therapist and the application of this field to pulmonary diseases. Two contact hours.

RET 1024 Fundamentals of Respiratory Therapy

4 Credit Hours

This introductory course covers basic respiratory therapy equipment, medical gases, gas therapy and the respiratory therapy department. Four contact hours. (CBE)

RET 1276 Physical Assessment Skills

2 Credit Hours

Corequisite: RET 1024. This course provides the information and skills necessary to physically

examine an adult, child and newborn patient with cardiopulmonary disease. Two contact hours.

RET 1450 Diagnostic Monitoring

3 Credit Hours

This course introduces students to arterial blood gas analysis and various techniques of monitoring critically ill patients. The course also includes the interpretation and clinical significance of the data gained from these monitoring techniques. Three contact hours.

RET 1485 Cardiopulmonary Anatomy and Physiology

4 Credit Hours

This course, designed to offer a thorough anatomical and physiological examination of the cardiopulmonary system, consists of an introduction to electrocardiology and chest roentgenology. In addition, the course includes a correlated examination of the renal system and circulatory system where relevant. Four contact hours.

RET 1824 Clinical I

2 Credit Hours

Prerequisite: consent of the professor. Corequisites: RET 1024 and RET 1485. This course provides students with an introduction to the hospital environment, the function of the respiratory therapy department and the role and responsibilities of the respiratory therapist. Four contact hours (clinical).

RET 2264 Ventilatory Techniques

3 Credit Hours

Prerequisite: consent of the professor. This course introduces students to artificial mechanical ventilation, classification of ventilators, indications, contraindications and side effects of mechanical ventilators, and modes of ventilation. Alternatives to conventional ventilation will also be studied as well as a review of current literature on mechanical ventilation. Three contact hours.

RET 2265 Advanced Monitoring and Therapeutic Techniques

2 Credit Hours

Prerequisites: RET 1450 and RET 2264. This course introduces students to more advanced monitoring techniques in the areas of ventilation and oxygenation for the adult, pediatric and newborn patient. Two contact hours.

RET 2272L Clinical II

4 Credit Hours

Prerequisite: RET 1824. This course introduces respiratory therapy students into the hospital departments and situations in which they may be expected to perform the procedures applicable to this point in their education. The course includes close supervision of the performance of these procedures. Eight contact hours (clinical).

RET 2273L Clinical Seminar in Intensive Respiratory Care I

1 Credit Hour

Prerequisite: RET 1485. Corequisite: RET 2832. This course is a weekly clinical symposium dealing with the current practices in intensive respiratory care, relevant medical literature and patient case studies. Two contact hours (clinical).

RET 2284C Clinical Seminar In Intensive Respiratory Care II

1 Credit Hour

Prerequisites: RET 2273L and RET 2264. Corequisite: RET 2833. This course is a continuation of the evaluation of current practices in intensive respiratory care, relevant medical literature and patient case studies. Two contact hours (clinical).

RET 2350 Advanced Pharmacology

2 Credit Hours

Prerequisite: RET 1008. This course instructs students in advanced drug actions, delivery methods and ACES drugs. Two contact hours.

RET 2414 Pulmonary Function Studies

2 Credit Hours

Prerequisite: RET 1485. This course is designed to introduce students to pulmonary function

techniques and the clinical significance of the diagnostic data gained from this form of testing. Two contact hours.

RET 2434 Arterial Blood Gases and Critical Care Monitoring
2 Credit Hours

Prerequisite: RET 1485. This course introduces students to arterial blood gas analysis and various techniques of monitoring critically ill patients. The course also includes the interpretation and clinical significance of the data gained from these monitoring techniques. Two contact hours.

RET 2484 Pulmonary Pathology
4 Credit Hours

Prerequisite: RET 1485. Pulmonary pathology gives an in-depth study of the more common diseases of the cardiopulmonary system including their etiology, pathophysiology, clinical picture and treatment. Four contact hours.

RET 2520 Community Health
2 Credit Hours

Prerequisite: consent of the instructor. This course is designed to introduce students to community health organizations, respiratory health education and promotion, job preparation skills and respiratory ethics. Two contact hours.

RET 2543 Respiratory Extended Care Management
2 Credit Hours

Prerequisite: consent of instructor. This course is designed to instruct on continuity of care for chronic cardiopulmonary disease patients. The course provides physiologic concepts and therapeutic techniques utilized in rehabilitation, subacute and home settings. Two contact hours.

RET 2714 Neonatal and Pediatric Respiratory Care
3 Credit Hours

Prerequisite: RET 1485 or consent of the professor. This course investigates fetal, neonatal and pediatric differences in cardiopulmonary anatomy and physiology, pediatric ventilatory management

and ventilatory equipment, neonatal and pediatric cardiopulmonary pathologies, and adaptations of respiratory care techniques to pediatric patients. Three contact hours.

RET 2832 Clinical III
12 Credit Hours

Prerequisite: RET 2272L. This course provides students with the essential clinical skills necessary to function as competent respiratory therapists in the critical care areas. Twenty-four contact hours (clinical).

RET 2833 Clinical IV
10 Credit Hours

Prerequisite: RET 2832. In continuation, this course provides students with the essential clinic skills necessary to function as competent respiratory therapists in the critical care areas. Twenty contact hours (clinical).

RMI — Risk Management and Insurance

RMI 1134 Retirement Plans: Basic Features and Defined Contributions Approaches
3 Credit Hours

This course examines issues common to all individual retirement account retirement planning vehicles, participant-directed investing, investment education and distribution planning. Subjects discussed include: profit sharing plans, saving and thrift plans, 401(k) cash or deferred arrangements, 403 (b) ESOP, IRA, SEP, and simple plans. Persons who are preparing to take the national exam to earn the Certified Employee Benefits Specialist (CEBS) designation will benefit from this class. This class may also count as continuing education credit for licensed insurance specialists. Three contact hours.

RMI 1521 Principles of Insurance (INS-21) (Y)
3 Credit Hours

This course outlines the basic principles of insurance products and, as such, will benefit all insurance professionals, from the novice to the seasoned

professional. In addition, it prepares students to take part one of the Insurance Institute of America INS-21 National Exam, thus completing Part I of this professional certificate. Three contact hours. (CBE)

RMI 1522 Personal Insurance (INS-22)
3 Credit Hours

This is an in-depth course in all forms of personal insurance, including auto, home, life, health and miscellaneous coverages. It is designed for all insurance professionals from underwriters to producers. In addition, it prepares students for the INS-22 National Exam offered by the Insurance Institute of America (Part II of this professional certificate). Three contact hours.

RMI 1523 Commercial Insurance (INS-23)
3 Credit Hours

This course presents an in-depth study of all forms of commercial insurance including general liability, property, bonding, worker's compensation, package policies and garage coverages. It is intended for all insurance professionals from the producer to the underwriter. Also, this course prepares students to take the INS-23 test offered by the Insurance Institute of America (Part III of this professional certificate.) Three contact hours.

RMI 1612 Principles of Casualty Insurance and Surety Bonding
3 Credit Hours

This course is an introduction to the eight areas of automobile liability and physical damage insurance, worker's compensation and employers' liability insurance, business, professional and personal liability insurance, health insurance and miscellaneous casualty coverages. Three contact hours. Prepares students for Florida insurance license. (CBE)

RMI 1613 Principles of Property Insurance
3 Credit Hours

This course is an introduction to the four areas of fire insurance, ocean marine, inland marine insurance, surety and fidelity bond, and multiple-line coverage. For each of these four areas, specimen contracts are examined. The course covers each area with regard to the perils, property, losses, persons, locations, time and hazards. Three contact hours. Prepares students for Florida insurance license. (CBE)

RMI 1615 Principles of Property Insurance Adjusting
3 Credit Hours

This course, an introduction to the general principles of insurance and property loss of adjusting, covers risk and insurance, suretyship, risk management principles and the insurance transaction, the insurance contract (limitations on coverage and limitation on amount of loss), the procedure, investigation and reports of adjustment of property losses, and estimations of business losses. Three contact hours. Prepares students for Florida insurance license. (CBE)

RMI 1631 Principles of Liability and Claim Adjusting
3 Credit Hours

This course in adjusting examines the principles and practices of adjusting all forms of liability and auto claims. Three contact hours. Prepares students for Florida Insurance license. (CBE)

RMI 1664 Marketing Principles of Life and Health Insurance
3 Credit Hours

This course presents a new approach toward the life and health insurance industry, its products, the market potential and the industry as a selling career. Three contact hours.

RMI 2524 Essentials of Risk Management (ARM 54)
3 Credit Hours

This course focuses on the risk management decision-making

process by identifying, analyzing and developing alternative techniques for treating loss exposures. In addition, it introduces the financial management foundation and guidelines for selecting the best risk management alternative and most appropriate technique for handling a loss exposure. (preparation for I.I.A. ARM 54) Three contact hours.

RMI 2525 Essentials of Risk Control (ARM 55)
3 Credit Hours

This course focuses on the process of developing and implementing guidelines for selecting risk management techniques that control and coordinate the organization's risk management effort. (preparation for I.I.A. ARM 55) Three contact hours.

RMI 2526 Essentials of Risk Financing (ARM 56)
3 Credit Hours

This course completes the risk management decision-making process with respect to risk financing techniques. Attention is directed primarily to risk retention, including use of captive insurers and commercial insurance. (preparation for I.I.A. ARM 56) Three contact hours.

RMI 2535 Principles of Insurance Production (AAI 81)
3 Credit Hours

This is an advanced course in the marketing of property and casualty insurance products. It is designed to prepare students to take the Accredited Adviser in Insurance (AAI) National Exam Number 81. (This course completes Part I of the AAI professional designation.) Three contact hours.

RMI 2536 Multiple-Lines Insurance Production (AAI 82)
3 Credit Hours

This course includes an in-depth study into the proper method for marketing commercial lines insurance coverages. Also, it will prepare students to take Part II of the Accredited Adviser in Insurance

program. (This will complete Part II of the AAI professional designation.) Three contact hours.

RMI 2537 Agency Operations and Sales Management (AAI 83)
3 Credit Hours

Included in this course will be a thorough study of the management and operations of an insurance agency. This course will prepare students to take Part III (AAI83) of the Accredited Adviser in Insurance program. Three contact hours.

RTE — Radiologic Technology

RTE 1000 Introduction to Radiologic Technology
3 Credit Hours

Prerequisite: MAC 1105 and BSC 2085C. This course presents a brief history of radiologic technology code of ethics, conduct for radiography students, fundamentals of radiation protection, and patient's rights. This course also teaches the care and handling of the sick and injured patient in the radiology department. It introduces the fundamentals of image production and film processing. Emphasis is placed on infection control and safety of the radiographer, student and patient. Three contact hours.

RTE 1111 Patient Care for Radiologic Technologists
3 Credit Hours

Prerequisite: permission of program adviser. This course is designed to prepare radiologic technology students to provide basic patient care. Vital signs, body mechanics, verbal/nonverbal communications and specialized radiologic procedures are covered in this course. Three contact hours.

RTE 1418C Radiographic Technique I
3 Credit Hours

Prerequisite: RTE 1000. This course introduces students to comprehensive study and theory of the production of X-rays and the primary exposure factors of radiographic imaging. The image parameters of contrast, density,

recorded detail, and image distortion will be studied as well as ancillary devices and equipment required to produce quality radiographic images. Laboratory experience is included. Three contact hours: two lecture hours, one laboratory hour.

RTE 1457C Radiographic Technique II

3 Credit Hours

Prerequisite: RTE 1418C. This course is a continuation of principles of imaging contained in Radiographic Technique I. This course also includes the quantitative and qualitative study of image receptors, sensitometry, image processing, intensification, fluoroscopy, and tomography. Laboratory experience included. Three contact hours: two lecture hours, one laboratory hour.

RTE 1473 Radiographic Technology Quality Assurance

1 Credit Hour

Prerequisites: RTE 1418C and RTE 1457C. This course will provide students with an introduction to the evaluation of radiographic systems to assure consistency in the production of quality images. The components involved in the radiography system will be identified. Tests and procedures to evaluate the components will be discussed. State and Federal impact will be discussed. One contact hour.

RTE 1503C Radiographic Procedures I

3 Credit Hours

Prerequisite: RTE 1111. This course introduces procedures for positioning the patient's anatomical structures relative to the X-ray beam and image receptor. This course emphasizes procedures for routine examination of the chest, abdomen, extremities and axial skeleton. Radiographic anatomy, pathology, critique of radiographs, and laboratory practicum are included. Three contact hours: two lecture hours, one laboratory hour.

RTE 1513C Radiographic Procedures II

3 Credit Hours

Prerequisite: RTE 1503C. This course is a continuation of Radiographic Procedures I for positioning the patient's anatomical structures relative to the X-ray beam and image receptor. It emphasizes procedures for skull examinations. Contrast studies of internal organs, radiographic anatomy, pathology, film critique, and laboratory practicum are included. Three contact hours: two lecture hours, one laboratory hour.

RTE 1613 Radiologic Physics I

4 Credit Hours

Prerequisites: RTE 1000 and MAC 1102. This course gives the basics of radiologic physics and presents both theory and practical aspects. The principles of math, physics, and chemistry are given, including the simplest and most direct approach to the structure of matter, electrostatics, magnetism, rectification, and X-ray production. Four contact hours.

RTE 1623 Radiologic Physics II

3 Credit Hours

Prerequisite: RTE 1613. This course is a continuation of Radiologic Physics I. It includes more detailed principles and applications including theory and application of X-ray generation and circuitry, production and control of high voltage, design and use of equipment in radiology, and a variety of other types of electrical and biomedical equipment. Three contact hours.

RTE 1804L Radiographic Clinic I

3 Credit Hours

Prerequisite: acceptance into the radiology program. This course offers students the opportunity to experience in the elementary aspects of radiology with clinical orientation to the radiology department/hospital, and actual clinical education. Three contact hours.

RTE 1814L Radiographic Clinic II

3 Credit Hours

Prerequisite: RTE 1804L. This course is a continuation of Radiographic Clinic I. It covers clinical experience in all phases of fundamental radiologic procedures and film critique of the studies submitted for interpretation. Three contact hours.

RTE 1824L Radiographic Clinic III

3 Credit Hours

Prerequisite: RTE 1814L. This course is a continuation of Radiographic Clinic II and includes clinical experience. Three contact hours.

RTE 1834L Radiographic Clinic IV

3 Credit Hours

Prerequisite: RTE 1824L. This course is a continuation of Radiographic Clinic III and includes clinical experience. Three contact hours.

RTE 1844L Radiographic Clinic V

1 Credit Hour

Prerequisite: RTE 1834L. This course is a continuation of Radiographic Clinic IV and includes clinical experience. One contact hour.

RTE 2061 Radiologic Seminar

3 Credit Hours

Prerequisite: consent of instructor. This course is provided to students as a review course for the American Registry for Radiologic Technologist Examination. Included is radiation protection, equipment operation and maintenance, image production and evaluation, radiographic procedures, and patient care. Three contact hours.

RTE 2202 Radiologic Management and Education

3 Credit Hours

Prerequisite: proof of current registration with the American Registry of Radiologic Technologist. This course is designed to prepare radiologic technology and radiation therapy students to provide basic patient care. Vital signs, body mechanics, verbal/nonverbal communications and specialized radiologic procedures are covered in this course. Three contact hours.

RTE 2209 Medical/Legal Aspects of Radiology

2 Credit Hours

Prerequisites: RTE 2308 and RTE 1000. This course serves to introduce students to the professional conduct in the radiology department as it relates to patients, colleagues, other members of the allied professions, and health care consumers. Two contact hours.

RTE 2308 Radiation Safety and Protection

3 Credit Hours

Prerequisites: RTE 1804L and RTE 1814L. This course will provide students with an understanding of basic interactions of X-rays with matter, radiation quantities and units. Limits for exposure to ionizing radiation, protection of the patient and occupational care workers during diagnostic procedures, room design and radiation monitoring will also be covered. Three contact hours.

RTE 2385 Radiation Biology

3 Credit Hours

Prerequisite: RTE 2308. This course is a continuation of Radiation Protection. It will provide students with an understanding of the principles of cellular response to radiation. Factors concerning cells and tissue radio sensitivity, LET, molecular effects of irradiation, organic damage from ionizing radiation, and genetic effects will be discussed. Three contact hours.

RTE 2587 Advanced Developments in Radiologic Technology

3 Credit Hours

Prerequisite: proof of current registration with the American Registry of Radiologic Technology. This course is designed to familiarize the radiologic technologist with the latest advances in radiologic technology. Such topics as radiation protection, image intensification, heart catheterizations, three-phase circuitry, positron emission tomography, computerized tomography, magnetic resonance imaging and radiation therapy will be explored. Four

contact hours: three lecture hours, one field experience hour.

RTE 2782 Radiographic Pathology

3 Credit Hours

Prerequisites: BSC 2085C and BSC 2086C. This course will provide students with an understanding of the manifestations of pathological conditions and their relevance to radiographic procedures. Also discussed will be examples/sites, complications, prognosis and etiology of the disease. Three contact hours.

RTV — Radio — Television

RTV 2000 Introduction to Broadcasting (Y)

3 Credit Hours

This course consists of an introduction to the historical, cultural, social, legal, business and career aspects of radio and television broadcasting plus an introduction to the types and sub-types of broadcast media. Five contact hours: three lecture hours, two laboratory hours.

RTV 2100 Writing for Electronic Media (Y)

3 Credit Hours

Prerequisite: ENC 1101. This pre-professional course is designed to provide fundamental instruction and practice in writing for the electronic media, including radio, television, film, news, commercials and industrial programming. Three contact hours.

RTV 2200 An Introduction to Television Production (Y)

3 Credit Hours

The course provides an opportunity for students to become familiar with the basic operation of a television studio. The course will help students prepare for an entry-level position in a local TV station or production facility, as well as for continuation in a communications or journalism course of study. Four contact hours: two lecture hours, two laboratory hours.

RTV 2206 Broadcast Direction (Y)

3 Credit Hours

Prerequisite: RTV 2200. This course, a continuation of An Introduction to Television Production, is intended for broadcast majors. The major topic is the direction of TV programs. Four contact hours: two lecture hours, two laboratory hours.

RTV 2260 Nonlinear Video Editing (Y)

4 Credit Hours

Prerequisite: RTV 2206 or consent of instructor. This is a computer based course using high-end non-linear and on-line video/audio workstations. Students will use multiple video and audio tracks, 2D and 3D-graphics, still photography and original art to develop a finished program. The program may be videotaped for broadcast, or an interactive non-broadcast industrial or educational project for CD-ROM.

RUS — Russian Language

RUS 1000 Conversational Russian (Y)

3 Credit Hours

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used. Students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work.)

RUS 1120 Beginning Russian I (Y)

4 Credit Hours

This beginning course consists of the fundamentals of Russian speech and grammar taught by integrating the basic communication skills of hearing and understanding, speaking, reading and writing. Five contact hours: four lecture hours, one unsupervised laboratory hour.

RUS 1121 Beginning Russian II (Y)
4 Credit Hours

Prerequisite: RUS 1120 or equivalent. This course is a continuation of Beginning Russian I. Five contact hours: four lecture hours, one unsupervised laboratory hour.

RUS 2200 Intermediate Russian I (Y)
3 Credit Hours

Prerequisite: RUS 1121. This course continues the study of Russian grammar, emphasizing the proper use of case and verbal forms. The nature of Russian syntax will also be addressed. Work in phonetics, translation, conversation and vocabulary development will constitute the major portion of the class. Cultural supplements will be employed throughout. Four contact hours: three lecture hours, one laboratory hour.

RUS 2201 Intermediate Russian II (Y)
3 Credit Hours

Prerequisite: RUS 2200. This course continues the study of Russian grammar while advancing into such areas as modality and word formation. Conversational skills will be further developed and maintained, while primary emphasis is given to reading, translation and composition. Russian participles will be introduced. Four contact hours: three lecture hours, one laboratory hour.

SLS — Student Life Skills

SLS 1101 Dynamics of Student Success (Y)
3 Credit Hours

This course is designed to assist students in adapting and coping with a college environment. Included in the course are study skills, academic motivation, self-assessment, college resources and other related topics. Three contact hours.

SLS 1201 Personal Development (Y)
3 Credit Hours

This course is designed to assist students in learning more about their own stages of personal development and how developmental issues influence their

understanding of self, others and the environment in which they interact. Areas of development to be explored are psychosocial issues, cognitive structure, learning style, locus of control, values, moral/ethical development, choosing and pursuing personal goals, and other related issues. Three contact hours.

SLS 1223 Stress in Today's Society (Y)
3 Credit Hours

This course, designed to acquaint students with the nature and scope of stress in today's society, examines the causes and methods of prevention from a lay perspective. The course also discusses general environmental and social stressors which affect all people to some degree. A laboratory experience will utilize various relaxation techniques which may aid students in coping with everyday stress. Four contact hours: two lecture hours, two laboratory hours.

SLS 1301 Career Planning and the World of Work (Y)
2 Credit Hours

This course assumes that career choice is a continuous process involving the understanding of self and one's environment. Using assessment instruments as well as group discussion, students will utilize decision-making techniques to select a career direction which is compatible with their aptitudes, abilities, interests and personal values. Two contact hours.

SLS 1401 Computerized Career Exploration (Y)
1 Credit Hour

A self-paced information gathering process designed for students who have not decided, are having difficulty deciding or need clarification in making a career choice. Topics will include work related interests, values, clarification and identification of abilities. Various computer based career exploration activities are scheduled at the convenience of students. There are no formal class hours. A minimum of fifteen hours of documented interaction are

required for course completion. Students schedule their interactions with computers and counselors at times that are mutually convenient for staff and students. One contact hour.

SLS 1931 Selected Topics in Student Life Skills (Y)
1 Credit Hour

The open format of this course provides an opportunity to address various selected topics in student life skills development. Students may only repeat SLS 1931, SLS 1932 and SLS 1933 for a total of six credit hours toward A.A. degree electives. One contact hour.

SLS 1932 Selected Topics in Student Life Skills (Y)
2 Credit Hours

The open format of this course provides an opportunity to address various selected topics in student life skills development. Students may only repeat SLS 1931, SLS 1932 and SLS 1933 for a total of six credit hours toward A.A. degree electives. Two contact hours.

SLS 1933 Selected Topics in Student Life Skills (Y)
3 Credit Hours

The open format of this course provides an opportunity to address various selected topics in student life skills development. Students may only repeat SLS 1931, SLS 1932 and SLS 1933 for a total of six credit hours toward A.A. degree electives. Three contact hours.

