

Course Descriptions

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 the student 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, theatre 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

Classification Discipline	Prefix
Accounting: General	ACG
Advertising	ADV
Aeronautical Science	ASC
Air Conditioning/Refrigeration: Technology	ACR
American History	AMH
American Literature	AML
Anthropology	ANT
Applied Accounting	APA
Arabic Language	ARA
Architecture	TAR
Art	ART
Art History	ARH
Asian History	ASH
Astronomy	AST
Automotive/Engine Repair	AER
Aviation Management	AVM
Aviation Technology Flight	ATF
Aviation Technology Theory	ATT
Banking	BAN
Banking: Related Courses	BRC
Biological Science — Introductory	BSC
Botany	BOT
Building Construction	BCN

Building Construction Trades	BCT
Business Law	BUL
Chemistry	CHM
Child Development	CHD
Chinese	CHI
Clothing and Textiles	CTE
Comparative Politics	CPO
Computer and Information Systems	CIS
Computer Design/Architecture	CDA
Computer Engineering Technology	CET
Computers in General Studies	CGS
Computer Programming	COP
Computing Theory	COT
Creative Writing	CRW
Criminal Justice Development	CJD
Criminal Justice Technology	CJT
Criminology and Criminal Justice	CCJ
Dance Activities	DAA
Dental Hygiene	DEH
Dental Support	DES
Developmental Psychology	DEP
Dietetic	DIE
Economics	ECO
Education: Early Childhood	EEC
Education: Foundations	EDF
Education: General	EDG
Educational Psychology	EDP
Electronic Engineering Technology	EET
Electronic Specialty Technology	EST
Emergency Medical Services	EMS
Engineering Geographical Science	EGS
Engineering Technology: Civil	ETC
Engineering Technology: Drafting	ETD
Engineering Technology: General	ETG
Engineering Technology: Industrial	ETI
Engineering Technology: Mechanical	ETM
English as a Second Language (for Non-Native Speakers)	ENS
English as a Second Language — Preparatory	ESL
English Composition	ENC
English Literature	ENL
European History	EUH
Film	FIL
Finance	FIN
Fire Fighting and Protection	FFP
Food Science	FOS
Food Service Systems	FSS
French Language	FRE
General Business	GEB
General History	HIS
Geography: Regional Areas	GEO
Geography: Systematic	GEO
Geology	GLY
German and Germanic Languages	GER
Graphic Arts	GRA
Health, Leisure and Physical Education	HLP
Health Science	HSC
Home Economics: Consumer Affairs	COA
Home Economics: Family Development	FAD
Home Management and Equipment	HME
Hotel and Restaurant	HFT
Housing and Home Design	HHH
Humanities	HUM

Human Nutrition	HUN	Physical Education Acts (General) —	
Interdisciplinary Science-Natural	IISC	Water, Snow, Ice	PEN
Interdisciplinary Social Sciences	ISS	Physical Education Acts (Professional) —	
Interdisciplinary Studies	IDS	Object Centered, Land	PEO
Interior Design	IND	Physical Education Theory	PET
International Relations	INR	Physical Science	PSC
Italian Language	ITA	Physics	PHY
Japanese Language	JPN	Physics	PHZ
Journalism	JOU	Political Science	POS
Latin American History	LAH	Precision Metals Trades	PMT
Leisure	LEI	Process Biology	
Library Sciences	LIS	(Cell/Molecular/Ecology/Genetics/Physiology)	PCB
Linguistics	LIN	Psychology	PSY
Literature	LIT	Radiologic Technology	RTE
Management	MAN	Radio-Television	RTV
Management: Applied	MNA	Reading	REA
Marketing	MAR	Real Estate	REE
Marketing Applications	MKA	Religion	REL
Mass Media Communications	MMC	Respiratory Therapy	RET
Mathematics: Algebraic Structures	MAS	Risk Management and Insurance	RMI
Mathematics: Applied	MAP	Russian Language	RUS
Mathematics: Calculus and Precalculus	MAC	Social Psychology	SOP
Mathematics: General	MAT	Sociology, General	SYG
Mathematics: General and Finite	MGF	Spanish Language	SPN
Mathematics: History and Foundations	MHF	Speech Communication	SPC
Mathematics: Technical and Business	MTB	Speech Pathology and Audiology	SPA
Medical Laboratory Technology	MLT	Statistics	STA
Medical Records	MRE	Student Life Skills	SLS
Meteorology	MET	Surveying and Related Areas	SUR
Microbiology	MCB	Tax	TAX
Military Science MIS Modern Hebrew Language	HBR	Theatre	THE
Music	MUS	Theatre Arts	TPP
Music: Brasses	MVB	Theatre Production and Administration	TPA
Music: Church	MUR	Transportation	TRA
Music: Commercial	MUM	Ward Clerk	WCL
Music: Composition	MUC	Zoology	ZOO
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		