SOP — Social Psychology

SOP 1002 Human Relations (Y)
3 Credit Hours

Drawing from several areas of behavioral science, this course, designed for students in business and technical fields, is also suitable for general education and personal enrichment but not recommended for students who plan to major in psychology. The course includes group dynamics, leadership, ethics, motivation and morale, social

systems, formal and informal organizations, and other selected topics. Three contact hours.

SOP 1502 Dynamics of Behavior (Y)
3 Credit Hours

This course consists of the study of individual behavior and how it is influenced by culture. This course emphasizes personal adjustment and individual development as they relate to interaction with other people. Three contact hours.

SPA — Speech Pathology and Audiology

SPA 1612 American Sign Language I (Y)
3 Credit Hours

An introduction to the linguistic structure and conceptual vocabulary of American Sign Language as used by deaf adults. This course will emphasize the development of American Sign Language skills including receptive and expressive conversational skills. The course will describe the history, values and culture of deaf people in America. There will be additional costs required which will vary based on activity or projects such as attendance to the deaf club and a trip to St. Augustine School for the Deaf. Three contact hours. (CBE)

SPA 1613 American Sign Language II (Y)
3 Credit Hours

Prerequisite: completion of SPA 1612 with a grade of "C" or better. This course is a continuation of American Sign Language I and will emphasize intermediate level sign vocabulary, increasingly complex grammatical constructions, idioms, inflectional usage and the development of intermediate receptive and expressive conversational American Sign Language skills. There will be additional costs required which will vary based on activity or projects such as attendance to the deaf club and a trip to the St. Augustine School for the Deaf. Three contact hours.

SPA 1614 American Sign Language III (Y)
3 Credit Hours

Prerequisites: completion of SPA 1612 and SPA 1613 with grade of "C" or better in both courses. This course, a continuation of American Sign Language II, will emphasize advanced level of sign vocabulary, compound complex grammatical constructions, usage and the development of advanced receptive and expressive conversational American Sign Language skills. There will be additional costs required which will vary based on activity or projects such as attendance to the deaf club and a trip to St. Augustine School for the Deaf. Three contact hours.

SPA 1617 Structure of American Sign Language
3 Credit Hours

Prerequisites: SPA 1613 and SPA 1614. This course is for intermediate or advanced signers with limited exposure to American Sign Language. American Sign Language, as used by deaf adults, is studied with an emphasis on the phonological, morphological, semantic, syntactical, idiomatic and metaphorical aspects of American Sign Language. Current research in the field is examined and discussed. Three contact hours.

SPA 1626 Fingerspelling (Y)
2 Credit Hours

Prerequisite: SPA 1612. Corequisite: SPA 1330. This is an intermediate course designed to provide receptive and expressive fingerspelling. Drills and practice will help to improve fluency and speed. Two contact hours.

SPC — Speech Communication

SPC 2016 Speech Communication for Business and the Professions (Y)
3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course is designed to focus on developing and refining oral communication skills in business and the professions. Students will enhance basic speaking and listening skills with additional

attention to making presentations, working in groups, handling interviews and meetings, and employing multimedia materials effectively. This course serves to meet the Gordon Rule writing requirement. Three contact hours.

SPC 2040 Introduction to Oral Communication (Y)
3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This course is a performance based course that provides theory and practice in interpersonal, small group, intercultural and mass communication. The course emphasizes the responsibilities of individuals in the communication process required by a variety of communication settings. The course explores the principles of communication, the barriers to communication, and techniques to improve communication skills. This course focuses on speaking and listening competencies and will reinforce reading and writing competencies. This course serves to meet the Gordon Rule writing requirement. Three contact hours.

SPC 2594 Forensic Activity (Y)
1 Credit Hour

This course is composed of directed participation in forensic activities with emphasis on individual speech events. Tournament activities involve a major feature of forensics. Three contact hours (studio/rehearsal).

SPC 2600 Fundamentals of Speech Communication (Y)
3 Credit Hours

Prerequisite: ENC 1101 with a grade of "C" or better. This essential course in speaking and listening skills instructs students in the principles and procedures that promote effective communication. This study includes message composition involving idea and information acquisition, determination of purpose and analysis of audience. This course also includes message transmittal involving vocal variations, articulation and appropriate levels of language usage and listening for both literal and critical comprehension. This

course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

SPN — Spanish Language

SPN 1000 Conversational Spanish (Y) 3 Credit Hours

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used. Students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work).

SPN 1120 Beginning Spanish I (Y) 4 Credit Hours

This beginning course consists of the fundamentals of Spanish speech and grammar taught by integrating the basic communication skills of hearing and understanding, speaking, reading and writing. Five contact hours: four lecture hours, one unsupervised laboratory hour. (CBE)

SPN 1121 Beginning Spanish II (Y) 4 Credit Hours

Prerequisite: SPN 1120 or equivalent. This course is a continuation of Beginning Spanish I. Five contact hours: four lecture hours, one unsupervised laboratory hour. (CBE)

SPN 2200 Intermediate Spanish I (Y) 3 Credit Hours

Prerequisite: SPN 1121. This course integrates a thorough review of the principles of grammar with compositions and conversations planned to develop a basic active vocabulary and facility in communicating in written and spoken Spanish. Students will study readings in the history and culture of Spain and Hispanic America. Four contact hours: three lecture hours, one unsupervised laboratory hour. (CBE)

SPN 2201 Intermediate Spanish II (Y) 3 Credit Hours

Prerequisite: SPN 2200. This course is a continuation of Intermediate Spanish I. Four contact hours: three lecture hours, one unsupervised laboratory hour. (CBE)

STA — Statistics

STA 2023 Elementary Statistics (Y) 3 Credit Hours

Prerequisite: MGF 1106 (previously MGF 1202) or MAC 1105 with a grade of "C" or better. This course is designed to introduce students to the fundamentals of descriptive and inferential statistics with a pronounced emphasis on inference. The major topics include methods for analyzing sets of data, probability, probability distributions, estimation, confidence intervals, hypothesis testing, simple linear regression, and correlation. The probability and statistical skills measured by CLAST are among the skills taught in this course. Students with a grade of "C" or better in MGF 1202 (currently MGF 1106) satisfy the prerequisite. Three contact hours. (CBE)

SUR — Surveying and Related Areas

SUR 1101 Surveying (Y) 3 Credit Hours

Prerequisites: MAC 1114 and ETD 1100. This course is a study of the fundamentals of surveying with emphasis on distance measurement, leveling, angles, bearings, traverses, topographic data collection and construction layout. The course includes related field work, computations and drawing. Four contact hours: two lecture hours, two laboratory hours.

SYG — Sociology, General

SYG 2000 Introductory Sociology (Y) 3 Credit Hours

This course includes a survey of the scope, methods and concepts of sociology. A wide range of topics including socialization of children, culture, crime and

deviance, family medicine, education and stratification are covered. Three contact hours. (CBE)

SYG 2010 Social Problems (Y) 3 Credit Hours

Prerequisite: SYG 2000. This course includes a consideration of major social problems like pornography, family violence, alcoholism, organized crime, poverty and pollution. Special attention is given to American society. Three contact hours.

SYG 2430 Marriage and Family (Y) 3 Credit Hours

This course includes a sociological study of the family and its forms as well as issues in mate selection, dating, marriage, child rearing, divorce and remarriage. Special attention is given to the contemporary American family. Three contact hours.

TAR — Architecture

TAR 2120 Architectural Drafting (Y) 3 Credit Hours

Prerequisite: ETD 1100. (Interior design students may substitute IND 1606 for ETD 1100.) This course introduces residential design and planning and requires an original solution to a given residential concept. Students not only prepare original tracings consisting of floor plans, elevations and wall sections, but they also produce large scale details from the original design. The emphasis of the course is on applied principles of architectural drafting and detailing. Four contact hours: two lecture hours, two laboratory hours. (CBE)

TAX — Tax

TAX 2000 Individual Taxes (Y) 3 Credit Hours

Prerequisite: ACG 2021 is recommended. This course, recommended for associate in science in accounting degree students, is a study of the Federal Revenue Code regulations and cases which apply to the determination of income taxes for individuals. Topics to be considered will include the preparation of the U.S. Individual Income Tax Return

Form 1040 and its supplemental forms. Three contact hours.

THE — Theatre

THE 2000 Theatre Appreciation (Y) 3 Credit Hours

Prerequisite: ENC 1101 or satisfactory grade on the placement test. This introductory course consists of the study of dramatic art as presented upon the stage. The course includes theatre organization, stage techniques, fundamental dramaturgy and a survey of theatre architecture in Western civilization. The course includes reading and writing competencies. Three contact hours.

THE 2100 Introduction to Theatre History (Y) 3 Credit Hours

This course surveys theatre history and drama from the theatre's origin in ancient Greece to the present. Three contact hours.

THE 2262 Costume History and Design I (Y) 3 Credit Hours

Prerequisite: TPA 1000. This course is a study of the historical trends in costumes from Egyptian to the Late Georgian periods, with an emphasis on the relationship to theatrical production. Three contact hours.

THE 2263 Costume History and Design II 3 Credit Hours

Prerequisite: THE 2262. This course is a continuation of Costume and History Design I. A study of the historical trends in costumes from 1789 to the present, with an emphasis on the relationship to theatrical production. Three contact hours.

THE 2305 Survey of Dramatic Literature (Y) 3 Credit Hours

Prerequisite: ENC 1101. This course is a survey of western theatre and drama from the Greeks to present day. Literary concepts particular to drama, such as plot, character, theme, and style are explored. The course also places dramatic

literature in the social framework of its age with emphasis on play production, actors, and audiences. Representative plays from major periods are studied. Three contact hours.

THE 2945 Drama Practicum (Y) 1 Credit Hour

This course consists of the planning and execution of production functions, scene construction and painting, props, costuming, lighting and other full technical responsibilities. This course includes writing competencies. Three contact hours (studio/rehearsal).

TPA — Theatre Production and Administration

TPA 1000 Introduction to Theatre Design (Y) 3 Credit Hours

This course is an introductory integrated design course on the basic principles of theatrical design in the areas of costume, scenic and lighting design. The course will include the study of fashion, architecture, art and decor as they relate to and influence theatrical design. Three contact hours.

TPA 1060 Scene Design (Y) 3 Credit Hours

Prerequisite: consent of professor. This course is a detailed introduction to the principles and techniques used in scenic design. This course will include the discussion and practice in analyzing scripts, visualizing a design concept, drafting, painters elevations and rendering and developing design portfolio. Three contact hours.

TPA 1210 Stagecraft I (Y) 3 Credit Hours

This course is an introduction to the tools, terminology, activities materials and principles of stagecraft. Assigned practical work in a supervised production is required outside of class. Six contact hours: three lecture hours, three practical work hours on production (a minimum of 45 hours for the term).

TPA 1211 Stagecraft II (Y) 3 Credit Hours

Prerequisite: TPA 1210. This course is a continuation of Stagecraft I, with an emphasis on more advanced construction techniques and problems. Students will serve in supervisory capacities on productions. Practical work outside of class is required on productions. Six contact hours: three lecture hours, three practical work hours on production (a minimum of 45 hours for the term).

TPA 1220 Introduction to Stage Lighting (Y) 3 Credit Hours

Prerequisite: TPA 1000. This course is an introduction to the fundamentals of lighting the stage, including a basic introduction to electricity, stage lighting instrumentation and control, color science and an introduction to lighting design to create theatrical mood and interpretation of a production. Work outside of class on productions is required; students will serve on lighting crews for hands-on application of the classroom material. Six contact hours: two lecture hours, two laboratory hours and two practical work hours on productions (two hours/week is an average, thirty hours for the term is the requirement).

TPA 1248 Stage Make-up (Y) 3 Credit Hours

This course is an introduction and application of the principles of stage make-up. Three contact hours.

TPA 1273 Stage Properties (Y) 3 Credit Hours

This course is a study of the history, style and decoration of practical scenic and hand properties. It also includes an introduction to specialty tools and materials used in the construction or reproduction of stage properties. Practical experience in the acquisition and running of properties for production. Work outside of class is required on productions. Four contact hours: three lecture hours, one practical

work hour on production (a minimum of 15 hours for the term).

TPA 1290 Technical Theatre Lab I (Y)
1 Credit Hour

This course is limited to theatre and entertainment technology associate in science degree-seeking students or those students with a demonstrated ability in the entertainment technology field, with permission of the instructor. The course includes practical experience in the machinations of the backstage operations of a theatre. The course will emphasize skills in working independently with a high level sense of responsibility for the work assigned. The concentration of this course will vary depending on the skills of students and the needs of the theatre, competency in working extended hours on a production is expected. The hours worked give credit for hours required for other entertainment technology courses. Seven contact hours: one lecture hour, six practical work hours in production (a minimum of 90 hours for the term).

TPA 1291 Technical Theatre Lab II (Y)
1 Credit Hour

Prerequisite: TPA 1290. This course is limited to theatre and entertainment technology associate in science degree-seeking students or those students with a demonstrated ability in the entertainment technology field, with permission of the instructor. The course includes practical experience in the machinations of the backstage operations of a theatre. The course will emphasize skills in working independently with a high level sense of responsibility for the work assigned. The concentration of this course will vary depending on the skills of students and the needs of the theatre, competency in working extended hours on a production is expected. The hours worked give credit for hours required for other entertainment technology courses. Seven contact hours: one lecture

hour, six practical work hours in production (a minimum of 90 hours for the term).

TPA 2077 Scene Painting (Y)
3 Credit Hours

Prerequisite: TPA 1000. This course is an introduction to the tools, materials, and techniques used to paint scenery for the theatre. Assigned practical work in supervised production activities outside of class is required, a minimum of 15 hours for the term. Four contact hours: three lecture hours, one practical work hour on production.

TPA 2083 Technical Design Individual Problems
3 Credit Hours

Prerequisite: minimum of 45 credit hours in the program. In this course students will develop and work on a single, challenging project individually tailored for each student with the assistance of the instructor. Projects will be reviewed and presented to the class periodically throughout the semester. Three contact hours.

TPA 2212 Sound for the Stage (Y)
3 Credit Hours

This course is an introduction to the application of the principles of theatre sound. Training in the use and maintenance of theatre sound equipment, recording and editing sound effects tapes, training in electronic sound reinforcement. The course requires work outside the classroom applying the principles learned in the practical application of theatre sound for production. Four contact hours: three lecture hours, and one practical work hour on productions (a minimum of 15 hours for the term).

TPA 2221 Advanced Stage Lighting (Y)
3 Credit Hours

Prerequisites: TPA 1000 and TPA 1220. This course is a continuation of Introduction to Stage Lighting, with more emphasis on lighting design, and developing a lighting design portfolio. Work outside of class on productions is required. Qualified students will be given design assignments

on productions. Six contact hours: four lecture hours, and two practical work hours on productions (a minimum of 30 hours for the term).

TPA 2230 Costume Techniques (Y)
3 Credit Hours

This course is a study of basic costume construction techniques for theatrical and dance costumes. The course will cover proper measuring skills, various construction techniques, and understanding of fabrics, costume cutting skills, and dyeing. Work outside of the class time is required on productions. Six contact hours: four lecture hours, and two practical work hours on productions (a minimum of 30 hours for the term).

TPA 2292 Technical Theatre Lab III (Y)
1 Credit Hour

Prerequisite: TPA 1291. This course is limited to theatre and entertainment technology associate in science degree-seeking students or those students with a demonstrated ability in the entertainment technology field, with permission of the instructor. The course includes practical experience in the machinations of the backstage operations of a theatre. The course will emphasize skills in working independently with a high level sense of responsibility for the work assigned. The concentration of this course will vary depending on the skills of students and the needs of the theatre, competency in working extended hours on a production is expected. The hours worked give credit for hours required for other entertainment technology courses. Seven contact hours: one lecture hour, six practical work hours in production (a minimum of 90 hours for the term).

TPA 2293 Technical Theatre Lab IV (Y)
1 Credit Hour

Prerequisite: TPA 2292. This course is limited to theatre and entertainment technology associate in science degree-seeking students or those students with a

demonstrated ability in the entertainment technology field, with permission of the instructor. The course includes practical experience in the machinations of the backstage operations of a theatre. The course will emphasize skills in working independently with a high level sense of responsibility for the work assigned. The concentration of this course will vary depending on the skills of students and the needs of the theatre, competency in working extended hours on a production is expected. The hours worked give credit for hours required for other entertainment technology courses. Seven contact hours: one lecture hour, six practical work hours in production (a minimum of 90 hours for the term).

TPA 2600 Stage Management (Y)
3 Credit Hours

Prerequisite: previous courses in technical theatre. This course is the study and application of the methods and techniques used by the stage manager, from pre-production to auditions and from the first rehearsal through closing night and strike. Three contact hours.

TPP — Theatre Arts

TPP 2110 Acting I (Y)
3 Credit Hours

This introductory course provides instruction and training in the basic concepts of acting, including methods, vocabulary, discipline and exploration of the creative process through exercises in observation, awareness and performance. The acting activities are intended as classroom assignments and do not require participation in other courses. Three contact hours.

TPP 2111 Acting II (Y)
3 Credit Hours

Prerequisite: TPP 2110 or consent of the instructor based on exhibition of necessary level of vocal skills and physical awareness. This course is a continuation of Acting I and provides opportunities for experimentation with scripted material, including

scene study, analysis, audition and performance techniques. The acting activities are intended as classroom assignments and additional involvement in other productions. Three contact hours.

TPP 2310 Beginning Directing (Y)
3 Credit Hours

Prerequisite: TPP 2110 or permission of the instructor. This course is intended to provide theatre students with the basic principles involved in directing for the stage, a foundation for artistic and conceptual analysis of a script, and the artistic exploration needed to bring that script to realization on the stage. Topics included are the elementary principles of directing, exercises in implementation of specific skills relevant to the exercise of that craft, text analysis and interpretation, goals and methods of collaboration, and interpretive/creative projects in which research and experimentation is stressed. Three contact hours.

TPP 2500 Movement Techniques for Theatre I (Y)
3 Credit Hours

Prerequisite: TPP 2110 or permission of the instructor. This course is intended to train theatre students in the basic techniques of fully utilizing physical expression for characterization. Students will be trained in specific exercises for physical awareness, strength, flexibility, and versatility. Students will be exposed to the various approaches of major movement theorists in the theatre today, and will explore those approaches through practical and creative application. Three contact hours.

TPP 2710 Voice Techniques for Theatre I (Y)
3 Credit Hours

Prerequisite: TPP 2110 or consent of the instructor. This course is intended to train theatre students in releasing techniques in order to free the natural speaking voice, and provide a basic understanding of articulation techniques for the stage.

To train students in specific exercises for breathing, releasing, flexibility in the voice, as well as in vocal strength and agility. To train students to expand range in pitch, resonance, rate and volume. To provide students with knowledge on the mechanics of vocal production and basic anatomy of the vocal system. Three contact hours.

TRA — Transportation

TRA 1010 Principles of Transportation (Y)
3 Credit Hours

This course is an introduction to transportation. Material includes the role and importance of transportation in the economy and to users, economic and operational characteristics, special carrier services, third party carriers, urban mass transportation and tourism. Managerial issues discussed are the financing of transportation, carrier management information systems and communications. Three contact hours.

TRA 1031 Transportation Management and Theory (Y)
3 Credit Hours

This course is designed for students advancing to the management stage in the transportation field. Material covered includes financial management, business law, management's relation to government, marketing management, management theory and philosophy, and broad management perspective. The objective of this course is to give students an overall picture of the practical operating nature and problems of the business, especially related to transportation and distribution. This course ties together all other business and technical courses as well as introducing the human element to the business environment. Three contact hours.

TRA 1032 Transportation and Traffic Management I
3 Credit Hours

Upon successful completion of this course, students will be able to understand the transportation

management and business logistics process. Curriculum includes interactions and transportation pricing, carrier costing and service considerations, private transportation and carrier operations. Students will comprehend the managerial implications of carrier negotiations, total quality management and future transportation directions. Three contact hours. (CBE)

TRA 1052 Transportation and Traffic Management II
3 Credit Hours

This course deals with the role of logistics in the economy and the organization. Topics explored are customer service, logistics information systems, inventory management, materials management, and supply chain management. The objective is to explore the full scope of the transportation plant and its services as a necessary preparation to efficient use of the transportation system. Three contact hours. (CBE)

TRA 2020 Economics of Transportation (Y)
3 Credit Hours

Modern treatment of economic patterns and forces, with emphasis on North American transportation systems, are studied in conjunction with carrier cost structures and inter-carrier competition. The economic and regulatory pressures which influence rate making policy and build freight rate floors and ceilings are reviewed and analyzed. Demand for freight transportation, efficient pricing, marketing, distribution strategies and available alternatives are discussed. Three contact hours.

TRA 2053 Transportation and Traffic Management III
3 Credit Hours

Upon successful completion of this course, students will understand the role of transportation and logistics in global business. This course covers economics and service characteristics of international transportation providers. Discussed topics include the government role, proper techniques

of foreign commerce, documentation, and terms of sale used in global business. Three contact hours. (CBE)

TRA 2054 Transportation and Traffic Management IV
3 Credit Hours

This course is designed for managers and persons aspiring to advance in transportation, distribution, marketing or materials management with transportation or non-transportation companies. Students will have their skills enhanced and sharpened by the concepts and practices reviewed and expanded in this course. It is an excellent course for managers who want an extensive overview of transportation and its relationship to the corporate structure. Three contact hours.

TRA 2412 Railroad Technical Careers
3 Credit Hours

This course combines classroom-based lecture and discussion with field observation. It is designed to provide students with information about technical careers in railroading so that they can choose suitable career paths and to demonstrate the relationship among technical work groups in day-to-day railroad operations. Three contact hours.

WST — Women's Studies

WST 2010 Introduction to Women's Studies (Y)
3 Credit Hours

Prerequisite: ENC 1101. This interdisciplinary course will examine the political, social, literary and economic issues of American women in the 19th and 20th centuries. Topics to be addressed include women and sexuality, women in politics, women in the work place and women in the arts. Three contact hours.

ZOO — Zoology

ZOO 1010C General Zoology (Y)
4 Credit Hours

Students will benefit by taking Life in Its Biological Environment, Principles of Biology II or

high school biology prior to enrolling in this course. This is a survey of the animal kingdom with emphasis on taxonomy, life cycles, evolution, organ systems and phylogenetic relationships. A representative of each of the major groups will be discussed and investigated. Six contact hours: three lecture hours, three laboratory hours.

SPECIAL SERIES COURSES

Cooperative Education

Prefix will be assigned according to student work experience.

—1949 Cooperative Education Work Experience I

3 Credit Hours

The first work experience in cooperative education provides students with meaningful experiences that will enhance their college education through career exploration and job training. Forty contact hours.

Prefix will be assigned according to student work experience.

—2949 Cooperative Education Work Experience II

3 Credit Hours

The second work experience in cooperative education provides students with further meaningful experiences that will enhance their college education through career exploration and job training. Forty contact hours.

COMPENSATORY COURSES

College Level Academic Skills Test (CLAST) Review

ENC 0007 CLAST Review: Reading, Essay and English Language Skills

This course is designed for students who desire a brief, comprehensive review of the essential communication skills including reading, writing and grammar. It is recommended for students who are preparing for the CLAST, students who are retaking CLAST and students who are seeking a refresher course in communication skills.

ENC 0090 CLAST Review: English Language Skills and Essay

This course is designed for students who desire a brief, comprehensive review of the essential communication skills including essay, writing and grammar. It is recommended for students who are preparing for the CLAST, for students who are retaking CLAST, and for students who are seeking a refresher course in communication skills.

REA 0003 CLAST Review: Reading Skills

This course is designed for students who desire a brief, comprehensive review of reading skills. It is recommended for students who are preparing for the CLAST, for students who are retaking CLAST, and for students who are seeking a refresher course in reading skills.

MAT 0012 Mathematics Review and Remediation for CLAST

This course is designed to meet the needs of associate in arts and associate in science degree-seeking students to further their mastery of the mathematics skills as related to the College Level Academic Skills Test.

Academic Skills Review

IDS 0004 Academic Skills Review

Intensive review is given in mathematics, reading and writing for students who require assistance in meeting the entry-level competencies for the Developmental Education Link Through Achievement (DELTA) program college credit track. Individual educational plans are developed for all students in the subject(s) identified in order to allow them to move ahead as rapidly as possible.

Certificate Course Descriptions

All courses in the following list are not taught each term. Class schedules which show the courses that will be offered are published prior to each term.

Career Advancement Courses

ACR 0001 Air Conditioning and Refrigeration Theory I

This course is designed to teach entry-level job skills. Topics include the refrigeration cycle, heat and its measurement and types, application of latent heat, temperature and its measurement, heat transfer and control, temperature conversion formulas, temperature BTU chart and piping techniques.

ACR 0001L Air Conditioning and Refrigeration Lab I

Prerequisite: ACR 0002 or consent of instructor. This course is designed to teach entry-level job skills. Topics include compressors, condensers, tubing, evaporators, receivers, metering devices, basic cycle controls, refrigerant characteristics, refrigerant oils, basic refrigeration cycle, and personal and industrial safety.

ACR 0002 Air Conditioning and Refrigeration Theory II

Prerequisite: ACR 0001. This course is a continuation of Air Conditioning and Refrigeration Theory I and is designed to teach entry-level job skills. Topics include basic refrigeration cycle, valves, accessories, piping dehydration, charging, discharging, installation procedures, multiple systems, troubleshooting, business ethics, employee and employer responsibilities, personal and industrial safety, and compressors.

ACR 0002L Air Conditioning and Refrigeration Lab II

Prerequisite: ACR 0001L or consent of instructor. This course is a continuation of Air Conditioning and Refrigeration Lab I and is designed to teach entry-level job skills. Topics include refrigeration cycle, accessories, piping, dehydration, charging, discharging,

shop safety, installation procedures, multiple system, troubleshooting, compressors, control wiring, and personal and industrial safety.

ACR 0100 Basic Electricity and Schematics

This course is designed to teach entry-level job skills. Topics include wiring diagram symbols, schematic wiring diagram circuits, schematic wiring diagram exercises, electric meter, alternating current fundamentals, single phase motor theory, single motor testing, motor protection, troubleshooting, electrical wiring and electrical components.

ACR 0102 Applied Electricity and Schematics

Prerequisite: ACR 0100 or consent of instructor. This course is a continuation of Basic Electricity and Schematics and is designed to teach entry-level job skills. Topics include heat pumps, gas and oil furnaces, electric furnaces, straight cooling units and building electrical control panels.

ACR 0575 Commercial Piping

This course is designed to teach commercial piping applications and brazing techniques. Applications will include commercial and A/C and refrigeration line sizing and troubleshooting.

ACR 0576 Commercial Load Calculations

This course is designed for students that need an understanding of duct design and heat load calculations for industrial applications.

ACR 0577 Advanced HVAC Controls

This course is designed to teach set up, adjustment, and troubleshooting of commercial HVAC electrical and mechanical controls.

ACR 0578 Advanced Refrigeration Controls

This course is designed to teach set up, adjustment, and troubleshooting of commercial refrigeration electrical and mechanical controls.

ACR 0621 Applied Heating I

Prerequisite: ACR 0100 or consent of instructor. This course is designed to teach entry-level job skills. Topics include gas furnaces, gas controls, properties of gas, gas piping, gas combustion, gas burners, ventilation and combustion air, gas troubleshooting, electric heat, heat pumps and gas efficiency checkout.

ACR 0622 Heating Lab

Prerequisite: ACR 0621 or consent of instructor. This course is a continuation of Applied Heating I and is designed to teach entry-level job skills. Topics include oil efficiency, oil heating, electric heat, heat pumps, troubleshooting, compressor failure and clean up after burn out.

ACR 0781 Container Refrigeration Fundamentals

Corequisite: ACR 0783. This course is designed to help prepare students for job entry into the container refrigeration service and repair field. The course includes instruction in the use of tools and equipment, servicing procedures, system evaluation and diagnosis. The course includes a combination of classroom and laboratory experience.

ACR 0783 Applied Electricity for Container Refrigeration

Corequisite: ACR 0781. This course is designed especially for container refrigeration mechanics seeking entry-level job training in electrical controls, safety devices, components, test equipment, symbols and schematic diagrams.

AER 0001 Introduction to Automotive Technology

This course is designed to teach entry-level skills in basic automotive service and systems operations. Topics covered are automotive systems overview, shop safety, OSHA rules and regulations, and Florida right to know law.

AER 0005 Basic Automotive Concepts I

This course is designed to teach basic automotive service and systems operation. Both lecture and

shop experience will be provided. Topics covered include automotive tools, measuring devices, fasteners, service information, and underhood maintenance of the following areas: engine oils, oil filters, cooling systems, power steering fluid, brake master cylinder fluids, and batteries.

AER 0006 Basic Automotive Concepts II

This course is a continuation of Automotive Concepts I with both lecture and shop experience. Topics covered include under-vehicle maintenance of the following areas: tires, suspension, steering, brakes, power train, wheel bearings, and exterior maintenance of the following areas: windshield wipers, headlights, lightbulbs, and fuses and circuit protection.

AER 0170 Air Conditioning and Heating Systems

This course is designed to teach entry-level job skills in the theory, service and repair of automotive heating and air conditioning systems. This course includes a combination of classroom and shop experience.

AER 0230 Manual Drive Trains and Axles

This course is designed to teach the theory of basic operation and the methods used to diagnose, adjust and repair manual transmissions, transaxles and drive train components. This course includes a combination of classroom and shop experience.

AER 0254 Automatic Transmissions and Transaxles I

This course is designed to teach entry-level job skills in the theory of operation and repair of domestic three speed automatic transmission/transaxles. Instruction includes basic service and repair of automatic transmissions/transaxles. This course includes a combination of classroom and shop experience.

AER 0255 Automatic Transmissions and Transaxles II

Prerequisite: AER 0254. This course is a continuation of Automatic Transmissions and Transaxles I and is designed to teach skill in the theory of operation of domestic four speed and over-drive transmissions/transaxles and import transmissions/transaxles.

AER 0300 Electrical Systems I

This course is designed to teach basic entry-level job skills. Topics include instruction in engine electrical systems, starting and charging systems, accessory systems and an introduction to computer control systems. This course includes a combination of classroom and shop experience.

AER 0301 Electrical Systems II

Prerequisite: AER 0300. This course is an advanced study of automotive electrical and electronic technology covering theory with application to modern vehicles. Areas covered include lighting systems, safety systems, display panel instruments, convenience systems, sensing and conversion devices, and computer controls. Students are expected to have basic knowledge of electrical systems, engine operation, fuel systems, and engine performance.

AER 0414 Brake Systems

This course is designed to teach entry-level job skills in the theory, operation and repair of drum, disc and anti-lock brake systems. This course includes a combination of classroom and shop experience.

AER 0452 Steering and Suspension Systems

This course is designed to teach entry-level job skills. Topics included are service and repair of steering and suspension systems, power steering, wheels and tires. This course includes a combination of classroom and shop experience.

AER 0501 Engine Performance I

This course is designed to teach entry-level job skills in the diagnosis and repair of drivability problems. Topics covered include engine performance and electrical and computer system operations. Emphasis is placed on manufacturer's diagnostic charts and advanced diagnostic equipment. Use of scanners on both carburetor and fuel-injected vehicles will be addressed.

AER 0502 Engine Performance II

Prerequisite: previous training or experience. This course is an advanced study of engine performance with heavy emphasis on computerized engine controls. Students will gain knowledge of common components of engine control systems, including sensing devices, actuators, control modules, diagnosis and service of import automobiles. Diagnosis and service will cover: Bosch continued, Toyota, Nissan, Honda, and other imports. Also covered will be the study of lab scope wave form and interpretation and analysis.

AER 0590 Engines

This course is designed to teach entry-level job skills for mechanics and includes instruction in engine tuning, engine repair and diagnosis. This course includes a combination of classroom and shop experience.

ARR 0020 Estimator

This course is designed to teach entry-level job skills. Topics include emphasis on safety, assessing damage, and creating a damage report manually.

ARR 0100 Trim and Tinting

This course is designed to teach entry-level job skills. Topics include emphasis on safety, tinting paint and all repair of trim.

ARR 0111 Automotive Welding

This course is designed specifically for entry-level job training in the automotive body repair and refinishing field. Topics include oxygen acetylene welding, welding and brazing, sheet metal welding and brazing, metal inert

gas welding, panel spotting and leading wiping or filling.

ARR 0180 Custom Painting

This course is designed to teach entry-level job skills. Topics include emphasis on safety, painting basecoat and clearcoat and single-stage finish.

ARR 0271 Basic Automotive Glass

This course is designed specifically for entry-level job training in automotive glass replacement. Emphasis is on safety, basic tools, weatherstrips, retainer and moulding clips, types of glass, glass operating mechanisms, door latches and locks, and water and air leaks.

ARR 0273 Advanced Automotive Glass and Sheet Metal

Prerequisite: ARR 0271. This course is designed to teach entry-level job skills in the automotive body repair and refinishing field. Topics include door operating mechanism, removal and alignment of headers and front bumpers, hoods and fenders, trunk lids and tail gates.

ARR 0291 Basic Automotive Body Repair

This course is designed specifically for entry-level job training in automotive body repair. Emphasis will be on metal straightening, metal finishing, buckled metal, direct and indirect damage, tools and final assembly.

ARR 0292 Advanced Automotive Body Repair and Panel Replacement

Prerequisite: ARR 0291. This course is a continuation of Basic Automotive Body Repair and is designed to teach entry-level job skills. Topics include emphasis on safety, vehicle identification, metal straightening, analysis of damage, repair of body panels, power tools and quarter panel replacement.

ARR 0351 Frame Straightening

This course is designed specifically for entry-level job training in and frame straightening. Topics include unibody, sectioning and corrosion protection.

ARR 0411 Basic Automotive Painting

This course is designed specifically for entry-level job training in automotive painting. Emphasis will be on safety, air compressors, paint booth operation, painting equipment, sanding equipment, paint identification, spray patterns and surface preparation.

ARR 0412 Advanced Automotive Painting

Prerequisite: ARR 0411. This course is designed specifically for entry-level job training in automotive painting. Topics include safety, spot repair, paint additives, special effects and clean up.

ARR 0610 Detailer

This course is designed to teach entry-level skills. Topics include emphasis on safety, removal of overspray and final finishing, clear exterior and interior of vehicle, apply decals and stripes.

BCV 0020 Tools and Pre-Construction Skills

This course is designed to teach entry-level job skills in carpentry. Topics include the safe use of all hand and power tools, construction of saw horses, saw vises and tool box. The course also includes the uses of the framing square and a review of working drawings.

BCV 0046 Leveling Instruments, Site Preparation and Layout

This course is designed to teach entry-level job skills in carpentry. Topics include the importance of accurate work in laying out buildings with the use of different leveling instruments and the many aspects of site preparation and layout of buildings and houses.

BCV 0103 Wood Products, Substitutes, Lumber and Building Materials

This course is designed to teach entry-level job skills in carpentry. Topics include wood, wood substitutes, different kinds of construction lumber, their growth and how wood finally becomes lumber. This course also includes building adhesives, their types and their applications.

BCV 0139 Foundation Formwork/Wall and Floor Framing

This course is designed to teach entry-level job skills. Topics include procedures necessary to make buildings and houses strong. The course also includes framing and bracing of floors and walls.

BCV 0140 Roof Framing I

This course is designed to teach entry-level job skills in carpentry. Topics include basic styles of roofs and construction and framing of a gable, hip and combination roof.

BCV 0141 Roof Framing II and Timber Construction

Prerequisite: BCV 0140 or consent of instructor. This entry-level job course is a continuation of Roof Framing I. Topics include layout and construction of a combination roof.

BCV 0170 Interior Trim

This course is designed to teach entry-level job skills in carpentry. Topics include the fundamentals of wall coverings, door hangings, windows, stairs and cabinets.

BCV 0173 Exterior Trim and Hardware

This course is designed to teach entry-level job skills in carpentry. Topics include the different types of exterior finishing materials and their application. The course also includes the different finish and rough hardware methods of installation, intended uses and appearances.

BCV 0451 Repairs

This course is designed to teach the repair, service and maintenance of plumbing systems including the tap connections to municipal sewer/water piping.

BCV 0500 Introduction to Plumbing

This course is designed to teach entry-level job skills and to familiarize students with trade-related words and terms that will be encountered in the work place. Also included will be safety, apprenticeship requirements, working conditions, wages, benefits and job specialization.

BCV 0504 Plans, Blueprints and Isometrics

This course is designed to teach entry-level job skills and to familiarize students with common types of residential blueprints and pipe drawings on an isometric angle. Included in this course are wall construction and location, scale drawings, grade relationships, symbols, measurements, isometric drawings and piping review.

BCV 0510 Introduction to Pipe Trades

This course is designed to provide an understanding of career and training opportunities, the use and care of tools and equipment, safety precautions, basic math, standards and codes and human relations.

BCV 0523 Fixtures, Valves and Faucets

This course is designed to teach entry-level job skills and to familiarize students with various plumbing fixtures such as kitchen sinks, water closets, bathtubs, showers, hose bibbs, urinals and water coolers. Students will also be able to recognize and repair the major types and brands of faucets and valves.

BCV 0570 Water Supply/Potable Water

This course is designed to teach entry-level job skills and to equip students with the ability to design and layout potable water systems, types of material, use and size, routing and sizing of supply piping, supports and hangers. Also included will be the various types of shallow wells and circulating pumps, principles of using solar energy collector plates, storage tanks, valves and pumps.

BCV 0571 Drain, Waste and Venting

This course is designed to teach entry-level job skills and to equip students with the ability to design and layout sanitary drainage systems. Students will also learn types of venting systems, code-specified sizing based on 10-D-9, wet venting, common venting,

combination waste and vent, utility and loop or circuit venting.

BCV 0580 Storm Drains, Interceptors

This course is designed to teach recognition, design function and installation of intercepting devices and storm drainage systems as they are related to the plumbing trade.

BCV 0600 DC Theory

This course is designed to give students the basic concepts of electricity and its applications. Topics include but are not limited to the following: 1) Physics of work and energy, 2) Electrical terms, 3) Basic component parts of electrical circuitry, 4) DC circuits, 5) Ohms Law, and 6) Basic test equipment and measurements.

BCV 0601 AC Theory

This course is designed to give students the basic concepts of alternating current (AC) and the differences that exist between DC and AC. Topics include, but are not limited to the following: 1) Electrical terms associated with AC, 2) Magnetism and electromagnetism, 3) Principles of induction and capacitance, and 4) Test equipment, including oscilloscopes.

BCV 0629 Residential Wiring I

This course, in conjunction with Electricity I and II is designed to give students the necessary skills in residential wiring to establish the foundation for becoming an electrical helper. Topics include, but are not limited to the following: 1) Proper use of both hand and power tools, 2) Blueprint reading, 3) Materials identification, 4) Basic residential circuits, 5) Terminology, 6) Wiring techniques, and 7) The National Electric Code (NEC) requirements.

BCV 0630 Residential Wiring II

This course is designed to give students the necessary skills to perform residential installations. This course is a continuation of Residential Wiring I in that the wiring techniques learned in the lab are incorporated in the actual wiring of a building.

BCV 0631 NEC Review

This course is designed to give students the necessary skills to understand and use the National Electric Code (NEC) in preparation for the journeyman and master license examination as well as basic understanding for electrical helpers to stay abreast with changes in the "code" from edition to edition.

BCV 0660 Commercial Wiring I

This course is designed to give students the necessary skills to function in the commercial electrical installation environment. Topics include, but are not limited to the following: 1) Commercial circuit requirements, 2) NEC requirement, 3) Conduit bending experience, 4) Conduit installations, 5) Commercial lighting systems, and 6) Site plans and interpretation.

BCV 0661 Commercial Wiring II

This course is designed to give students the necessary skills to perform commercial installations. This course is a continuation of Commercial Wiring I in that wiring techniques learned in the lab are incorporated in the actual wiring of a building.

BCV 0662 Electrical Maintenance

This course is designed to give students the necessary skills to perform electrical maintenance on various types of residential and commercial installations. Topics include, but are not limited to the following: 1) General power distribution systems for both residential and commercial installations. 2) HVAC requirements, 3) general single phase motor maintenance, 4) commercial lighting maintenance, and 5) Low voltage control systems.

BCV 0663 Motors and Controls

This course is designed to teach industrial electrical motor and control skills. Topics include, but are not limited to the following: DC and AC motor principles, 2 and 3 wire control, remote and local control, both DC and AC drives.

BCV 0664 Industrial Wiring

This course is designed to teach entry-level skills. Topics include plans and siteplans, National Electrical Code (NEC) requirements for industrial wiring, hazardous location installations and equipment, and power distribution with transformers.

BRC 0100 Teller

This course is designed as entry-level job training to enable individuals to function efficiently on the job as new tellers. Also, tellers with experience can strengthen specific skills and become aware of the professional aspects of their jobs. Teller training can improve performance and attitudes towards coworkers and customers.

BRC 0300 Fundamentals of Member Services/Credit Union

In this customized course, students will quickly be able to function efficiently on the job as new Credit Union employees. Credit Union representatives will be strengthened in their everyday contact with credit union members. This course will provide an increased understanding of terminology and regulations applicable to credit unions, demonstrate security procedures and detecting of fraud; and enhance skills for effective communication with credit union members and co-workers.

BRC 0301 Foundation and Structure of Credit Unions

In this customized course, students will gain understanding of credit union history, structure, and regulatory environment. Included are individuals, events, laws, and organizations significant to the credit union movement. Instruction is also provided in the overall operation of credit unions as well as major issues confronting them. This course is intended for credit union employees only.

BRC 0311 Credit Union Accounting

In this customized course, students will acquire a basic knowledge of credit union bookkeeping. This course will give credit union people hands-on experience with the journalistic cycle of a credit union

with specific examples of how to journalize entries, complete closing of books, and complete the necessary financial statements.

BRC 0321 Collection Techniques/Credit Union

In this customized course, students will gain basic knowledge of credit union collections and collection techniques. Skills to be addressed include organizing a collection department, making phone collections, following-up effectively, skiptracing, repossessing, and financial counseling. In addition, students will study bankruptcy and collection laws and regulations. This course is intended for credit union employees only.

BRC 0323 Consumer Lending/Credit Union

In this customized course, students will become familiar with various loan documents, e.g., applications, notes, and security agreements. Also addressed will be interviewing techniques, Federal Regulations B and Z, credit bureau reports, the financing of collateral items, real estate elements, and cross-selling techniques. This course is intended for credit union employees only.

BRC 0324 Mortgage Lending

This course will provide a basic introduction to the fundamentals of sound mortgage lending for credit unions, to include philosophy and the processing procedures required to administer a mortgage lending program in a credit union environment.

BRC 0325 Advanced Mortgage Lending

In this course, students will gain an understanding of and gain skills with the tools to process mortgage loans. How to deal with exceptions to the general rules, including the self-employed, will be mastered along with learning about private mortgage insurance and sources of funds for mortgage loans, this will include the sale of loans into the secondary market. An understanding of compliance issues

will be gained and loan programs for low/moderate income borrowers will be explored as well as servicing mortgages and collection of delinquent mortgages.

BRC 0341 Financial Counseling/Credit Union

This is a customized course designed for credit union employees. Students will gain skills in personal financial counseling. Such skills will include interviewing, listening techniques, and problem solving. Instruction will also be provided in personal and family budgeting, debt management, dealing with creditors, developing a savings plan, and referral sources. Students will learn how to develop their own personal budget and will maintain a budget expense notebook during the school term. Assignments will deal with actual case problems. This course is intended for credit union employees only.

BRC 0342 Human Behavior/Credit Union

This customized course includes a study of human behavior psychology and human relations. Among the specific topics addressed are: understanding interests and desires of individuals; matters of personal and group adjustments; understanding self; and understanding credit union members. This course is intended for credit union employees only.

BRC 0353 Credit Union Marketing

In this customized course, students will gain knowledge of the role marketing plays within an organization. Topics addressed will include what is 'marketing', product mix, the marketing environment today and tomorrow, and market segmentation. Also included will be market and member research, marketing mix, developing sales and service quality, marketing plan, advertising tools, marketing budget, and elements of a campaign. Through in-class work sessions, students will be required to complete a class project. This course is intended for credit union employees only.

**BRC 0355 Effective Writing/
Credit Union**

This is a customized course in writing designed to teach students the requisite skills to edit their own writing for both style and content. These skills include five principles of editing as well as using style and organization for a purpose. Students will have class time experience in writing effective memos and letters. Also presented will be techniques of writing reports using materials provided. This course is intended for credit union employees only.

**BRC 0356 Basic Business
Mathematics/Credit Union**

This course is designed to familiarize students with a wide range of business procedures for which mathematics is required in order to prepare them for business employment.

**CET 0555 Novell
Network Administration**

Prerequisite: EEV 0580. This course teaches how to administer a computer network through adding users, assigning rights, and monitoring network usage. Hands-on laboratories reinforce course topics.