COURSE DESCRIPTIONS

COLLEGE CREDIT COURSES IN THIS CATALOG WITH THE (Y) SYMBOL COUNT IN THE ASSOCIATE IN ARTS DEGREE AND ARE GUARANTEED TRANSFERABLE FOR THOSE STUDENTS TRANSFERRING WITH THE ASSOCIATE IN ARTS DEGREE. WHEN A STUDENT TRANSFERS 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 IN THE ASSOCIATE IN ARTS DEGREE. THE TRANSFERABILITY OF THESE COURSES IS DECIDED BY THE RECEIVING TRANSFER INSTITUTION.

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 1003 General Accounting I (Y) 3 cr.

This course is a study of the sole proprietorship form of business organization with an emphasis on the following topics: the accounting cycle, journalizing and posting, deferrals and accruals, adjusting and closing procedures, the worksheet, preparing financial statements and the use of special journals and subsidiary ledgers, an introduction to the voucher system, bank reconciliations and the petty cash fund. The course includes special problems for both a service oriented business and a merchandising concern. The student must satisfactorily complete a practice set. Three contact hours.

ACG 1004 General Accounting II (Y) 3 cr.

Prerequisite: ACG 1003. This course consists of a further study of proprietorship and corporations. Emphasis will be placed on the following topics: inventory valuation, depreciation and fixed asset valuation, payroll accounting, the use of data processing in accounting with an emphasis on internal control and an introduction to partnership and corporate accounting, including the basic characteristics and financial structure of these two business forms. The student must satisfactorily complete a practice set. The satisfactory completion of ACG 1003 and ACG 1004 is equivalent to the completion of ACG 2001. Three contact hours.

ACG 2001 Principles of Accounting I (Y) 4 cr.

This course consists of a study of the sole proprietorship form of business organization with an emphasis on the following topics: the accounting cycle; adjusting, closing and reversing procedures; the worksheet, preparing financial statements, accounting for a merchandising operation, special journals and a study of internal control including the voucher system, petty cash and bank reconciliations. Other topics include payroll, inventory valuation, time value of money, receivables and payables, accounting for non-current assets and an introduction to partnership accounting. Students must satisfactorily complete a practice set. The satisfactory completion of ACG 1003 and ACG 1004 is equivalent to the completion of ACG 2001. Four contact hours.

ACG 2011 Principles of Accounting II (Y) 4 cr.

Prerequisites: ACG 2001 or ACG 1003 and ACG 1004. This course is a continuation of ACG 2001 with coverage of the following topics: accounting for stocks, long-term liabilities, investments, the statement of cash flow and financial statement analysis. The course also covers the study of managerial accounting including job order, process and standard cost systems, variance analysis, budgeting, cost-volume-profit analysis and capital budgeting. In addition, there is an introduction to taxes. Four contact hours.

ACG 2071 Managerial Accounting (Y) 3 cr.

Prerequisite: ACG 2011. This course interprets and analyzes cost in three major areas: (1) planning and controlling routine operations (break-even analysis, job order and process cost systems), (2) inventory valuation and income determination (budgeting and standard

costing), (3) policy making and long-range planning (capital budgeting). Three contact hours.

ACG 2100 Intermediate Accounting I (Y) 3 cr.

Prerequisite: ACG 2011. 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 cr.

Prerequisite: ACG 2100. This course is a continuation of ACG 2100 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 cr.

Prerequisite: ACG 2011. 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.

ACR — Air Conditioning/Refrigeration: Technology

ACR 1000 Introduction to Air Conditioning and Refrigeration 4 cr.