CJD 0254 Medical First Responder

Prerequisites: CJD 0704, CJD 0705, CJD 0730, CJD 0731, CJD 0732, CJD 0734, CJD 0760, CJD 0761, CJD 0762, CJD 0763, 19 years of age, valid drivers license, American Citizen, TABE (entrance exam FCCJ), medical examination, polygraph, drug screening, background investigation, physical performance test, oral interview, sponsored by a Law Enforcement Agency or FCCJ. This course will cover first responder techniques needed in emergency medical situations. In lecture format the major types of communicable diseases among adults, signs and symptoms of each disease, and the methods of transmission are also taught.

**CJD 0704 Criminal Justice
Defensive Tactics**

Prerequisites: CJD 0730, CJD 0731, CJD 0734, CJD 0760, CJD 0761, CJD 0762, CJD 0763, 19 years of age, valid drivers license, American Citizen, TABE (entrance exam FCCJ), medical examination, polygraph, drug screening, background investigation, physical performance test, oral interview, sponsored by a Law Enforcement Agency or FCCJ. This course covers the techniques used for an officer's personal safety and those necessary to subdue, search, and then transport resisting individuals. The use of restraining devices, impact weapons, pressure points are covered. Objectives are addressed as specified by criminal justice standards and training commission.

**CJD 0705 Criminal
Justice Weapons**

Prerequisites: CJD 0730, CJD 0731, CJD 0732, CJD 0734, CJD 0760, CJD 0761, CJD 0762, CJD 0763, 19 years of age, valid drivers license, American Citizen, driving history, TABE (FCCJ entrance exam), medical examination, polygraph, drug screening, background investigation, physical performance test, oral interview sponsored by a Law Enforcement Agency or FCCJ. This course covers criminal justice weapons including instructions in the use of firearms, handguns and shot guns. Safety procedures and ammunition use are covered in lecture.

CJD 0723 Vehicle Operations

Prerequisites: CJD 0704, CJD 0730, CJD 0731, CJD 0732, CJD 0734, CJD 0760, CJD 0761, CJD 0762, CJD 0763, be at least 19 years of age, have a valid drivers license, be an American citizen, driving history, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigations, physical performance test, oral interview and be sponsored by a

law enforcement agency or FCCJ. This course covers the components of the police driving environment and practical exercises on the driving range are conducted. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

**CJD 0730 Law Enforcement
Legal III**

Prerequisites: CJD 0704, CJD 0760, CJD 0761, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigations, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers various criminal laws and their elements. Emphasis is placed upon those laws specific to police application. Traffic and drivers license laws are studied. Legal considerations of officer vehicle operations are explored.

CJD 0731 Law Enforcement Patrol

Prerequisites: CJD 0704, CJD 0730, CJD 0734, CJD 0760, CJD 0761, be at least 19 years of age, have a valid drivers license, be an American citizen, driving history, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigations, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course addresses the skills and techniques that are needed by officers daily to do patrol tactics and respond to various types of calls. Methods of approach to various high-risk situations are explored with practical exercises included. Unusual occurrence events, including firefighting and crowd control are addressed.

CJD 0732 Law Enforcement Traffic

Prerequisites: CJD 0704, CJD 0730, CJD 0731, CJD 0734, CJD 0760, CJD 0761, CJD 0762, CJD 0763, be at least 19 years of age, have a valid

drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigations, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers studies of traffic enforcement and control with the inclusion of DUI offenses and enforcement. Traffic accident investigation, scene management and reporting procedures are also studied.

CJD 0734 Law Enforcement Investigations

Prerequisites: CJD 0704, CJD 0730, CJD 0760, CJD 0761, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigations, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course addresses investigations of various crimes, including property crimes, person crimes, narcotics offenses, vice organized crime, terrorist activity, bombing incidents and death investigations. Techniques are developed from the initial observation method through the processing of the crime scene and case preparation. Florida's computer network is studied as an information source.

CJD 0741 Emergency Preparedness

Prerequisites: CJD 0770, CJD 0771, CJD 0772, CJD 0773, CJD 0704, CJD 0705, CJD 0254, CJD 0750, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test and oral interview. This course covers skills needed for riot and disturbance control and fire-fighting. Lecture includes methods

of riot prevention and handling of unusual occurrences. Hostage situations and emergency procedures are also covered. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 0750 Interpersonal Skills II

Prerequisites: CJD 0770, CJD 0771, CJD 0772, CJD 0773, CJD 0704, CJD 0705, CJD 0254, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test and oral interview. This course covers an examination of inmate populations and techniques to supervise inmates. This module goes into greater detail and depth than Interpersonal I and concentrates on inmate societies, criminal types, institutional criminalities, inmate deception and manipulation, and female and male homosexual inmates.

CJD 0752 Correctional Operations

Prerequisites: CJD 0770, CJD 0771, CJD 0772, CJD 0773, CJD 0704, CJD 0705, CJD 0254, CJD 0750, CJD 0741, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test and oral interview. This course will thoroughly investigate the daily operations within the confines of the correctional facility to include inmate intake, classification, safety release, accountability, movements/transfers, confinement, health care and feeding.

CJD 0760 Criminal Justice Legal I

Prerequisites: be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug

screening, background investigation, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course provides an introductory overview of the criminal justice system and a history of law. The foundation and basic components of law are studied with specific focus upon officer application. Court procedure and testimony are also examined.

CJD 0761 Criminal Justice Legal II

Prerequisites: CJD 0704, CJD 0760, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers constitutional law and its application to the public and officers. Law, including evidence procedures, arrest law, search and seizure, and various statutory laws that are common to police and correctional officers are studied. Emphasis is given to elements of various crimes. Various civil laws applications are also covered. Civil and criminal liability of officers is studied.

CJD 0762 Criminal Justice Communications

Prerequisites: CJD 0704, CJD 0730, CJD 0734, CJD 0731, CJD 0760, CJD 0761, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview, and be sponsored by a law enforcement agency or FCCJ. This course covers the report-writing process from the interview, statement taking, and notetaking through the final report product with practical exercises included. The difference between interviewing and interrogation are explored.

Interpersonal communication skills are covered along with radio and telephone procedures.

CJD 0763 Interpersonal Skills I

Prerequisites: CJD 0704, CJD 0730, CJD 0731, CJD 0734, CJD 0760, CJD 0761, CJD 0762, be at least 19 years of age, have a valid drivers license, be an American citizen, driving history, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers community relations techniques and courtesy. With emphasis given to crime prevention the need of various groups within society are addressed. These include juveniles, the elderly, ethnic and cultural groups, mentally ill and retarded, the physically disabled and substance abusers. Intervention techniques for various situations including suicide, domestic violence and other crises are studied with practical exercises. Stress recognition and reduction are included.

CJD 0770 Criminal Justice Legal I/Correctional Officer

Prerequisites: be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph, drug screening, background investigation, physical performance test and oral interview. This course will constitute the introductory phase of the legal requirement for certification eligibility by the commission on Criminal Justice Standards and Training.

CJD 0771 Criminal Justice Legal II/Correctional Officer

Prerequisites: CJD 0770, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph, drug screening, background investigation, physical

performance test and oral interview. This course is a continuance of Criminal Justice Legal I but goes into greater detail on specific topics such as Constitutional Law, Evidence Rules and Concepts, etc.

CJD 0772 Criminal Justice Communications/Correctional Officer

Prerequisites: CJD 0770, CJD 0771, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph, drug screening, background investigation, physical performance test and oral interview. This course introduces students to the principles and rules of proper notetaking, taking statements, report writing and familiarization with communication equipment, radio codes and telephone procedures.

CJD 0773 Criminal Justice Interpersonal Skills I/Correctional Officer

Prerequisites: CJD 0770, CJD 0771, CJD 0772, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph, drug screening, background investigation, physical performance test and oral interview. This course in interpersonal skills will cover such topics as human behavior, ethnic and cultural groups, mentally ill physically handicapped inmates, crisis intervention and stress reduction.

COS 0080 Cosmetology I

Prerequisite: TABE, VPI 0100, VPI 0200 and VPI 0300 (as needed). This course provides students with the beginning theoretical principles and practical procedures of cosmetology. Manipulative skills, safety requirements and sanitary measures are presented. Students receive laboratory practice on mannequins and each other.

COS 0081 Cosmetology II

Prerequisite: COS 0080. This course provides students with the beginning theoretical principles and practical procedures of hair cutting and hair styling. Basic tasks performed will include finger waving, pin curl sets and selecting appropriate hair styles as well as combing techniques. Students will learn the relationship of shampooing, conditioning and chemical services. Hair cutting tasks will include low elevation cutting, selection of appropriate haircut and haircut checking.

COS 0082 Cosmetology III

Prerequisites: COS 0080 and COS 0081. This course, a continuation of Cosmetology II, provides students with additional hair cutting and hair styling techniques the introduction of the chemical service permanent waving and facial (including massage) procedures and techniques.

COS 0083 Cosmetology IV

Prerequisites: COS 0080, COS 0081 and COS 0082. This course, a continuation of Cosmetology III, provides students with the introduction of manicuring/pedicuring/nail extensions in both theoretical instruction and practical application. Also the chemical processes of hair tinting and bleaching are introduced. At this time students are made aware of industry standards applicable to seeking employment including application forms, resume preparation and the interviewing process. Florida cosmetology law is introduced and interwoven into lecture as applicable.

COS 0084 Cosmetology V

Prerequisites: COS 0080, COS 0081, COS 0082 and COS 0083. This course, a continuation of Cosmetology IV, provides students with the opportunity to perform previously accomplished service techniques, procedures and applications in the clinic. The focus is to perform cosmetology services on patrons in a salon type environment. Students will review previously learned

techniques, clinic procedures and responsibilities. Students will be presented with new material which includes the care, fitting and design of hairpieces and wigs, advanced permanent waving, chemical relaxers and reformation curls.

COS 0085 Cosmetology VI

Prerequisites: COS 0080, COS 0081, COS 0082, COS 0083 and COS 0084. This course, a continuation of Cosmetology V, provides students with advanced techniques in hair tinting and bleaching, and manicuring/pedicuring/nail extensions. There is ample time built into the schedule for additional review and practice as needed.

COS 0086 Cosmetology VII

Prerequisites: COS 0080, COS 0081, COS 0082, COS 0083, COS 0084 and COS 0085. This course, a continuation of Cosmetology VI, provides students with the opportunity to emphasize creativity, the mastering of new trends and the review and enhancement of all basic skills/techniques. New material to be introduced includes cosmetics and make-up, beauty salon management and advanced employability skills.

COS 0087 Cosmetology VIII

Prerequisites: COS 0080, COS 0081, COS 0082, COS 0083, COS 0084, COS 0085 and COS 0086. This course, a continuation of Cosmetology VII, offers students the daily performance and accumulation of services in addition to individualized instruction. New theoretical subject matter to be introduced includes Florida law and state board requirements governing cosmetology, an overview of entrepreneurship and beginning review for the state licensing exam.

COS 0088 Cosmetology IX

Prerequisites: COS 0080, COS 0081, COS 0082, COS 0083, COS 0084, COS 0085, COS 0086 and COS 0087. This course, a continuation of Cosmetology VIII, is a review and

summarization of the preceding eight levels including practical and written theory and written practical evaluations. Emphasis will be placed on enhancing students' professional image, technical skills and human relation skills.

COS 0089 Cosmetology X

Prerequisites: COS 0080, COS 0081, COS 0082, COS 0083, COS 0084, COS 0085, COS 0086, COS 0087 and COS 0088. This course, a continuation of Cosmetology IX, provides practical application of employability skills and salon management with emphasis on final exam preparation. Students must demonstrate their understanding and technical skills by achieving 85 percent or better on written and practical exit exams.

COS 0500 Barber-Styling I

Prerequisites: TABE, VPI 0100, VPI 0200 and VPI 0300. This course provides students with beginning theoretical and practical procedures of barbering. The basic topics and tasks to be performed are history of barbering, professional image and ethics, bacteriology, sterilization and sanitation, safe and efficient work practices, implements, tools and equipment, skin, scalp and hair structure, disorders and treatments of hair and skin, and massage and facial treatments.

COS 0510 Barber-Styling II

Prerequisite: COS 0500. This course provides students with beginning theoretical and practical procedures of barbering. Basic topics and tasks to be performed are draping, shampooing and rinsing, shampoos, conditioners and rinses, men's hair cutting and hair styling, shaving, beard and mustache trims, women's hair cutting and hair styling.

COS 0520 Barber-Styling III

Prerequisites: COS 0500 and COS 0510. This course is a continuation of Barber-Styling II. Students will be introduced to non-chemical and chemical hair

processing and hair designing techniques as they continue to perfect their skills. Students will demonstrate their understanding and technical skill abilities by achieving 85 percent or better on a written and practical final exam prior to participating in Barber-Styling IV. This course includes instruction in airwaving, curling iron techniques, finger-waving and permanent waving.

COS 0530 Barber-Styling IV

Prerequisites: COS 0500, COS 0510 and COS 0520. This course is a continuation of Barber-Styling III with emphasis on chemical processes and includes theoretical instruction and practical hands-on training in chemical hair relaxing, soft curl permanents, hair coloring and bleaching, and wig and hairpiece fitting and care.

COS 0540 Barber-Styling V

Prerequisites: COS 0500, COS 0510, COS 0520 and COS 0530. This course provides students with theoretical and practical review and application of all topics and tasks. Students will follow clinic floor procedures by performing reception desk and sanitation duties and by consulting with the instructor prior to a client service, following instructions during a service and by having the finished service checked by the instructor for approval. Students will also maintain service record sheets to record the number of services performed on clients as recommended by DBPR.

COS 0550 Barber-Styling VI

Prerequisites: COS 0500, COS 0510, COS 0520, COS 0530 and COS 0540. This course is a continuation of Barber-Styling V with the focus on theoretical and practical review of all topics and tasks.

COS 0551 Barber-Styling VII

Prerequisites: COS 0500, COS 0510, COS 0520, COS 0530, COS 0540 and COS 0550. This course offers students continuation of the daily performance and accumulation of services in addition to the availability of individual instruction. New theoretical

subject matter to be introduced includes the development of barber management skills, the demonstration of employability skills, a knowledge of State Board requirements, rules and regulations, and an understanding of entrepreneurship.

COS 0552 Barber-Styling VIII

Prerequisites: COS 0500, COS 0510, COS 0520, COS 0530, COS 0540, COS 0550 and COS 0551. This course provides practical applications of employability skills, shop management, entrepreneurial responsibilities and applied Florida law statutes. Students will continue in the daily performance and accumulation of required services.

COS 0590 Professional Barber-Styling I

Prerequisites: COS 0500, COS 0510, COS 0520, COS 0530, COS 0540, COS 0550, COS 0551 and COS 0552. This course provides a culmination of the previous levels in practical and theoretical areas with special emphasis applied to state board examinations preparation. Additionally, students will address enhancing their professional image and human relation skills. Students must demonstrate their understanding and technical skills by achieving 85 percent or better on written and practical exit exams and by performing the minimum number of services required by DPR prior to applying for state licensure testing.

COS 0591 Professional Barber-Styling II

Prerequisites: COS 0500, COS 0510, COS 0520, COS 0530, COS 0540, COS 0550, COS 0551, COS 0552 and COS 0590. This course is a continuation of Professional Barber-Styling I for the purpose of preparing for Florida state board examination. An employment search conducted by students will be considered a performance standard.

COS 0930 Selected Topics in Cosmetology

The open format of this course provides an opportunity to address various selected topics in cosmetology. This course will provide students with any additional hours required for certification. Topics will be selected based on students' needs.

COS 0931 Selected Topics in Barbering

The open format of this course provides an opportunity to address various selected topics in barbering. This course will provide students with any additional hours required for certification. Topics will be selected based on student needs.

CSP 0010 Cosmetology Specialist — Nails

This course provides students with a minimum of 240 hours of theory instruction, laboratory experiences and the practical application of manicuring, pedicuring and nail extension services. Following the completion of 95 services and the achievement of 85 percent or better on written and practical tests, students will be issued a certificate of completion by FCCJ in order to qualify for state board certification of this specialty course.

DEA 0001 Clinical Practice I

This course is an introduction to clinical assisting skills. Students will assist with introducing the patient to the clinic and operating policies, establishing records, perform as chairside dental assistants with various procedures. Field trips will be scheduled for the purpose of broadening the scope of the dental assisting professional.

DEA 0021 Preclinical Procedures

A comprehensive course designed to acquaint students with the many aspects of assisting at chairside in the treatment of dental patients. Among areas are patient management techniques taking and recording medical and dental histories, vital signs, performing and assisting with

clinical examinations and charting, assisting with local anesthesia and all areas of dental treatment, operating and maintaining dental equipment and sterilizers.

DEA 0022 Introduction to Microbiology

This course is intended to familiarize students with the role of microorganisms in health and disease. Organisms of concern to the dental practitioner will receive particular attention.

DEA 0029 Clinical Practice II

This course is a clinical experience in which students will gain additional chairside assisting skills and begin to incorporate the advanced functions into patient treatment procedures. A rotation to include the specialties in dentistry is included, as well as a didactic study of the specialties.

DEA 0201 Practice Management

This course is a study of the various practice management procedures which include reception procedures, telephone techniques, appointment book control, inventory control, and purchasing, filing systems, bookkeeping and banking procedures and tax records, legal and ethical aspects of dentistry.

DEA 0211 Radiology II

This is an advanced course in dental radiographic interpretation, surveys, and techniques including carpal radiography. In addition, information will be presented on the following subjects: quality control, radiologic physics, and health physics.

DEA 0301 Dental Nutrition

This is a comprehensive course designed to integrate nutrition into the diagnosis, care and treatment of dental patients. Emphasis will be placed on instilling in students an overall awareness of nutrition in oral health and providing a practical means in assessing a dental patients' diet as well as the impact it has upon dental health through the nutritional process.

DEA 0311 Dental Health Education

This course will emphasize the principles of prevention along with the development of visual aid materials. Practical experience is gained through teaching proper oral hygiene in elementary schools and the clinical setting during National Dental Health Month. Topics include educational principles, oral hygiene procedures, fluorides, and patient motivation.

DEA 0746 Pharmacology and Dental Office Emergencies

This course is designed to familiarize students with basic concepts and considerations regarding pharmacology and pharmaceutical properties, actions, dose, methods of administration, therapeutic usage, side effects, indications and contraindications for pharmaceutical preparations used in dentistry. This course also deals with anticipating and preventing the development of emergency situations in the dental office. The relationship of health and medical histories will be emphasized as well as recognizing and assisting with emergency care of dental patients.

DEA 0801 Expanded Duties

This course is designed for the dental assisting student to gain laboratory and clinical proficiency in the expanded duties legally allowable in the state of Florida.

DEA 0805 Clinical Practice III

This course is designed as an externship for students with a private practitioner in dentistry. Students will obtain experience in all aspects of dental office procedures.

DES 0020 Dental and Head/Neck Anatomy

This course provides comprehensive instruction in the anatomy of the human dentition, its development and function. A detailed study of bony, muscular, circulatory, and nervous systems of the head and neck.

DES 0044 Oral Pathology

This course is a study of general and oral pathological diseases

with emphasis on those related to the oral cavity. Recognition of normal and abnormal conditions of the oral cavity and surrounding tissues will cultivate through case presentations and slide series.

DES 0103 Dental Materials

Prerequisite: High school diploma or GED. Students will deal with the properties, manipulation, and care of materials used in the prevention and treatment of oral disease. It will include the study of physical, mechanical, chemical, and biological characteristics of materials.

DES 0204 Radiology I

This course consists of a study of the principles of radiology, theory, and operation of X-ray equipment, darkroom procedures, film storage, and the hazards and precautions involved in dental radiology.

DES 0400 Anatomy/Physiology for Dental Assistants

This course is a survey of human anatomy and physiology including material on cellular structure and function.

DIM 0001 Introduction to Diesel Engines

This course is designed to teach diesel engine entry-level job skills. Topics include diesel engine components, engine performance and cycle of operation, proper use of basic precision and special tools, engine systems lubricating oils and diesel fuels. Special emphasis will be placed on safety procedures, accident prevention, math for diesel technicians, employability skills, and entrepreneurship.

DIM 0102 Diesel Systems Repair and Overhaul

This course is designed to teach entry-level job skills in the overhaul and repair of heavy-duty truck, Cummins, Detroit, Caterpillar and John Deere diesel engines, and their components. Topics include rewire manual utilization, engine disassembly and reassembly, use of precision measuring instruments, engine systems theory and engine run-in procedures. Special emphasis will

be placed on safety and manufacturer overhaul procedures.

DIM 0151 Maintenance and Troubleshooting I

This course is designed to teach entry-level job skills on diesel engine tune-up, troubleshooting, and maintenance procedures. Emphasis will be placed on valve adjustment, injection timing, engine timing, removing, testing and rebuilding fuel injectors, solving engine problems and test running an engine. Special emphasis will be placed on safety and manufacturer's maintenance procedures.

DIM 0152 Maintenance and Troubleshooting II

Prerequisite: DIM 0151 or consent of instructor. This course is a continuation of Maintenance and Troubleshooting of Diesel Engines I and is designed to provide practical experience and entry-level job skills to perform an engine tune-up on a Detroit Diesel 8V-71 and Caterpillar 1100 series diesel engine. Topics include exhaust valve clearance, governor gaps, no-load speed, idle speed, injection timing valves and buffer screws. Injection testing, timing and adjustments will also be covered.

DIM 0302 Diesel Electrical and Basic Electronics

This course is designed to teach the basic operation of all electrical components. Emphasis will be placed on identifying tracing, and troubleshooting basic electrical circuits, the theoretical and practical knowledge of lead-acid batteries, alternators, and starters, reading wiring diagrams, basic DC theory, and lighting systems. Special emphasis will be placed on electrical safety procedures and electrical shock prevention.

DIM 0303 Diesel Electronic Systems and Controls

Prerequisite: DIM 0302 or consent of the instructor. This course is designed to teach the concepts of operation of the on-board computer system as it applies to the control of diesel fuel injection

systems. Topics include function and operation of DDEC, PEEC, CELECT PLUS, MACK, and NAVISTAR systems with the aid of various special manufacturer's tools. Special emphasis will be placed on safety and manufacturers troubleshooting procedures.

EER 0471 Industrial Electronic Technology

This course is designed to provide students with the basic understanding and knowledge of electronic devices used in industry. Topics include power supplies, logic gates, semi-conductor theory, op-amps, opto-isolators, proximity switching devices, 55 timers, and other devices.

EEV 0031 DC/AC Fundamentals

This course and lab are designed to introduce the basic concepts of DC and AC electricity. The course topics include electrical properties and measurements, circuit configurations and component familiarity. Students will develop skills with computer analysis and simulation. Hands-on lab experiences reinforce the course topics.

EEV 0105 Power Supplies

Prerequisites: EEV 0031 and EEV 0813. Principles of linear and non-linear power supplies are covered in this course along with basic troubleshooting procedures.

EEV 0256 Electronic Fabrication

Prerequisite: EEV 0031. In this course, the student learns to construct circuits using printed circuit board etching technology. A project is required to be constructed by each student.

EEV 0310 Basic Computer Usage

This course is designed to introduce students to the basics of the computer, its components, principles of operation and uses. Computer terminology, operating systems and system composition are covered.

EEV 0332 Introduction to PLCs

This course is designed to provide students with the knowledge necessary to comprehend the basic theory and operation of programmable logic controllers (PLCs) in an industrial environment.

EEV 0441 PLC Applications

This course is designed to allow students to utilize PLC in the operation of a variety of industrial applications. Skills developed are those necessary to install, configure and program PLCs for the operation of functional equipment in the lab.

EEV 0443 Industrial Process Control

Prerequisites: EEV 0814, EEV 0816 and ETI 0843. This course is designed to introduce students to industrial measurement, control and automation. The course topics include transducers, control devices and circuits, microprocessor-based control and hands-on experience with programmable logic controllers. Laboratory experiences reinforce course topics.

EEV 0444 Documentation for Instrumentation

This course is designed to teach the basic requirements and procedures for the writing of instrument specification sheets, instrument data files, instrument calibration sheets, documenting of instrument repair reports, and the need of accurate record keeping in today's workplace. Topics included are specification sheets, data files, proper recording of instrument calibration procedures, instrument maintenance schedules, and instrument failure reports.

EEV 0531 Computer Architectures

This course covers the system architectures used in the majority of computer systems. The course includes preventive maintenance, and basic troubleshooting. Special emphasis shall be placed on the assembly, reassembly, major components, and compatibility issues related to various micro-computer architectures. Hands-on laboratories are provided.

EEV 0533 Operating Systems and Environments

This course is designed to familiarize students with computer operating systems and software packages that run on top of the operating system which determines the computing environment. The course includes detailed instruction on installing, configuring, operating and writing batch files, as well as installing, configuring, and operating in popular operating system environments. Troubleshooting common problems in these operating systems and associated environments will receive special emphasis.

EEV 0534 Memory and Storage Devices

Prerequisites: EEV 0531 and EEV 0533. This course is designed to familiarize students with various memory concepts and configurations of microcomputers. Students will also be familiarized with storage devices such as hard drives, tape drives, floppy disk drives, optical drives, etc. Special emphasis shall be in installing, configuring, troubleshooting, and repairing memory and storage devices.

EEV 0535 Computer Networks

Prerequisites: EEV 0531, EEV 0533 and EEV 0534. This course is designed to familiarize students with computer networks, network operating systems, and troubleshooting and repair of computer network equipment. Special attention will be given to installation of a network including loading applications onto the network.

EEV 0536 Printers and Peripherals

Prerequisites: EEV 0531 and EEV 0533. This course is designed to familiarize students with various peripheral equipment including printers and modems, communication standards, and communication concepts. Special emphasis shall be in installing, configuring, troubleshooting, and repairing printers and peripheral equipment including the software programs and drivers needed to make them work.

EEV 0539 Certification Preparation and Customer Support

Prerequisites: EEV 0531, EEV 0533, EEV 0534 and EEV 0536. This course is designed to prepare students for the A+ Microcomputer Repair Certification and the Novell NetWare Administrator Certification exams. Furthermore, the course will prepare students in written, oral, and non-verbal communication skills needed for microcomputer support.

EEV 0540 Advanced Operating Systems

Prerequisites: EEV 0531 and EEV 0533. This is an advanced course designed to teach the implementation and support of the latest operating system(s) in the computer market. Topics are to include planning and installation of the operating system, customizing and configuration of the operating system, managing disk resources and utilities related to the operating system, running applications in the operating system, and troubleshooting the operating system.

EEV 0565 Instrumentation Systems Troubleshooting

This course is designed to teach the necessary knowledge and skills to properly perform the task of maintaining and troubleshooting process instrumentation devices and equipment used in today's automated manufacturing processes. Topics included are identification, repair and replacement of defective parts or inoperative systems, calibration and adjustments, troubleshooting techniques, and the usage of various types of instrumentation test equipment.

EEV 0570 Cisco I

This course is designed to teach basic network interoperability. Hands-on laboratories are part of the curriculum.

EEV 0571 Cisco II

Prerequisite: EEV 0570. This course teaches basic router commands and builds on the information gained in Cisco I. Hands-on laboratories are an integral part of the course.

EEV 0572 Cisco III

Prerequisites EEV 0570 and EEV 0571. This course teaches switches and routers and builds on information presented in Cisco I and Cisco II. Hands-on laboratories are included.

EEV 0573 Cisco IV

Prerequisites: EEV 0570, EEV 0571 and EEV 0572. This course focuses on wide area network interconnectivity while building on the information presented in Cisco I, Cisco II and Cisco III. Hands-on laboratories are part of the curriculum.

EEV 0574 Microsoft Network Administration

Prerequisite: EEV 0580. This course teaches how to administer a computer network through adding users, assigning rights, and monitoring network usage. Hands-on laboratories reinforce course topics.

EEV 0580 Introduction to Networking

This course is designed to familiarize students with basic networking concepts, terminology, components found in the network environment, cost analysis, design, and budgeting for networking projects found in today's computing environment.

EEV 0581 Network Operating Systems

This course is designed to teach basic operating system commands, usage, and installation. The students will also be exposed to diagnostic tools and software packages commonly used by network support personnel. Hands-on laboratories are part of the curriculum.

EEV 0582 Network Software Installation and Troubleshooting

Prerequisite: EEV 0580. This course teaches students how to install software when using networks. Special emphasis is placed on troubleshooting software installations, configurations, and operation when operated in a network environment. Laboratory experiences reinforce course topics.

EEV 0583 Network Installation

This course is designed to teach students how to install a server, a workstation, and basic connectivity devices. Hands-on laboratories are an integral part of the curriculum.

EEV 0584 Network Troubleshooting

Prerequisites: EEV 0580, EEV 0570, EEV 0571, EEV 0572, CET 0555 and EEV 0583. This course familiarizes students with basic tools and utilities used when students troubleshooting network problems. Hands-on laboratories present real networking problems on which students gain experience.

EEV 0585 Customer Support

Students will learn how to deal with network users of all types, accurately fill out forms and invoices commonly used in business, read and follow oral and written instructions, and demonstrate efficient organizational skills.

EEV 0603 DC/AC Circuit Analysis

Prerequisite: EEV 0031. This course covers analysis of networks used in DC and AC circuits. An understanding of series and parallel circuits is necessary for completion of this course. Topics include multisource circuits, network theorems, AC reactive circuits, resonance and power factor correction.

EEV 0623 Basics of Instrumentation

This course is designed to teach the basic knowledge and understanding of basics of instrumentation. Topics included are principles of temperature, pressure, flow, and level, and the relationship of the devices used to measure these for control. Introduction to

present industrial uses of Computer Integrated Manufacturing and Process Control.

EEV 0624 Instrumentation Process Measurement and Control

This course is designed to teach the basic knowledge and understanding of measurement, processes, and control used in industry. Topics include control loops, feedback loops both pneumatic and electronic control loop adjustments, on line analytical measurement devices, and combination process control systems.

EEV 0625 Instrumentation Systems using Programmable Logic Controllers (PLCs)

This course is designed to teach the basic process control and automated manufacturing processes. Topics include programmable logic controllers, PID loops, material handling processes, physical, chemical, and electronic principles necessary for sensors to measure changes in the processes physical phenomena.

EEV 0626 Instrumentation System Graphics

This course is designed to teach the necessary knowledge and skills needed to set up a computer to display the graphics for a process and its control system using a Human Machine Interface (HMI) software package. Topics include designing the process graphics, designing the alarm indicators, setting up trending graphs, establishing the data logging files, linking the various process input to the graphic objects created, linking the process inputs and outputs for display and data logging.

EEV 0793 Technical Report Writing

This course is designed to develop the student's ability to communicate effectively in writing in a technical work environment. Emphasis is on the use of factual information in descriptive, analytical and researched recommendation reports. Instruction is also provided in writing

effective business letters, memoranda and information reports.

EEV 0813 Solid-State Devices

This course is designed to teach entry-level job skills and to familiarize students with the major semiconductor devices used in electronics. Topics include vacuum tube basics, solid-state diodes, bipolar and field-effect transistors, thyristor devices and the fundamentals of integrated circuits. Laboratory experiences reinforce course topics.

EEV 0814 Analog Circuit Analysis

Prerequisite: EEV 0813. Corequisite: ETI 0843. This course is designed to teach entry-level job skills and to familiarize students with typical analog circuits. Topics include multistage small-signal and power amplifiers, linear integrated-circuits, operational amplifiers, power supplies, oscillators and modulation techniques. Laboratory experiences reinforce course topics.

EEV 0815 Digital Fundamentals

Prerequisite: EEV 0814 or consent of instructor. This course is designed to teach entry-level job skills and to familiarize students with digital techniques. Course topics include number systems and codes, combinational and sequential circuits, Boolean algebra, encoders, displays and troubleshooting. Laboratory experiences reinforce course topics.

EEV 0816 Microprocessor Fundamentals I

Prerequisite: EEV 0815 or consent of instructor. This course is designed to teach entry-level job skills and to familiarize students with microprocessors. Topics include machine and assembly level programming and interfacing techniques. Laboratory experiences reinforce course topics.

EEV 0817 Microprocessor Fundamentals II

Prerequisite: EEV 0816. This course builds upon EEV 0816. It covers advanced microprocessor technology and trends in development.

EEV 0821 Basic Soldering

This course is designed to teach acceptable soldering and desoldering techniques needed for technicians in the computer support field.

EEV 0822 Soldering, Board Fabrication, and Equipment Repair

Prerequisites: EEV 0814 and EEV 0815. This course is designed to provide students with hands-on skills in soldering, printed circuit board fabrication and effective diagnosis of malfunctions in electronic equipment. Students will practice these skills in the maintenance of lab test equipment.

EEV 0850 Operating Systems I

This course is designed to teach basic operating system commands, usage and installation. Students will also be exposed to diagnostic tools and software packages commonly used by computer support personnel including virus protection software. Hands-on laboratories are part of the curriculum.

EEV 0851 Operating Systems II

Prerequisites: EEV 0850 and EEV 0852. This course is designed to familiarize students with the latest operating systems in the computer market. Emphasis will be placed on troubleshooting the operating system installation and start-up procedures. Hands-on laboratories are included as part of the class.

EEV 0852 Operating Environments

This course is designed to teach the basics of working within a graphical user interface. Special emphasis will be placed on how to troubleshoot common problems found in this environment. Hands-on laboratories are an integral part of the classes.

EEV 0853 Installing and Troubleshooting Software

Prerequisites: EEV 0850 and EEV 0852. This course is designed to teach students how to install common software packages used in today's computing environment. Special emphasis will be placed on troubleshooting software application

installation and operation. Hands-on practice with real world problems is included.

EEV 0854 Customer Support and Business Practices

Students will learn how to deal with computer users of all types, accurately fill out forms and invoices commonly used in business, read and follow oral and written instructions, demonstrate efficient organizational skills, and demonstrate knowledge of current laws regarding working environments.

EEV 0856 Memory and Batch Files

Prerequisites: EEV 0531, EEV 0850, EEV 0851 and EEV 0852. Students become familiar with managing and installing memory as well as troubleshooting memory problems. Also included are methods used in creating and troubleshooting batch files including those used as part of a computer's start-up process. Hands-on laboratories are included in the class.

EEV 0857 Storage Devices

Prerequisites: EEV 0531, EEV 0850, EEV 0851 and EEV 0852. This course presents how to install, configure, and troubleshoot common storage devices used in computers today. Also included are diagnostic and utilities used with the storage devices. Hands-on laboratories are an integral part of the class.

EEV 0858 Input/Output Devices

Prerequisites: EEV 0531, EEV 0850, EEV 0851 and EEV 0852. Students become familiar with various input/output devices used in computer systems such as CD-ROMs, DVD drives, tape drives, etc. Emphasis will be placed on installation, configuration, compatibility, and troubleshooting these devices. Hands-on laboratories are integrated as part of the curriculum.

EEV 0859 Printers and Peripherals

Prerequisites: EEV 0531, EEV 0850, EEV 0851 and EEV 0852. Students learn how to install a printer, install printer drivers, and troubleshoot printers found

in industry. Also included are preventive maintenance techniques. Hands-on laboratories are included.

EEV 0860 Introduction to Networking

Prerequisites: EEV 0531, EEV 0850 and EEV 0852. This course is designed to familiarize students with basic networking concepts, terminology, components found in the network environment, cost analysis, design and budgeting for networking projects found in today's computing environments.

EEV 0861 Network Administration

Prerequisites: EEV 0531, EEV 0850, EEV 0851, EEV 0852 and EEV 0860. This course teaches how to administer a computer network adding users, assigning rights, and monitoring network usage. Hands-on laboratories reinforce course topics.

EEV 0862 Network Installation

Prerequisites: EEV 0531, EEV 0850, EEV 0851, EEV 0852 and EEV 0860. This course is designed to teach students how to install a server, a workstation, and basic connectivity devices. Hands-on laboratories are an integral part of the curriculum.

EEV 0863 Network Software Installation

Prerequisites: EEV 0531, EEV 0850, EEV 0851, EEV 0852, EEV 0860 and EEV 0862. This course teaches how to install software when using networks. Special emphasis is placed on troubleshooting software installations, configurations, and operation when operated in a network environment. Laboratory experiences reinforce course topics.

EEV 0864 Network Troubleshooting

Prerequisites: EEV 0531, EEV 0850, EEV 0851, EEV 0852, EEV 0860 and EEV 0862. Students become familiar with basic tools and utilities used when troubleshooting network problems. Special emphasis is placed on troubleshooting techniques used when working in a networked environment. Hands-on laboratories present real

networking problems on which students gain experience.

EEV 0865 Network Printers

Prerequisites: EEV 0531, EEV 0850, EEV 0851, EEV 0852, EEV 0860 and EEV 0862. This course is designed to teach installation, configuration, and troubleshooting of printers in a network environment. Special emphasis is placed on configuration software for various printer configurations. Hands-on laboratories reinforce course topics.

EEV 0940 Internship I

Prerequisites: EEV 0581, EEV 0580, EEV 0583 and EEV 0570. Students work in a computer support environment using the skills learned throughout the program.

EEV 0941 Internship II

Prerequisites: EEV 0940, EEV 0570 and EEV 0571. Students work in a computer support environment using the skills learned throughout the program.

EEV 0942 Internship III

Prerequisites: EEV 0940, EEV 0941, EEV 0570, EEV 0571 and EEV 0572. Students work in a computer support environment using the skills learned throughout the program.

ETI 0813 Basic Industrial Controls

Prerequisite: EEV 0861. This course will introduce the student to industrial measurement and control. The course topics include physical phenomena sensing transducers, control devices, timing, time delay methods and ladder logic control circuits. Laboratory experiences reinforce the course topics.

ETI 0814 Industrial Control Systems

Prerequisite: ETI 0813. This course is a continuation of the study of industrial electronics control. Course topics include an introduction to process control and automation, digital motor control, programmable controllers and microprocessor-control interfacing. Laboratory experiences reinforce the topics.

ETI 0843 Motors and Transformers

Corequisite: EEV 0814. This course is designed to teach entry-level job skills in the variety of AC and DC motors, generators and transformers typical in industry. Topics include single phase and three-phase transformers and AC motors, generation of DC and AC, and DC motors.

ETI 0861 Electronic Troubleshooting and Instrument Repair

Prerequisite: EEV 0031. This course is designed to familiarize the student with the operation, calibration and repair of typical electronic measurement instruments. It demonstrates the use of basic test equipment in section-alizing and localizing malfunctions in electronic equipment. Theory of operation for the multimeter, oscilloscope, function generator and frequency counter are covered. Also presented is an efficient approach to the diagnosis of electronic system malfunctions. Laboratory experience reinforces the course topics.

EVS 0110 Introduction to Water and Wastewater Technologies

This course is designed to prepare students for employment or advanced training in the water and wastewater treatment industry. The "D" level is the fundamental level of training. Students are introduced the principles and operation of water and wastewater treatment facility procedures. The program is approved by the Florida Department of Environmental Protection.

EVS 0133 Water Treatment Plant Operation C

This course is designed to prepare students to pass the state of Florida exam for water treatment operator level "C."

EVS 0143 Water Treatment Plant Operation B

Prerequisite: EVS 0133. This course is designed to prepare students to pass the state of Florida exam for water treatment operator level "B."

EVS 0333 Wastewater Treatment Plant Operation C

This course is designed to prepare students to pass the state of Florida exam for wastewater treatment operator level "C."

EVS 0343 Wastewater Treatment Plant Operation B

Prerequisite: EVS 0333. This course is designed to prepare students to pass the state of Florida exam for wastewater treatment operator level "B."

EVS 0353 Water/Wastewater Treatment Plant Operation A

Prerequisite: EVS 0333 and EVS 0343. This course is designed to prepare students to pass the state of Florida exam for wastewater treatment facility supervisor level "A."

FFP 0005 Volunteer Fire Fighter

Prerequisites: (TABE) FCCJ entrance exam, a physical examination, fingerprint, drug screening, and sponsorship by a fire department (optional). This course is designed to prepare students for certification at Volunteer Fire Fighter skill level. Initial employment as firefighters in the state of Florida would require completion of Fire Fighting also. Successful completion of both courses will qualify students to take minimum standard written, oral and practical examinations as administered by the Bureau of Fire Standards and Training.

FFP 0006 Fire Fighter

Prerequisite: FFP 0005 (both courses must be completed within one year.) This is a subsequent course that is also required for Fire Fighting in the state of Florida. Completion of Volunteer Fire Fighter and Fire Fighter skill levels may also qualify students for employment in other states and Canada.

FOS 0201 Sanitation and Safety Management

Students will explore the scientific rationale for sanitation and safety practices which are enforced for group protection in institutions and food service facilities. Students will identify

causative agents of food-borne illnesses and demonstrate preventive techniques by adhering to sanitation standards. The course emphasizes methods of accident and fire prevention.

FSS 0101 Management of Food and Beverage Purchasing

Students will acquire the fundamentals involved in purchasing food and beverages in quantity. The course emphasizes standardizing, grading and estimating, selecting, receiving and storing foods and beverages, as well as the practical application in writing specifications and in developing purchasing techniques.

FSS 0202 Food Production I

Students will acquire knowledge and skill in the preparation of food. Included are basic principles and techniques of food preparation, management of resources, use of recipes, use and care of equipment and evaluation of food products. The course emphasizes safety and sanitation practices. This course is for Dietetic Management and Supervision students only. Students must have the permission of the program manager. Students are required to have knives, books and uniforms.

FSS 0252 Food Preparation Worker I

This course introduces students to basic knowledge and skills including communication and math required of food preparation workers. Students identify career and job opportunities, examine and practice employability skills, and function as team members. Students develop safety and sanitation habits and use and care for commercial tools and equipment. Students prepare basic food and beverage items, and practice front-of-the-house skills. TABE is required within the first 6 weeks of beginning program.

FSS 0253 Food Preparation Worker II

Prerequisite: FSS 0252. This second introductory course expands students' basic knowledge and skills as food preparation workers by developing personal productivity skills and safe and sanitary practices. Students utilize basic recipes, apply nutrition principles, prepare basic food and beverage items and practice front-of-the-house skills. Students will develop skills as cooks, waiters and waitresses.

FSS 0254 Food Preparation Worker III

Prerequisite: FSS 0253. This course is a continuation of Food Preparation Worker II and includes further exploration of career and job opportunities, continued basic skill development, safety and sanitation and use of recipes. Students will also have front-of-the-house training/responsibilities and will prepare food and beverage items. Students will develop skills as kitchen, baker helper and cashier.

FSS 0255 Food Preparation Worker IV

Prerequisite: FSS 0254. This course is a continuation of Food Preparation Worker III and includes career and advancement opportunities in cooking and baking. Instruction will be provided for identification, selection and purchase of food products; advanced cooking and baking techniques; scientific principles in cooking and baking; and quality standards. Time, energy and resource management techniques will be used. Communication and math skills will be further developed and utilized in performance of laboratory/class activities. Students will develop skills as institutional or cafeteria cooks.

FSS 0256 Food Preparation Worker V

Prerequisite: FSS 0255. This course is a continuation of Food Preparation Worker IV and was developed to increase students' competencies in identification, selection and purchasing of food,

food and beverage cost control, food science, management techniques and food presentation. Communication and mathematics skills will be enforced. Students will develop skills as bakers and cooks in restaurant food service.

FSS 0257 Food Service and Restaurant Manager I

Prerequisite: FSS 0256. This course is a continuation of Food Preparation Worker V and explores career and advancement opportunities. Included are competencies in identification, selection and purchasing of food, food and beverage cost control, food science, food management techniques, advanced cooking and food presentation techniques. Students will develop skills for the position as entry-level managers.

FSS 0258 Food Service and Restaurant Manager II

Prerequisite: FSS 0257. This course is a continuation of Food Service and Restaurant Manager I and was developed for students to develop competence in management skills; food service and hospitality laws and regulations; business plans; menus; cost control techniques; guidelines and policies; physical plan layouts; marketing strategies; and career opportunities. Students will develop skills for the position of food service manager.

FSS 0941 Clinical Nutrition I

This course consists of a supervised field experience in which students will work on the job nine hours per week and apply course theories and skills basic to quality control, including principles of food preparation, personnel management, sanitation and safety.

GRA 0441 Theory of Printing Processes

This course is designed to introduce students to major processes of the printing industry. All methods of typesetting including photo typesetting, mechanical art preparation, printer's math

and proofreading are included in the course.

GRA 0442 Theory of Lithographic Processes

This course is designed to teach entry-level job skills. It is a lecture course designed to give an introduction to three major processes of the lithographic industry. Process camera operation, negative stripping and platemaking, and offset press operation are included.

GRA 0443 Printing Design and Planning I

This course is designed to teach entry-level skills.

GRA 0444 Printing Design and Planning II

This course is designed to teach entry-level skills.

GRA 0445 Printing Design and Planning III

This course is designed to teach entry-level skills. This lab is designed to expose students to the various aspects of job planning and art production techniques relating to projects encountered hands-on in the printing business.

GRA 0446 Cold Type Typesetting and Pasteup

This course is designed to teach entry-level job skills. It provides skill development in the technique of setting type by photographic typesetting equipment and also the preparation of mechanical art forms. Emphasis is placed on the application of basic techniques toward greater job complexity, increased quality and increased productivity.

GRA 0451 Camera Operation and Film Processing

This course is designed to teach entry-level job skills. It provides skill development in the technique of operating the process camera for the reproduction of line and halftone copy negatives, contact printing, preparation of darkroom chemicals, and developing graphic arts films and papers.

GRA 0452 Graphic Arts Lab I

This course is designed to teach entry-level skills. The major processes of the printing industry are introduced through lecture and laboratory exposure. Career possibilities and organizational relationships within printing and related industries are examined. Employability skills, safety and first aid practices are discussed. Printers math is also included.

GRA 0453 Graphic Arts Lab II

This course is designed to teach entry-level skills. It course offers lecture and laboratory exposure to various reproduction photography techniques as well as paper and ink specifications and characteristics. Image assembly and platemaking techniques are introduced.

GRA 0454 Graphic Arts Lab III

This course is designed to teach entry-level skills. It course will introduce basic layout and design techniques including thumbnail layouts, rough drafts, comprehensive layouts and mechanical art preparation. Press operation fundamentals and problems are discussed.

GRA 0473 Negative Stripping and Platemaking

This course is designed to teach entry-level job skills. It provides skill development in the technique of setting up offset negatives and positives for proper press positioning, separating for color, and exposing and developing offset press plates.

GRA 0474 Offset Press Operation I

This course is designed to teach entry-level skills. It provides skill development in the technique of setting up, operating, and maintaining duplicators and offset presses in the 10x15, 11x17, 15x18 and 14x20 inch ranges.

GRA 0475 Offset Press Operation II

This course is a continuation of Offset Press Operation I.

GRA 0476 Offset Press Operation III

This course is a continuation of Offset Press Operation II.

GRA 0477 Bindery Operations

This course is designed to teach entry-level skills. It provides skill development in the technique of setting-up, operating, and maintaining various bindery equipment.

HCP 0102C Nursing Assistant

Prerequisites: HCP 0605 and completion of 10th grade, 18 years of age, health clearance, and completion of basic course in cardiopulmonary resuscitation. This course is designed to prepare a non-professional worker with minimal skills and knowledge to perform carefully selected patient care activities, in a nursing home or hospital under direction of the Registered Professional Nurse. Upon successful completion the graduate will be eligible to write the State of Florida Examination to become a Certified Nurse Assistant. Course content includes classroom activities, simulated laboratory experiences and hands-on experience in a designated clinical agency.

HCP 0311 Home Health Aide A

Prerequisites: HCP 0605, HCP 0102C, completion of 10th grade, 18 years of age, health clearance, and completion of a basic course in cardiopulmonary resuscitation. This course is designed for entry-level job training with emphasis placed upon the care of the client in the home environment. Family differences and ethical safe practices will be stressed. Common incapacitating conditions will be discussed in addition to procedures for assisting the client and his family to cope with limitations and stress. Instruction is limited to those supportive services required to assist the client toward independent living in a safe environment. The role of the Home Health Aide as an assistant to, and under direction of, the Registered Nurse is emphasized.

HCP 0312 Home Health Aide B

Prerequisites: HCP 0605 and completion of 10th grade, 18 years of age, health clearance, and completion of a basic course in cardiopulmonary resuscitation. This course is designed as entry-level job training for Home Health Aides only. Emphasis is placed upon the care of the client in the home environment. Family differences and ethical safe practices will be stressed. Common incapacitating conditions will be discussed in addition to procedures for assisting the client and his family to cope with limitations and stress. Instruction is limited to those supportive services required to assist the client toward independent living in a safe environment. The role of the Home Health Aide as an assistant to, and under direction of, the Registered Nurse is emphasized.

HCP 0400 Patient Care Assistant

Prerequisites: HCP 0605, HCP 0102C, HCP 0311, completion of 10th grade, 18 years of age, health clearance, and completion of a basic course in cardiopulmonary resuscitation. This course includes knowledge and skills relating to various client care activities and associated non-professional services necessary in caring for the personal needs and comfort of clients in non-complex situations. This care may be given in a general hospital, a nursing home or the home of the client. Family differences and ethical, safe practices will be stressed and instruction is limited to those supportive services necessary to assist the client toward independent living in a safe environment. The role of patient care assistants as assistants to, and under direction of, the registered nurse is emphasized. Upon successful completion, graduates will be able to take the state of Florida examination to become certified nursing assistants and will also be eligible to function as home health care aides.

HCP 0401 Electrocardiograph Aide

This course is designed to teach the cardiovascular system, cardiovascular wellness and rehabilitation, and the application of medical instrumentation modalities. Students enrolled in this course will have completed the patient care assistant competencies and are adding skills to be cross-trained to perform basic electrocardiograph patient care techniques.

HCP 0402 Phlebotomist

This course is designed to teach students about the services provided by a phlebotomist. Students will learn to identify anatomic structures, collection reagents, supplies, and equipment requisite to perform phlebotomy. Students enrolled in this course will have completed the patient care assistant competencies and are adding these skills to be cross-trained to perform basic blood drawing (phlebotomy) techniques.

HCP 0605 Health Careers Core

This course will cover basic entry-level information, preparing individuals for further training in health-related occupations. Students will be introduced to basic concepts such as the health delivery system, wellness and disease, environmental safety, communication and nutrition.

HCP 0760 Allied Health Assistant

This course provides skills and clinical experiences specific to the allied health areas. Students enrolled in this course have completed the patient care assistant competencies and are adding these skills to be further cross-trained with skills representative of one to three of various allied health areas (i.e. respiratory, occupational therapy, health unit coordinator, emergency).

HCP 0790 Patient Care Technician

This course is designed to focus on the organizational and management skills to practice in a clinical setting. Students enrolled in this course must have completed all modules in the patient care technician program. Students

will be prepared as cross-trained, unlicensed health care workers.

HEV 0101 Child Care Worker I

This course provides the required HRS training to those individuals employed in child care centers. The topics covered include: rules and regulations; health, safety, and nutrition; child abuse and neglect; and child growth and development.

HEV 0551 Commercial/Institutional Housekeeping/Janitorial Services

This course is designed to help students acquire competence in the areas of the environmental services profession, employability skills, equipment and supplies, sanitation and security, environmental services procedures, customer relations, communication, institutional housekeeping procedures, and hazardous materials reporting procedures.

HEV 0552 Housekeeping/Janitorial Services Supervision

This course is designed to promote professionalism of students. It will introduce students to the methods, techniques and procedures used in leadership and supervision in environmental services. This course also covers leadership, management, supervision, and entrepreneurship. It will also look at the laws, regulations and agencies governing the environmental service industry.

HEV 0940 Child Care Aide Internship

Prerequisites: HEV 0111, HEV 0112 and HEV 0152 or consent of professor. This course is optional for students who have successfully completed the child care assisting program (795) and who have satisfactory basic skills test scores. Students will be placed in appropriate child care centers throughout the city. They will be supervised by a faculty member and have an opportunity to put into practice those instructional and child care techniques that they have learned in class.

HEV 0941 Internship

This course, a supervised on-the-job training course, requires students to work a minimum of 90 hours over a 6 week period in an approved facility. This cooperative educational experience will provide students the opportunity to practically apply knowledge gained in prerequisite courses. The instructor will make on-site visitations to monitor students' progress and performance. There will be a two-hour on campus seminar every other week during this internship.

HFT 0180 Supervision and Personnel Management

Students will develop and demonstrate skills necessary to perform the managerial procedures and functions of a food service operation. Emphasis will be placed on personnel selection, interviewing, evaluating, communicating and wage determination. Actual case studies will be utilized in this course. This course is for Dietetic Management and Supervision students only. Students must have the permission of the program manager.

HMV 0033 Destination Geography

Corequisite: HMV 0700. This course is a study of worldwide travel destinations in terms of location, culture, and physical characteristics. Emphasizing itinerary planning, students will examine economic conditions, environmental conditions, attractions, accommodations, and transportation. Tourism facilities, seasonal events, historical and artistic displays will be specified.

HMV 0502 Sales and Customer Service

Prerequisites: HMV 0700 and HMV 0033. Corequisite: HMV 0730. Students will gain knowledge of the key sets of skills that every successful travel salesperson needs to master. These skills include preparation for the sale, the selling process, marketing strategies, and customer service follow-through.

**HMV 0700 Travel
Career Development**

Corequisite: HMV 0033. This course covers an in-depth exploration of the components that make up the travel industry and the inter-relationships between them. Topics included are travel agency operations, airlines and ticketing, cruise line operations, tour operators, ground transportation and accommodations.

**HMV 0730 Computer
Reservations Training**

Prerequisites: HMV 0700 and HMV 0033. Corequisite: HMV 0502. In this course students will train on an IBM PC simulated airline computer system. They will learn to make reservations and calculate fares for flights, trains, car rentals, hotels, tours and cruises.

**HMV 0944 Travel/Tourism
Internship I**

Prerequisites: HMV 0700, HMV 0033, HMV 0730 and HMV 0502. This course consists of on-the-job experience supplied by area full-service travel agencies. Students will receive 80 hours of in-house training in all basic travel agency functions and 10 hours of seminar lecture to reinforce this training.

**HMV 0945 Travel/Tourism
Internship II**

Prerequisites: HMV 0700, HMV 0033, HMV 0730 and HMV 0502. This course consists of on-the-job experience supplied by area travel and tourism industries. These industries can include travel management companies, tour operators, meeting and convention planners, visitor and convention bureaus, airlines, hotel marketing departments, and car-rental companies. Students will receive 80 hours of in-house training and 10 hours of seminar lecture to reinforce this training.

HUN 0200 Human Nutrition

Students will acquire the basic principles of nutrition and develop skills in applying the recommended dietary allowances to all age groups. The course

emphasizes key food nutrients, consumer information regarding food economy, quality food purchasing and maximum nutrition for the life cycle. This course is for Dietetic Management and Supervision students only. Students must have permission of program manager.

HUN 0203 Principles of Nutrition

This course includes a study of the basic principles of nutrition and the relation of food selection to health. The aim is to interpret nutrition in terms of its practical application in the planning, preparing and serving of meals and relating these meals to the other food for the week. The course will develop an understanding of daily dietary allowances necessary for various age groups and the planning of these requirements in the daily/weekly diet. Also included is information on foods with maximum nutritive value and how to purchase, store and prepare these foods in order to retain maximum nutritive value. This course is for Dietetic Management and Supervision students only. Students must have permission of the program manager.

IDS 0010 Basic Skills I

Corequisite: the first of a non-college entry-level job training course offered at the Downtown Campus or consent of instructor. This course is designed to provide the basic academic skills necessary for completion of the first course in the occupational programs offered at the Downtown Campus. Following pretesting and assessment, students will be provided with individualized instructional plans to upgrade mathematics and reading skills.

IDS 0011 Basic Skills II

Prerequisite: IDS 0010 or consent of the instructor. Corequisite: enrollment in a non-college entry-level job training course offered at the Downtown Campus or consent of the instructor. This course is designed to provide the basic academic

skills necessary for completion of the second course in the occupational programs offered at Downtown Campus. Following pretesting and assessment, students will be provided with individualized instructional plans to upgrade mathematics and reading skills.

IDS 0012 Basic Skills III

Prerequisite: IDS 0011 or consent of the instructor. Corequisite: enrollment in a non-college entry-level job training course offered at the Downtown Campus or consent of the instructor. This course is designed to provide the basic academic skills necessary for completion of the third course in the occupational programs offered at Downtown Campus. Following pretesting and assessment, students will be provided with individualized instructional plans to upgrade mathematics and reading skills.

MEA 0005 Medical Assisting I

Prerequisite: TABE, high school diploma or GED. The first of two sequential courses, this course is designed specifically for entry-level job training and will orient individuals to a multitude of basic skills for employment in a physician's office, ambulatory care centers, clinics or hospitals. Examples of skills needed are secretarial practices and procedures, introduction to computers, medical transcription, examining room technique, X-ray safety and laboratory procedures. Applicants are encouraged to type 25 words per minute or be familiar with a computer keyboard.

MEA 0006 Medical Assisting II

Prerequisite: MEA 0005. This course is an intensive course and a continuation of some of the skills presented in Medical Assisting I. It is designed specifically for entry-level job training and will orient students to a multitude of basic skills for employment in a physician's office, ambulatory care centers, clinics or hospitals. Examples of

these skills are secretarial practices and procedures, introduction to computers, medical transcription, examining room technique, X-ray safety and laboratory procedures. Applicants are encouraged to type 25 words per minute or be familiar with a computer keyboard.

MKA 0003 Marketing Essentials

The purpose of this course is to develop the competencies essential to marketing. These competencies include human relations, employability, communication, math and economic skills. The fundamentals of marketing and selling are also included.

MKA 0040 Customer Assistance I

This course is designed to build upon the experiences and content of the business technology education core (Business Systems I and II) so that a fundamental core of knowledge, skills, and attitudes required for today's business environment is established. Emphasis is placed on developing proficiency with computer skills, telephone skills, interpersonal skills, communication skills, conflict resolution, problem-solving, stress management, and employability skills as tools for obtaining customer care positions.

MKA 0047 Customer Assistance II

This course is designed to build upon the experiences and content of Customer Assistance I. Emphasis is placed on developing supervisory skills for customer care specialist positions.

MKA 0243 International Marketing I

The purpose of this course is to introduce students to the basics of international marketing. These competencies include an understanding of import and export basics.

MKA 0248 International Marketing II

The purpose of this course is to develop competencies regarding international marketing, transportation, finance, laws and regulations and communications.

MKA 0249 International Marketing III

The purpose of this course is to develop competencies regarding state/regional profiles, a world profile, international economics and effective communications. Entrepreneurship as related to an international market is also included in this course.

MRE 0030 Medical Transcription I

Prerequisite: must keyboard at rate of 45 wpm and satisfactory score on placement test. Corequisite: HCP 0605. This course is designed to introduce students to transcription of physician dictated medical documents, healthcare records, and other types of medical dictation. Students will transcribe basic medical dictation, incorporating English usage and machine transcription skills, medical terminology, knowledge, keyboarding skills, and proofreading and editing skills, and will meet progressively demanding accuracy and productivity standards. Students will transcribe "real" dictation from a variety of medical specialties on computers using WordPerfect.

MRE 0031 Medical Transcription II

Prerequisite: MRE 0030. This course is designed to expand students' transcribing abilities. Students transcribe more difficult actual medical dictation, requiring greater knowledge of fundamentals taught in Medical Transcription I, continuing to advance skills in all areas of competency, while meeting progressively demanding accuracy and productivity standards. Students are expected to utilize all available reference materials.

MRE 0034 Medical Transcription III

Prerequisites: HCP 0605, MRE 0030 and MRE 0031. This course provides on-the-job experience for medical transcription students. Under the supervision of experienced transcriptionists, students work on site at local area hospitals, clinics, contract agencies, doctors' offices and the like, doing "live" dictation. The course will be supplemented with class time to polish students' skills

further. At this point they should feel confident enough to apply for the AAMT certification test and pass Part I.

MTE 0013 Service Writer/ Parts Technician

This course is designed to teach entry-level job skills required to operate the "parts and service" side of a marine business. Topics include record keeping, parts and accessories procurement and sales, filling out warranty and work-order forms. Students will be introduced to computerized ordering and inventory systems.

MTE 0014 Trailer Rigging and Repair

This course is designed to teach entry-level job skills necessary to install electrical, ignition, steering, and remote control systems on boats. Install and adjust brake, wheel, assemblies, springs, bunkers and rollers on trailers.

MTE 0054 Four-Stroke Marine Engine Overhaul

This course is designed to teach entry-level job skills and to familiarize students with construction, operation overhaul and maintenance of the four-stroke inboard marine engine. Topics include engine disassembly and re-assembly, theory, troubleshooting, and repair of the electrical, ignition, fuel and cooling systems.

MTE 0060 Boat and Motor Rigging

This course is designed to teach entry-level job skills in the installation and water testing of engines and equipment in accordance with American Boating and Yacht Council Standard and Manufacturers Guidelines. Topics include but are not limited to transom and stringer preparation, aligning engines, inspecting and testing steering, fuel, electrical and drive systems for correct installation, adjustment and fluid levels.

MTE 0131 Outboard Marine Engine Ignition and Electrical Systems

This course is designed to teach entry-level job skills in the various types of ignition and

charging systems used in the marine engines. Topics include theory, diagnostics and repair of magneto, battery, C/D and modular ignition systems, as well as the battery charging system.

MTE 0132 Outboard Marine Engine Overhaul

This course is designed to teach entry-level job skills and to familiarize students with the construction, and operation of the two-stroke marine engine. Topics include inspection of powerheads, failure diagnostics, cylinder and block repairs, over haul, break-in procedures, preventive maintenance and extended care.

MTE 0181 Outboard Marine Fuel and Cooling

This course is designed to teach entry-level job skills in maintenance and repair techniques for the fuel and cooling systems on outboard engines. Topics include fuel, fuel system and combustion control. Fuel system diagnostics are made using digital diagnostic terminal, "system check" gauge, and lap top PC to retrieve service codes. System repairs of carburetors, EFI, DFI and FFI fuel systems are explored. Cooling system theory, water pump repair and maintenance are covered.

MTE 0221 Outboard Marine Engine Gearing

This course is designed to teach entry-level job skills in the maintenance, repair and testing of outboard gearcases and mid-sections. Topics include gearcase theory and maintenance, failure diagnostics, repair, shimming procedures, propping, trim and tilt and power steering repairs.

MTE 0223 Stern Drive/ Vertical Drive Units

This course is designed to teach entry-level job skills in stern drive/vertical drive units. Topics include servicing, maintenance, and repair of upper and lower drive units, transom assemblies and transmissions as well as propping, power steering and trim and tilt hydraulic units.

MTE 0501 Welding and Trailer Repair

This course is designed to teach entry-level job skills. Topics include basic arc welding, oxy-acetylene cutting, use of tools and shop equipment necessary to facilitate actual trailer repair and safety.

ORH 0054 Floral Design and Marketing I

The purpose of this course is to develop the fundamental competencies necessary for entry into the floral design and marketing industry. Topics include employability skills, basic design construction in round, horizontal, symmetrical and asymmetrical designs; proper care and handling procedures for cut flowers and foliage; flower and foliage identification; basic principles of design and correct storage procedures. Students will be issued a tool kit at the first class meeting (covered by the supply fee) and will be expected to bring this kit to each class. All flowers and basic supplies (foam, wire, tape, etc.) will be furnished. Students need a current tetanus shot. Up to 30 hours of instructional time may consist of field work or projects that occur outside the classroom. TABE is required within the first six weeks of beginning program.

ORH 0055 Floral Design and Marketing II

Prerequisite: ORH 0054 or consent of instructor. This entry-level course is designed to teach students everyday skills in flower shop operations including window display, packaging flowers, delivery, operation of a cash register, customer relations, and use of wire service. Students will be introduced to pricing procedures, holiday designs and non-floral products such as balloon bouquets fruit baskets and gourmet baskets. This course also provides students with an in-depth understanding of the personal selling process as it specifically relates to floral industry. Emphasis will be on

successful personal selling techniques, multiple and suggestive selling, and personal service as related to the merchandising of flowers, floral designs, and floral products. Up to 30 hours of instructional time may consist of field work or projects that occur outside the classroom.

ORH 0056 Floral Design and Marketing III

Prerequisite: ORH 0055 or consent of instructor. This course introduces students to data entry and business software. In addition, students will learn how to decorate, care for and display the most common flowering and foliage plants. Dish garden and designs for all occasions are also covered. This course also provides students the fundamentals in purchasing perishable and non-perishable floral merchandise. Emphasis will be placed on determining consumer demand as well as planning, selecting, controlling and evaluating purchases. This course will tour firms representing various aspects of the floral industry. Itineraries include visits to wholesalers, manufacturers, nurseries, gift markets and trade shows. Up to 30 hours of instructional time may consist of field work or projects that occur outside the classroom. TABE is required within the first six weeks of beginning program.

ORH 0057 Floral Design and Marketing IV

Prerequisite: ORH 0056 or consent of instructor. This course prepares floral design students to make symmetrical and asymmetrical fresh and silk arrangements. Students will also study European, Oriental and vegetative design styles and learn design techniques such as basing, terracing, grouping, pillowing, banding, framing and clustering. Students will have the opportunity to participate in a design show competition and create a design portfolio. Lastly, students will demonstrate effective oral and written communications skills

by developing a party plan for a special event and presenting this plan in class. Up to 30 hours of instructional time may consist of field work or projects that occur outside the classroom.

ORH 0058 Floral Design and Marketing V

Prerequisite: ORH 0057 or consent of instructor. This course provides advanced training for students to utilize creative skills and experience gained in the previous four courses to design appropriate floral arrangements. Students learn how to construct wedding bouquets, hair pieces, advanced corsages, reception and ceremony decorations, funeral wreaths, sprays, hearts, crosses, casket covers and other specialty designs. Up to 30 hours of instructional time may consist of field work or projects that occur outside the classroom.

ORH 0059 Floral Design and Marketing VI

Prerequisite: ORH 0058 or consent of instructor. This course is designed to provide the opportunity for students to acquire the knowledge and skills necessary to manage a retail flower shop. Students will learn marketing and promotional strategies, how to conduct wedding and funeral consultations and techniques for starting a new business venture. Students will acquire skills in selection of merchandise and products, shop management, inventory control, sales analysis, credit and billing procedures, personnel administration and how to control payroll and other expenses. Students will demonstrate an understanding of entrepreneurship, identify the business skills needed to run a small business efficiently and understand the functions of management. A calculator is required. Up to 30 hours of instructional time may consist of field work or projects that occur outside the classroom.

OTA 0900 Business Systems and Technology I

This course is designed to provide a basic overview of current business and information systems and trends and to introduce students to the basic skills and foundations required for today's business environments. Emphasis is placed on developing proficiency with touch keyboarding and fundamental computer applications, so that they may be used as communication tools for enhancing personal and workplace proficiency in an information based society. After successful completion of this core course, students will have met occupational completion point — data code A, File Clerk.

OTA 0901 Business Systems and Technology II

This course is designed to build up the experiences and content of Business Systems and Technology I so that a fundamental core of knowledge, skills, and attitudes required for today's business environment is established. Emphasis is placed on developing proficiency with database, spreadsheet, presentation, and integrated software applications as tools for accomplishing business related job objectives and enhancing workplace performance. After successful completion of the Business Technology Education Core courses (Business Systems and Technology I and II), students will have met occupational completion point — data code B, General Office Clerk.

OTA 0902 Administrative Office Technology I

This course is designed to assist with administrative and general office duties in a support capacity. This course explores and expands the core competencies in the areas of personal and professional development and promotes application of higher level office procedure tasks and communications skills through the use of technology. After successful completion of Administrative Office

Technology I and Business Software Applications I, students will have met occupational completion — data code C, Secretary.

OTA 0903 Business Software Applications I

This course is designed to develop proficiency in using the advanced features of software programs to perform office related tasks. After successful completion of Administrative Office Technology I and Business Software Applications I, students will have met occupational completion point -data code C, Secretary.

OTA 0904 Medical Office Technology I

This course is designed to assist with administrative office duties and procedures specific to the medical environment. The course explores and expands the competencies learned in Administrative Office Technology I and promotes application of higher level office procedures tasks and communication skills. After successful completion of Medical Office Technology I, II and II students will have met occupational completion point — data code D, Medical Secretary.

OTA 0905 Medical Office Technology II

This course expands the competencies learned in Medical Office Technology I. Students are required to perform higher level thinking and decision making and to use technology as a resource to efficiently perform systematic procedural tasks and to produce quality work in an efficient manner. After successful completion of Medical Office Technology I, II, and III, students will have met occupational completion point — data code D, Medical Secretary.

OTA 0906 Medical Office Technology III

This course expands the competencies learned in Medical Office Technology II and is designed to develop medical vocabulary and skill in transcribing medical documents from

machine transcription. Students will use technology to produce high-quality employment portfolios, research job opportunities, and compile and disseminate job-seeking documents. After successful completion of Medical Office Technology I, II and III, students will have met occupational completion point — data code D, Medical Secretary.

OTA 0907 Administrative Office Technology II

This course is designed to assist with administrative office duties and procedures specific to the office environment. The course expands the competencies learned in Administrative Office Technology I and promotes application of higher level office procedures, tasks and communication skills.

OTA 0908 Administrative Office Technology III

This course expands the competencies learned in Administrative Office Technology II. Students are required to perform higher level thinking and decision-making and to use technology as a resource to efficiently perform systematic procedural tasks and to produce quality work in an efficient manner.

OTA 0909 Business Software Applications II

This course expands the competencies learned in Administrative Office Technology III. Students will use technology to produce high quality employment portfolios, research job opportunities, and compile and disseminate job-seeking documents.

PMT 0102 Introduction to Welding

This course is designed to familiarize students with the various welding processes and give the basic knowledge and skills to perform satisfactory welds using each process. The processes covered will include Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux Cored Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW), and Oxyacetylene Welding

(OAW). Students will be required to weld lap, tee, and joints in the flat and horizontal positions utilizing each welding process. Furthermore, a visual inspection by the instructor will determine the acceptability or the weld joint. Oxyacetylene and plasma cutting will also be covered during this course. The instruction will be individualized and will consist of classroom instruction and laboratory assignments. Students will use information contained in the textbook, workbook, video tapes, and instructions and demonstrations by the instructor to complete the assignments. Students must purchase the textbook, workbooks, and all personal equipment.

PMT 0106 Basic Arc Welding

This course is designed to teach entry-level job skills in fusing metal parts by means of welding rods and electrical welding apparatus to fabricate metal articles or to repair damaged metal objects. It also includes instruction and training in manual and machine oxy-acetylene flame cutting.

PMT 0112 Oxygen-Acetylene Welding and Brazing

Prerequisite: PMT 0106. This course provides entry-level job training in the welding field and presents technical information about oxygen-acetylene welding, brazing and braze welding using 16 gage through three-sixteenths inch mild steel, 16 gage stainless steel, and copper piping and fittings. Related information includes equipment operation and weld quality.

PMT 0122 Intermediate Shielded Metal Arc Welding

This course is designed to give students the required knowledge and skill to produce quality lap and tee welds using low-hydrogen type electrodes in the flat, horizontal, vertical and overhead positions. The cutting of irregular shapes using the oxyfuel torch, introduction to oxyacetylene welding and torch brazing will be presented during this course. The instruction will be

individualized and will consist of classroom instruction and laboratory assignments. Students will use the information contained in the textbook, workbook, video tapes, and instruction and demonstrations by the instructor to complete the assignments. Students will purchase the textbook, workbook and all personal equipment.

PMT 0124 Advanced Welding

Prerequisite: PMT 0106. This course is designed to teach entry-level job skills in shielded metal arc welding and welding safety. It provides training to develop the manual skills necessary to make high quality shielded metal arc welds in all positions on mild steel three-eighths inch plate, multiple pass butt joints and one inch plate lap joint and air arc gouging.

PMT 0134 Gas Metal Arc Welding

Prerequisite: PMT 0124 or consent of instructor. This course is designed to provide entry-level job skills necessary to make high quality gas metal arc welds in all positions on mild steel from one-sixteenth inch sheet to three-eighths inch plate single pass and multiple pass, using short circuit transfer and to make high quality welds on aluminum using spray transfer.

PMT 0135 Gas Tungsten Arc Non-Ferrous Metals

This course is designed to give students the required skills to make quality welds using the GTAW process in the flat, horizontal, vertical and overhead positions on the stainless steel and aluminum. The instruction will be individualized and will consist of classroom instruction and laboratory assignments. Students will use information contained in the textbook, workbook, video tapes and instruction and demonstrations by the instructor to complete the assignments. Students must purchase the textbook, workbook and all personal equipment.

PMT 0141 Gas Tungsten Arc Ferrous Metals

Prerequisite: PMT 0134. This course is designed to give students the required skills to make quality welding using the GTAW process on butt, lap and tee joint in the flat, horizontal, vertical and overhead positions on carbon steel. The instruction will be individualized and will consist of classroom instruction and laboratory assignments. Students will use information contained in the textbook, workbook, video tapes, and instructions and demonstrations by instructor to complete the assignments. Students must purchase the textbook, workbook, and all personal equipment.

PMT 0145 Flux Core Welding

This course is designed to give students the required skills to make quality welds using the FCAW in the flat, horizontal, vertical and overhead positions. This course also includes instructions in metal transfer and shielding gases associated with the FCAW process. The instruction will be individualized and will consist of classroom instruction and laboratory assignments. Students will use information contained in the textbook, workbook, video tapes and instructions and demonstrations by the instructor. Students must purchase the textbook, workbook and all personal equipment.

PMT 0166 Shielded Metal Arc Pipe

Prerequisite: PMT 0171. This course is designed to teach entry-level job skills in pipe welding nomenclature, weld quality, uphill pipe procedures and preheating and interpass heat elements. Topics include welding skills necessary to make high quality welds on open root mild steel pipe in the 2G, 5G and 6G positions and mild steel pipe with backing rings in the 6G position.

PMT 0171 Gas Tungsten Arc Pipe and Tubing

Prerequisite: PMT 0141. This course is designed to teach entry-level job skills in the welding

field. Topics include gas tungsten arc welding fundamentals, preparation for welding pipe and pipe welding defects.

PMT 0173 Gas Metal Arc Welding Pipe

Prerequisite: PMT 0166. This course is designed to teach entry-level job skills in the welding field. Topics include gas metal arc welding fundamentals, preparation for welding pipe and pipe defects. The course develops the manual skills necessary to produce high quality groove welds on six inch diameter steel pipe in the 2G, 5G and 6G positions.

PMT 0201 Blueprint Reading

This course is designed to teach entry-level job skills. Topics include how to interpret blueprints, visualization, understanding various views, alphabet of lines and symbols, and understanding supplementary information contained on prints.

PMT 0205 Measuring Tools

This course is designed to teach entry-level job skills. Topics include machine measurement in theory and manipulation training in safety, the use of scales, inside and outside micrometers (English and metric), inside and outside calipers, telescope gages, combination set and thread micrometers. Mastering bench and portable tools for benchwork on the job is also included.

PMT 0206 Machine Operator

This course is designed to solve job-related problems using basic formulas, geometry and trigonometry. Also covered will be reading and interpreting blueprints with basic geometric tolerances and layout.

PMT 0213 Lathe I

This course is designed to teach entry-level job skills. Topics include safety, machine set-up, center drilling, alignment of centers, facing, filing, polishing, burring, taper turning, thread cutting, (internal and external) drilling, reaming, grooving and grinding.

PMT 0214 Milling Machine I

This course is designed to teach entry-level job skills. Topics include the proper methods and procedures of machining in a vertical milling machine. Special emphasis is given to shop safety methods and procedures of cutters and end mills that can be used in a vertical milling machine for performing various operations. Topics include the mounting of various cutters, alignment of head and vise in order to mill a flat surface, square and parallel surface, and machine an angular surface.

PMT 0218 Basic Tools and Drill Press

This course is designed to teach entry-level job skills. Topics include sensitive drill presses, common drill presses and the operation and function of all accessories. Students will also receive instructions in safety, calculations, and set-ups for various materials.

PMT 0226 Surface Grinders

This course is designed to teach entry-level job skills. Topics include procedures for mounting and removing wheels, truing and dressing a grinding wheel, grinding of a flat surface, grinding the edges of a work piece square and parallel, and grinding an angular surface.

PMT 0233 Lathe II

This course is designed to teach entry-level skills in boring, knurling, and cutting external threads. Also included will be performing angular, contour and radial cuts with the lathe.

PMT 0234 Milling Machine II

This course is designed to teach entry-level skills in cutting external keyways, boring holes with a boring head, using digital readouts and understanding straddle mill operations.

PMT 0235 Milling Machine III

This course is designed to teach entry-level skills in the set up and operation of the dividing head and rotary tables.

PMT 0243 Lathe III

This course is designed to teach entry-level skills in recharging and cutting internal threads. Also included will be the use of the taper attachment, set up and cutting of internal tapers and use of followers and steady rests.

PMT 0250 Basic Numerical Control

This course is designed for entry-level job skills. Topics include definition of numerical control terms, description of machine movements, programming of feed rate, drilling, tape, milling and miscellaneous functions.

PMT 0401 Basic Engine Parts and Disassembly

This course is designed to teach entry-level job skills. Topics include engine parts identification, principles of power and engine disassembly.

PMT 0402 Precision and Non-Precision Tools for the Automotive Trade

This course is designed to teach entry-level job skills in instrumentation used in the remanufacturing of automotive engines.

PMT 0405 Cleaning Engine Parts

This course is designed to teach entry-level job skills. Topics include training in cleaning machines, cleaning products and methods of cleaning engine parts with special emphasis put on safety in the use of the machines and chemicals.

PMT 0411 Automotive Reconditioning Machines I

This course is designed to teach entry-level job skills in the identification and repair of cracks in automotive parts.

PMT 0412 Head and Block Reconditioning Tech

This course is designed to teach entry-level job skills to students desiring to become reconditioning technicians. Skills taught will include seat and guide replacement, machining heads to specifications, boring and honing of cylinders, and line honing of main bearing surfaces.

PMT 0413 Crankshaft and Rod Reconditioning Tech

This course is designed to teach entry-level skills to students desiring to become crankshaft grinder operators. Skills taught will include machine operation, inspection, and straightening of crankshafts.

PMT 0415 Automotive Reconditioning Machines I

This course is designed to teach entry-level job skills related to the operation of four machines commonly used in the automotive machine shop: wet head grinder, valve grinder, valve seat grinder and the piston pin machine.

PMT 0421 Automotive Reconditioning Machines II

Prerequisite: PMT 0415 or consent of instructor. This course is designed to teach entry-level job skills and is a continuation of Automotive Reconditioning Machines I. Topics include the operation of the following four machines commonly used in the automotive machine shop: rod and cap grinder, precision honing, horizontal honing and cylinder boring.

PMT 0431 Automotive Reconditioning Machines III

Prerequisite: PMT 0421 or consent of instructor. This course is designed to teach entry-level job skills and is a continuation of Automotive Reconditioning Machines II. Topics include the operation of the following four major machines commonly used in the automotive machine shop: head machining center, flywheel grinder, milling and brake service center.

PMT 0435 Automotive Reconditioning Machines IV

Prerequisite: PMT 0431 or consent of instructor. This course is designed to teach entry-level job skills and is a continuation of Automotive Reconditioning Machines III. Topics include the operation of the following four major machines commonly used in the automotive machine shop:

crankshaft straightener, crankshaft grinder, drill press and engine lathe.

PRN 0930 Practical Nursing I

Prerequisites: High school diploma or GED, TABE, cardiopulmonary resuscitation (CPR) certification. The practical nursing program is designed as entry-level job training to prepare beginning practitioners of practical nursing. This first course consists of activities designed to familiarize students with basic needs of the well individual. The units progress from a study of the normal structure and function of the body, growth and development, health concepts and nutrition, to the common problems encountered during illness. Interpersonal relationships, principles and skills are included to assist students in providing care for clients and families. Demonstrations and supervised practice are planned in a nursing laboratory for students to acquire basic skills prior to assignment in local hospitals for clinical experience.

PRN 0931 Practical Nursing II

Prerequisite: PRN 0930. This entry-level job training course is a continuation of Practical Nursing I and includes basic concepts and principles needed to care for the medically and/or surgically ill client. Nutritional, psychosociological, pharmacological, rehabilitative and preventive aspects of care for all age groups are integrated throughout the program. Instruction is also provided in the specialty areas of maternal and newborn nursing, pediatric nursing and geriatric nursing. Students are assigned clinical experiences in selected areas of appropriate community agencies, planned to be concurrent with the theory presented in the classroom and based upon their level of learning.

PRN 0932 Practical Nursing III

Prerequisites: PRN 0930 and PRN 0931. This entry-level job training course is a continuation of Practical Nursing II and

includes basic concepts and principles needed to care for the medically and/or surgically ill client. Nutritional, psychosociological, pharmacological, rehabilitative and preventive aspects of care for all age groups are integrated throughout the program. Instruction is also provided in the specialty areas of maternal and newborn nursing, pediatric nursing and geriatric nursing. Students are assigned clinical experiences in selected areas of appropriate community agencies, planned to be concurrent with the theory presented in the classroom and based upon their level of learning.

RMI 0641 Life Insurance Marketing

This course is designed to help prepare life, health and variable annuities agents for state license exams and initial training. The course shall consist of 40 hours of classroom instruction in life insurance, health insurance and annuities. A final examination covering life, health and variable annuities will be given at the end of each course.

SER 0101 Construction of Small Engines

This course is designed to teach entry-level job skills. Topics include necessary familiarization with the working parts of a small gasoline engine and, at the same time, provides technical information on the operation of these small engines.

SER 0105 Fuel System Repair

This course is designed to teach entry-level job skills. Topics include an in-depth study of various small engines fuel system including tanks, lines, filters, pumps, carburetors, governors, classroom lectures and shop experience.

SER 0151 Product Familiarization

This course is designed to teach entry-level job skills. Topics include product identification using manufacturer's model numbering system, and locating and removing various components on both self-propelled lawnmowers and riding mowers.

This course includes lecture and classroom experience.

SER 0211 Drive System Repair

This course is designed to teach entry-level job skills. Topics include instruction on the drive system of riding lawnmowers, garden tillers, compliance lawnmowers and mower battery maintenance. Instruction includes lecture and classroom experiences.

SER 0400 Part Inventory and Control

This course is designed for the Gasoline Engine Service Technician to learn efficient systems and procedures for accurate material control. Topics covered include parts identification systems, procurement, pricing, stocking, assignment to job orders, billing, inventory, restocking, accounting and accountability for inventory. Systems include those appropriate for a variety of business/shop environments, from those of a small business to computerized/automated systems.

SLS 0313 Vocational-Technical Career Explorations

This course introduces students to various vocational skills areas. It allows students the opportunities to explore three areas while gaining information on various aspects of the trade, such as what jobs are included, where the skills would be utilized and approximate pay scales. Course topics are reinforced by laboratory experiences designed to stimulate interest while providing the opportunity to gain some insight in the actual job environment.

SLS 0341 Employability Skills and Communication

This course is designed to teach students needed to secure a job in a technical field. Also included are verbal, written, and non-verbal communication techniques including methods for dealing with computer users.

STS 0810 Surgical Technology I

Prerequisite: TABE, high school diploma or GED. This course is the first of two sequential courses

designed specifically for entry-level job training. It is a combination of classroom studies and clinical experiences in the operating room, recovery room and delivery room which prepares students to assist surgeons, anesthesiologists and nurses with client care and related services. Particular emphasis is placed upon the skills involved in scrubbing and circulating during surgical procedures and in the preparation and maintenance of sterilized and unsterilized supplies.

STS 0820 Surgical Technology II

Prerequisite: STS 0810. This course is a continuation of some of the skills presented in Surgical Technology I. It is a combination of classroom studies and clinical experiences in the operating room, recovery room and delivery room which prepares students to assist surgeons, anesthesiologists and nurses with client care and related services. Particular emphasis is placed upon the skills involved in scrubbing and circulating during surgical procedures, and in the preparation and maintenance of sterilized and unsterilized supplies. Upon successful completion of the program, graduates are qualified to take a national certifying examination to become a certified surgical technologist (CST).

VPI 0100 Reading Skills

This course is designed to provide vocational preparatory instruction. Students will be provided with an individualized program to upgrade their reading skills. The amount of hours spent by students in a particular area will depend on the scores achieved on the Test of Adult Basic Education (TABE).

VPI 0200 Mathematical Skills

This course is designed to provide vocational preparatory instruction. Students will be provided with an individualized program to upgrade mathematical skills in arithmetic reasoning and fundamentals. The amount of hours spent by students in a particular area will depend on

the scores achieved on the Test of Adult Basic Education (TABE).

VPI 0300 Language Skills

This course is designed to provide vocational preparatory instruction. Students will be provided with an individualized program to upgrade their language skills. The amount of hours spent by students in a particular area will depend on the scores achieved on the Test of Adult Basic Education (TABE).

VPI 0400 Workforce Readiness Skills

This course will help prepare students for the workplace by exploring career interests, aptitudes and goals and by providing instruction in resume writing, interviewing and other work-related procedures.

Special Series Courses

— **0920-0921 Seminars**

This course offers seminars in each vocational area of interest as supplementary instruction.

— **0930 Postsecondary Internship**

This course provides work experience in a technical or industrial setting. Students will receive supervision from a technical and industrial manager and support from College instructors.

— **0980 and 0981 Apprenticeship Cooperative Education**

This course will provide on-the-job training that parallels and reinforces training received in the related or classroom portion of the apprenticeship program.

— **0949 Vocational Cooperative Education**

Course options A-D provide entry-level job training that corresponds with the second through the fifth level of training in a vocational program. Students will receive a combination of classroom and on-the-job instruction in their chosen occupational area.

**Adult Basic Education, GED,
High School Diploma and
English as a
Second Language**

**AHSA 0101 English IA
High School Credit 1/2**

The purpose of this course is to provide integrated language arts experiences in reading, writing, listening, viewing, speaking, language, and literature. The learning tasks and materials accommodate the individual needs of students, and students use technology to develop competencies in the language arts.

**AHSB 0101 English IB
High School Credit 1/2**

Prerequisite: AHSA 0101. The purpose of this course is to provide integrated language arts experiences in reading, writing, listening, viewing, speaking, language, and literature. The learning tasks and materials accommodate the individual needs of students, and students use technology to develop competencies in the language arts.

**AHSA 0102 English IIA
High School Credit 1/2**

Prerequisite: AHSA/B 0101 English I. The purpose of this course is to provide integrated language arts experiences in reading, writing, listening, viewing, speaking, language, and literature. The learning tasks and materials accommodate the individual needs of students, and students use technology to develop competencies in the language arts. Emphasis is given to world literature and the four modes of discourse.

**AHSB 0102 English IIB
High School Credit 1/2**

Prerequisite: AHSA 0102. The purpose of this course is to provide integrated language arts experiences in reading, writing, listening, viewing, speaking, language, and literature. The learning tasks and materials accommodate the individual needs of students, and students use technology to develop competencies in the language

arts. Emphasis is given to world literature and the four modes of discourse.

**AHSA 0103 English IIIA
High School Credit 1/2**

Prerequisite: AHSA/B 0102 English II. The purpose of this course is to provide integrated language arts experiences in reading, writing, listening, viewing, speaking, language, and literature. The learning tasks and materials accommodate the individual needs of students, and students use technology to develop competencies in the language arts, with emphasis on British literature.

**AHSB 0103 English IIIB
High School Credit 1/2**

Prerequisite: AHSA 0103. The purpose of this course is to provide integrated language arts experiences in reading, writing, listening, viewing, speaking, language, and literature. The learning tasks and materials accommodate the individual needs of students, and students use technology to develop competencies in the language arts, with emphasis on British literature.

**AHSA 0104 English IVA
High School Credit 1/2**

Prerequisite: AHSA/B 0103 English III. The purpose of this course is to provide integrated language arts experiences in reading, writing, listening, viewing, speaking, language, and literature. The learning tasks and materials accommodate the individual needs of students, and students use technology to develop competencies in the language arts, with emphasis on British literature.

**AHSB 0104 English IVB
High School Credit 1/2**

Prerequisite: AHSA 0104. The purpose of this course is to provide integrated language arts experiences in reading, writing, listening, viewing, speaking, language, and literature. The learning tasks and materials accommodate the individual needs of students, and students

use technology to develop competencies in the language arts, with emphasis on British literature.

**AHSA 0121 Special Topics
World Literature
High School Credit 1/2**

Prerequisite: AHS 0101 English I. The purpose of this course is to study and write about selected works of Western and Eastern literature from ancient times to the present. Students will read selections from fiction, nonfiction, and poetry which represent cultural, social, and literary ideas; they will write papers based upon the literature.

**AHSA 0122 Special Topics
American Literature
High School Credit 1/2**

Prerequisite: AHS 0102 English II. This course is designed to study selected American literary works of various genres in relationship to the historical and cultural forces which shaped the national literature. The content includes selected readings from each literary period/movement and frequent writing assignments based upon the literature.

**AHSA 0123 Special Topics
British Literature
High School Credit 1/2**

Prerequisite: AHS 0103 English III. The purpose of this course is to study British literary works of various genres and their relationship to the historical and cultural forces which influenced them, to develop an understanding of British literary periods/movements, and to write interpretive essays based upon the literature.

**AHS 0105 Business English I
High School Credit 1**

This course provides instruction in English language arts, with emphasis upon specific language skills as they relate to various occupations. The content includes instruction in personal and business communications, both oral and written, language study with emphasis upon practical applications of standard English

mechanics and usage, vocabulary study with emphasis upon specialized vocational terminology and interpersonal relationships in business environments through the study of literature.

AHS 0151 Writing I
High School Credit 1/2

Prerequisite: AHS 0102 or its equivalent. This course provides an organized study of both sentence and paragraph structure. These are shaped into larger patterns via written assignments which are based upon personal experiences, observations and literature. Emphasis is placed on form and content as well as manuscript preparation. Other areas of concentration are diction, coherence and transition, mechanics of grammar and punctuation, and spelling. Also included are the skills needed for selecting and limiting a topic, arranging support, outlining, drafting and revision.

AHS 0152 Writing II
High School Credit 1/2

Prerequisite: AHS 0151. This course extends the development of skills introduced in Writing I. It focuses on refining exposition and introduces analysis and persuasion. In addition, tone, syntax and figurative language are taught. A major emphasis is placed on the skills needed for revision. Personal writing techniques continue to be improved through practice of rewriting, drafting and improved editing.

AHS 0193 English Honors III
High School Credit 1

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns 3 college credit hours in English Composition I. It embodies the fundamentals of effective expression with emphasis on the various forms of expository writing, logical and imaginative thinking, and reading for understanding. The course provides instruction in sentence structure, diction, organization of short essays and correct usage of standard American English.

AHS 0194 English Honors IV
High School Credit 1

Prerequisite: ENC 1101 with a grade of "C" or better. This course is a dual enrollment course which also earns 3 college credit hours in English Composition II. As a continuation of AHS English Honors III and English Composition I, this course includes the study and practice in research writing and writing competencies.

AHS 0202 Earth/Space Science
High School Credit 1

This course provides opportunities for students to develop concepts basic to the earth, its materials, processes, history and environment in space.

AHS 0203 Environmental Science
High School Credit 1

This course provides students with the study of man's interaction with the environment. The content includes forms of pollution, conservation, environmental planning and policy, public land usages, population dynamics and major forms of energy.

AHS 0250 Anatomy and Physiology
(With Lab)
High School Credit 1

This course provides students with exploratory activities in the structures and functions of the components of the human body.

AHS 0251 Botany (With Lab)
High School Credit 1

This course provides students with an in-depth study of the plant kingdom. The content includes but is not limited to plant cell anatomy and physiology, plant genetics, plant classification and use of taxonomic key, comparative plant anatomy and physiology, plant responses, plant life cycles, ecology and importance of plants to man.

AHS 0252 Chemistry I
High School Credit 1

This course covers the areas of elements and compounds, oxygen and hydrogen, water and solutions, carbon and its oxides, and acids, bases and salts.

AHS 0253 Physical Science
(With Lab)
High School Credit 1

This course is designed to acquaint individuals with various aspects of the physical sciences. It includes elements of physics, chemistry, geology, astrology, meteorology and other selected physical science topics. A laboratory experience is included.

AHS 0255 Biology I
High School Credit 1

This course is designed to give students an introduction to the origin, development, structure, function and distribution of living things. An integral and required part of this course will be the laboratory section. This course will provide hands-on experience as well as activities that will acquaint students with scientific procedures and equipment.

AHS 0256 Earth/Space Science
(With Lab)
High School Credit 1

This course provides opportunities for students to develop concepts basic to the earth, its materials, processes, history and environment in space. A laboratory experience is included.

AHS 0257 Environmental Science
(With Lab)
High School Credit 1

This course provides students with the study of man's interaction with the environment. The content includes forms of pollution, conservation, environmental planning and policy, public land usages, population dynamics and major forms of energy.

AHS 0258 Marine Biology
(With Lab)
High School Credit 1

This course introduces students to the geological, chemical and biological aspects of the marine environment, with an emphasis on the biological. Content includes origin of the oceans, marine communities, classification, taxonomy and man's inter-relationship with the oceans. A required lab component is included to provide students

with hands-on experience in marine concepts.

AHS 0290 Anatomy/Physiology Honors (With Lab)
High School Credit 1

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns 3 college credit hours in Human Anatomy and Physiology I. This course, a study of the gross morphology and physiology of the human, includes sections concerned with cells, tissues, the musculo-skeletal system, circulation, the lymphatic system, the digestive system, and the integument system. The course includes a laboratory component.

AHS 0292 Chemistry I Honors (With Lab)
High School Credit 1

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns four college credit hours in Introduction to General Chemistry. The course is an introduction to the concepts of inorganic chemistry including structure of matter, atomic theory, nomenclature, bonding, gases, solutions, equilibrium, and acids and bases. The course includes a laboratory component.

AHS 0293 Physical Science Honors (With Lab)
High School Credit 1

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns three college credit hours in Physical Science. Students will benefit by taking high school algebra prior to enrolling in this course. The course acquaints students with the development of the physical sciences, with the integrating principles and theories in the physical sciences, with the practice of the scientific method, and with a useful knowledge of selected areas in mechanics, electricity and magnetism, periodicity and atomic structure and nuclear phenomena. Presentation involves lectures, demonstrations, and films.

AHS 0295 Biology I Honors (With Lab)

High School Credit 1

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns four college credit hours in the Principles of Biology I. The course, an introduction to the principles of biology, includes studies of cellular organization, genetics, and evolution. It includes a laboratory component.

AHS 0296 Earth/Space Science Honors (With Lab)

High School Credit 1

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns four college credit hours in Earth and Space Science. The course acquaints students with the development of science, the integrating principles and theories in the earth sciences, the practice of the scientific method and with a useful knowledge of selected areas of geology, astronomy and meteorology. Presentation involves lectures, demonstrations and films.

AHS 0321 Algebra I

High School Credit 1

This course is designed as an introduction to algebra with emphasis on fundamentals, the solution of equations and the application of equations to everyday problems.

AHS 0322 Geometry

High School Credit 1

Prerequisite: AHS 0321 with a grade of "C" or better or consent of professor. This course is designed to deal with geometric figures in a plane surface in which construction and deductive reasoning with triangles, perpendicular and parallel lines, polygons and the circles are emphasized. Additionally, special emphasis is placed on congruent triangles.

AHS 0323 Algebra II

High School Credit 1

Prerequisite: AHS 0321 with a grade of "C" or better or consent of professor. This course is

designed as a continuation of Algebra I with emphasis on fractions, fractional equations, quadratic equations, elementary trigonometry, ratio and proportion, and radicals.

AHS 0324 Mathematical Analysis

High School Credit 1

Prerequisite: Algebra II or higher with a grade of "C" or better or consent of professor, and satisfactory score on placement test. This course is a dual-enrollment course which also earns four college credit hours in Precalculus Algebra. The purpose of the course is to emphasize the skills necessary for the study of calculus. A review of algebraic techniques and operations, exponents, radicals, complex numbers, and absolute value is also included. Major course topics are: linear equations and inequalities; quadratic equations and inequalities; relations, functions, and graphs; exponential and logarithmic functions; systems of equations and inequalities; higher degree polynomial equations; matrices and determinants; applications; sequences, series, and the binomial theorem; and mathematical proof.

AHS 0325 Trigonometry

High School Credit 1/2

Prerequisite: Algebra II or higher with a grade of "C" or better or consent of professor, and a satisfactory score on the placement test. This course is a dual-enrollment course which also earns three college credit hours in College Trigonometry. The major topics in the course are circular functions, solving triangles, trigonometric identities and functions, inverse relations and trigonometric equations, complex numbers and polar coordinates.

AHS 0330 Algebra Ia

High School Credit 1

Algebra Ia and Algebra Ib constitute a two year sequence of courses which may satisfy the Algebra I requirement for graduation. This course is designed as an introduction to algebra with emphasis on fundamentals, the

solution of equations, and the application of equations to everyday problems.

AHS 0331 Algebra Ib
High School Credit 1

Prerequisite: AHS 0330 with a grade of "C" or better or consent of instructor. Algebra Ia and Algebra Ib constitute a two year sequence of courses which may satisfy the Algebra I requirement for graduation. This course is designed as an introduction to algebra with emphasis on fundamentals, the solution of equations, and the application of equations to everyday problems.

AHS 0334 Liberal Arts Mathematics
High School Credit 1

Prerequisite: AHS 0330 with a grade of "C" or better or consent of the instructor. The purpose of this course is to strengthen mathematical skills necessary for further study of advanced mathematics. It includes a review of the principles and operations of algebra and an introduction to geometry.

AHS 0393 Algebra II Honors
High School Credit 1

Prerequisite: AHS 0321 with a grade of "C" or better, and satisfactory score on placement test. This course is a dual-enrollment course which also earns three college credit hours in College Algebra. The major topics included in this course are: exponents, roots, and radicals; equations and inequalities; relations and functions; graphs; systems of equations and inequalities; and applications. A review of algebraic techniques is also included in this course as well as geometric and measurement skills.

AHS 0401 American History
High School Credit 1

This course is designed to place emphasis on political, economic and social development of the United States from colonization to the present.

AHS 0402 American Government
High School Credit 1/2

This course includes a study of such topics as the constitution, legislative, executive and judicial branches, and functions of national, state and local government, evolving role of political parties and interest groups in determining government policy, elections and citizenship.

AHS 0404 World History
High School Credit 1

This course examines the political, economic, social, religious, military, dynastic, scientific and cultural events that have affected humanity by covering the chronological development of civilization.

AHS 0405 Economics
High School Credit 1/2

This course provides students the opportunity to acquire an understanding of the way in which society organizes its limited resources to satisfy unlimited wants. Students will be introduced to the major characteristics of the mixed market economic system. The major emphasis is to provide students with an understanding of the forces of the marketplace by examining the effect on the system of their roles as producer, consumer, saver, investor, resource owner, voter and taxpayer.

AHS 0492 American Government Honors
High School Credit 1/2

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns three college credit hours in American Federal Government. The course consists of a study of the theory, organization, principles and functioning of the federal government, emphasizing the relationship of the individual to the government. This course includes reading and writing competencies.

AHS 0495 Economics Honors
High School Credit 1/2

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which

also earns three college credit hours in Principles of Economics I. It is a course of macroeconomics which presents the foundations of economic analysis, the theory of economic growth, development, and stabilization, current economic issues, and the monetary theory.

AHS 0505 Critical Thinking and Study Skills
High School Credit 1/2

The purpose of this course is to provide the foundation for and practice of good study habits and to develop the skills needed to process information, complete assignments accurately, and perform well on tests. The content of the course will include practice in taking notes and tests, managing time, and developing organizational, listening, and critical thinking skills.

AHS 0506 Career Research and Decision-Making
High School Credit 1/2

This course will assist students in understanding the career planning process and the world of work. Students will assess their work related values, interests and abilities and discover how these relate to career choice. Other topics covered include strategies for building self-esteem, analysis of decision-making skills and methods of career research. The use of computerized career planning software is included.

AHS 0601 Health I, Life Management Skills
High School Credit 1/2

This course is a study of the human body. It also provides students with the opportunities to develop and enhance critical life management skills necessary to make sound decisions and take positive actions for healthy living.

AHS 0704 Workplace Essentials
High School Credit 1/2

This course will provide students with the skills needed for seeking, obtaining, and maintaining job success. Topics covered include

employment goal setting, making application and resume writing, communication on the job, problem-solving, and teamwork.

AHS 0716 Keyboarding and Business Skills

High School Credit 1/2

This course is designed to provide a basic overview of current business and information systems, with emphasis on touch keyboarding and fundamental word processing applications.

AHS 0732 Child Development

High School Credit 1/2

This course is a study of the child from pre-natal up to school age with emphasis on physical, social, emotional, and mental development. Cultural and environmental influences on the child are also studied, as well as exploration of careers in childcare.

AHS 0733 Parenting Skills

High School Credit 1/2

This course studies the role of the parent in understanding and providing for the physical, cognitive, social, and emotional needs of the child. Brain-based research, special needs, and safety issues are examined.

AHS 0801 Drawing and Painting I

High School Credit 1

This course is a study of the fundamentals of drawing and painting, concepts of drawing principles and composition, and a study of techniques.

AHS 0821 Drama I

High School Credit 1

This course provides an in-depth theatrical experience in planning and executing production functions including scene construction and painting, props, costuming, acting, lighting and other full technical responsibilities.

AHS 0822 Drama II

High School Credit 1

This course provides intermediate development in the study and practice of theatre arts. The content includes instruction in reading and interpretation of dramatic literature. Students will be introduced to techniques and mechanics of acting including

scenery construction, costume and lighting design, as well as other features of stagecraft, character analysis and portrayal, interpretive study of plays and production of plays.

AHS 0823 Acting I

High School Credit 1

This course introduces students to the study and practice of acting. The course will include techniques of acting, terminology, movement, vocal production and characterization.

AHS 0824 Stagecraft I

High School Credit 1

This course is an introduction to the tools, terminology, materials and principles of stagecraft. The course requires practical work outside of class on the current productions.

AHS 0825 Voice and Diction I

High School Credit 1

This course provides students an opportunity to improve their speaking voice. This is a basic course targeted at students interested in improving vocal skills developing an effective voice and speech.

AHS 0841 Chorus I

High School Credit 1

This course includes both individual and group singing with emphasis on group vocal experience that may be useful to individuals who participate in community musical activities.

AHS 0911 Advanced Reading

High School Credit 1/2

Prerequisite: AHS 0505 Critical Thinking and Study Skills. The purpose of this course is to strengthen reading, thinking, and vocabulary skills. Students will practice reading strategies designed to improve comprehension, rate, and vocabulary. The course will also include advanced test-taking and study skills instruction.

AHS 0915 Creative Writing

High School Credit 1/2

This course develops students' writing and language skills needed for individual expression in literary forms. The content

includes instruction in the development and practice of writing a variety of literary works.

AHSA 0920 Special Topics

General Science

High School Cr. 1/2

This course provides experiences and activities to acquaint the student with the concepts of earth/space, physical, and biological sciences. Laboratory experiences are not an integral part of this course.

AHSB 0920 Special Topics

General Science

High School Cr. 1/2

Prerequisite: AHSA 0920. This course provides experiences and activities to acquaint the student with the concepts of earth/space, physical, and biological sciences. Laboratory experiences are not an integral part of this course.

AHSA 0921 Special Topics

General Science (With Lab)

High School Cr. 1/2

This course provides experiences and activities to acquaint the student with the concepts of earth/space, physical and biological sciences.

AHSB 0921 Special Topics

General Science (With Lab)

High School Cr. 1/2

Prerequisite: AHSA 0921. This course provides experiences and activities to acquaint the student with the concepts of earth/space, physical, and biological sciences.

AHS 0940 African-American History

High School Cr. 1/2

This course provides students with an understanding of African American heritage within the context of a broad historical focus. Students examine connections to the past to prepare for the future as participating members of a democratic society.

AHS 0941 World Cultural

Geography

High School Credit 1

World Cultural Geography is a general course in geography that includes a study of the physical, economic, political, religious and cultural aspects of important geographic areas and

people, and their influence on world conditions and problems.

AHS 0942 Psychology
High School Credit 1/2

This course is designed to provide students with a variety of perspectives for dealing with and understanding human behavior. The emphasis of the course is on application of psychology to life situations encountered by most individuals.

AHS 0943 Sociology
High School Credit 1/2

This course includes the study of cultural influence on our society, the forms, institutions, and the relationships between the sexes, racial and ethnic groups.

AHS 0944 Humanities to 1500
High School Credit 1/2

The purpose of this course is to examine and respond to creative efforts from early civilization through the 1500s. The content will include, but not be limited to, providing opportunities for students to explore, analyze, synthesize and respond in a variety of ways to cultural traditions. These include viewing, listening, speaking, reading, writing, performing and creating. Students should gain an appreciation for and an understanding of themselves and their world through an interdisciplinary approach involving the study of painting, sculpture, architecture, music, dance, drama, history, literature, philosophy and religion.

AHS 0945 Humanities Since 1500
High School Credit 1/2

The purpose of this course is to examine and respond to creative efforts from the post-Renaissance through the contemporary period. The content will include, but is not limited, to providing opportunities for students to explore, analyze, synthesize and respond in a variety of ways to cultural traditions. These ways include viewing, listening, speaking, reading, writing, performing and creating. Students should gain an appreciation for

and an understanding of themselves and their world through an interdisciplinary approach involving the study of painting, sculpture, architecture, music, dance, drama, history, literature, philosophy and religion.

AHS 0946 Law Studies
High School Credit 1/2

The purpose of this course is to acquaint students with the various phases of law that affect everyday life. Included are topics such as the basis of the legal system, the organization of the legal system, criminal and juvenile justice, consumer law, the civil court and social values and their impact on interpretations of the law and the supremacy.

AHS 0949 Civics
High School Credit 1

This course deals with the structure and function of government at the local, state, and national levels. Course content includes the U.S. Constitution, U.S. government and the free enterprise system.

AHS 0951 French I
High School Credit 1

This course provides students with beginning skills in listening and speaking with emphasis on pronunciation of words in introductory French.

AHS 0952 French II
High School Credit 1

Prerequisite: AHS 0951. This course, a continuation of French I, is adapted to the needs and interests of adults who wish to improve and expand speaking and oral comprehension abilities which were begun in French I.

AHS 0953 Spanish I
High School Credit 1

This course provides students with elements of grammar, with conversation and composition, and reading of Spanish texts.

AHS 0954 Spanish II
High School Credit 1

Prerequisite: AHS 0953. This course, a continuation of Spanish I and is adapted to the needs and interests of students who wish to improve and

expand speaking and oral comprehension abilities which were begun in Spanish II.

AHS 0955 German I
High School Credit 1

This course is adapted to the needs and interests of students who wish to acquire a speaking and oral comprehension ability in introductory German.

AHS 0961 Health II, Personal Health
High School Credit 1/2

Prerequisite: AHS 0601. This course is a continuation of Health I, Life Management Skills and continues the study of health as it applies to the individual students, their families and the larger community in which they live. The course provides students with knowledge and skills necessary for making sound health decisions.

AHS 0962 Personal Fitness
High School Credit 1/2

The purpose of this course is to provide students with opportunities to develop an individual optimal level of physical fitness, acquire knowledge of physical fitness concepts and acquire knowledge of the significance of life style on one's health and fitness. The content should include, but is not limited, to knowledge of psychological values of physical fitness including stress management, knowledge of sound nutritional practices and knowledge of consumer issues related to physical fitness.

AHS 0963 Personal, Social, and Family Relationships
High School Credit 1/2

The purpose of this course is to develop advanced knowledge and skills that promote positive social and emotional interactions and relationships. A human development course for students up to age 18. This course provides an opportunity for students to explore the meaning or purpose of life, discover the mystery of the transition from adolescence to adulthood and feel a deep connection to the wholeness of life.

AHS 0971 Introduction to the Computer
High School Credit 1/2

The purpose of this course is to provide an overview of computers in today's world including what they are, what they do, how they work, the hardware involved, the necessary components of an information system, the need for accuracy and controls, the most common languages, the most common business applications and an understanding of the basic terminology.

AHS 0972 Computer Applications
High School Credit 1/2

The purpose of computer applications is to introduce students to the care and uses of micro-computers and to give them an opportunity for as much hands-on experience as possible. The content includes but is not limited to, simple programming and the use of commercially available software.

AHS 0975 Voluntary Public Service
High School Credit 1/2

This course provides students with hands on experience in local community service agencies and helps them develop an appreciation of the concept of volunteerism and its impact on others. Students will identify community needs and volunteer placement options and provide 75 hours of meaningful community service through a local agency. Course content includes a self-assessment, and analysis of the structure of volunteer service programs, and an oral or written presentation about the experience of being a volunteer.

ASE 0012 Adult Life Stages

This course is designed to teach basic skills while exploring the psychological and physiological changes which take place during the various stages of an adult's life. The content of the course includes implications of aging, adult socialization opportunities, health issues, security issues and social services for adults.

ASE 0014 Reading for Adults A
ASE 0015 Reading for Adults B
ASE 0016 Reading for Adults C
ASE 0017 Reading for Adults D

These courses provide instruction at four levels of reading skills necessary for successful employment and citizenship. The courses are designed to enable students to use the reading process effectively and to construct meaning from a wide range of texts, literary forms, and printed materials.

ASE 0024 Mathematics for Adults A
ASE 0025 Mathematics for Adults B
ASE 0026 Mathematics for Adults C
ASE 0027 Mathematics for Adults D

These courses provide instruction at four levels of mathematics skills necessary for successful employment and citizenship. The courses are divided into two major parts: computation and applications. The computation portion includes number sense, concepts, and operations; measurement; geometry and spatial sense; algebraic thinking; data analysis and probability. The application portion teaches the student to use mathematical concepts to solve problems encountered in daily living.

ASE 0034 Language for Adults A
ASE 0035 Language for Adults B
ASE 0036 Language for Adults C
ASE 0037 Language for Adults D

These courses provide instruction at four levels of language arts skills necessary for successful employment and citizenship. The courses are designed to teach the student to use the writing process in order to communicate ideas and information effectively.

ASE 0040 Workforce Readiness

This course is designed to aid students in qualifying for further basic or postsecondary education, vocational education, or employment. It covers such topics as job search, the application process, wage and tax information, technology, and an introduction to retail, trade, and medical work force skills.

ASE 0060 GED Comprehensive Review

This course is designed to provide instruction for all five portions of the The General Education Development (GED) test, which offers the opportunity to a high school equivalency diploma. The five sections of the test are: writing (including the composition of an essay), social studies, science, literature and the arts, and mathematics.

ASE 0061 GED on TV

This course is designed for home study for the GED diploma. A set of four textbooks and 43 30-minute programs on local television channels cover the comprehensive course material. Video lessons may also be viewed at any FCCJ learning resource center, and a GED instructor is available for additional help.

ASE 0062 GED Writing

This course is designed to provide instruction for the writing portion of the General Education Development (GED) Test, which offers the opportunity to earn a high school equivalency diploma. Academic instruction covers both general writing skills and the composition of the essay.

ASE 0063 GED Social Studies

This course is designed to provide instruction for the social studies portion of the General Education Development (GED) Test, which offers the opportunity to earn a high school equivalency diploma.

ASE 0064 GED Science

This course is designed to provide instruction for the science portion of the General Education Development (GED) Test, which offers the opportunity to earn a high school equivalency diploma.

ASE 0065 GED Literature

This course is designed to provide instruction for the literature and arts portion of the General Education Development (GED) Test, which offers the opportunity to earn a high school equivalency diploma.

ASE 0066 GED Mathematics

This course is designed to provide instruction for the mathematics portion of the General Education Development (GED) Test, which offers the opportunity to earn a high school equivalency diploma.

Non-Credit Adult Studies ESL**SLD 0050 ESOL Foundations****SLD 0110 ESOL I****SLD 0200 ESOL 2****SLD 0300 ESOL 3****SLD 0400 ESOL 4****SLD 0500 ESOL 5****SLD 0600 ESOL 6**

These courses provide English language instruction for limited English proficient adults. They are designed to prepare students to communicate effectively in a multi-faceted society with workplace, life, and academic applications. This program of courses is divided into seven Literacy Completion Points.