This course teaches refrigeration, heat production, heat transfer and specific heat, temperature pressure chart, pressure relations, silver brazing, soft soldering, flaring and swaging. Eight contact hours (laboratory).

ADV — Advertising

ADV 2000 Advertising (Y) 3 cr.

This basic course, designed to familiarize the student 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 advertisement and produce TV and radio commercials. Three contact hours.

AER — Automotive/Engine Repair

AER 1100 Engines 4 cr.

This course is designed to provide instruction in the repair, diagnosis and tuning of engines, in both classroom and laboratory conditions. Toyota T-Ten training on Toyota engines and training on American built engines will be provided. Eight contact hours: four lecture hours, four laboratory hours.

AER 1310 Automotive Electrical Systems 4 cr.

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. This course will also include the complete Toyota Electrical Mastery Series (Toyota course numbers 622 and 652). Eight contact hours: four lecture hours, four laboratory hours.

AER 1410 Brake Systems 4 cr.

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. In addition, students will receive Toyota T-Ten training in braking systems (Toyota course number 550). Eight contact hours: four lecture hours, four laboratory hours.

AER 1450 Steering and Suspension 4 cr.

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. In addition, students will receive Toyota T-Ten training in suspension systems (Toyota course number 450). Eight contact hours: four lecture hours, four laboratory hours.

AER 1610 Air Conditioning and Heating 4 cr.

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. In addition, students will receive Toyota T-Ten training to include Toyota course no. 726, Toyota Climate Control Systems. Eight contact hours: four lecture hours, four laboratory hours.

AER 2251 Advanced Automatic Transmissions 3 cr.

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. In addition, students will receive Toyota T-Ten training in transmission and drive trains (Toyota course numbers 261, 270 and 305). Six contact hours: three lecture hours, three laboratory hours.

AER 2260 Clutch and Transmission 4 cr.

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. In addition, students will receive Toyota T-Ten training in automatic

and manual transmissions (Toyota course numbers 245 and 301). Eight contact hours: four lecture hours, four laboratory hours.

AER 2311 Advanced Electrical 3 cr.

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. In addition, students will receive Toyota T-Ten training in electrical systems (Toyota course number 672). Six contact hours: three lecture hours, three laboratory hours.

AER 2520 Fuel and Emission Control Systems 4 cr.

Prerequisites: 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. In addition, students will receive Toyota T-Ten training in emission controls, carburetors, fuel injection and engine control systems (Toyota course number 812 and 825). Eight contact hours: four lecture hours, four laboratory hours.

AER 2522 Drivability and Diagnosis 4 cr.

Prerequisite: 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 cr.

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. In addition, students will receive Toyota T-Ten training in fuel injection and import engine controls (Toyota course number 840). Six contact hours: three lecture hours, three laboratory hours.

AMH — American History

AMH 2010 United States History to 1865 (Y) 3 cr.

This course in United States History to 1865 emphasizes the European background, Revolution, Articles of Confederation, the 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.

AMH 2020 United States History From 1865 to the Present (Y) 3 cr.

This course, United States History from 1865 to the present, 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.

AMH 2070 History of Florida (Y) 3 cr.

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 Afro-American History and Culture (From African Origins Through Reconstruction) (Y) 3 cr.

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 Afro-American History and Culture (From World War I to the Present) (Y) 3 cr.

This course is a non-sequential continuation of AMH 2092 with special emphasis on present and projected developments among black people. This course also includes the black people and World War I and II and their aftermath, as well as the roots and manifestation of the Civil Rights and Black Power movements. Three contact hours.

AML — American Literature

AML 2012 American Literature: Colonial Times to 1900 (Y) 3 cr.

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. Three contact hours.

AML 2023 American Literature: 1900 to the Present (Y) 3 cr.

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. Three contact hours.

ANT — Anthropology

ANT 2410 Cultural Anthropology (Y) 3 cr.

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 world wide. Three contact hours.

ANT 2511 Physical Anthropology (Y) 3 cr.

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 2321 Hospitality Accounting Management 3 cr.

Prerequisite: ACG 1003. This course consists of the application of accounting principles and concepts to financial analysis, cost, budgeting and investment of hospitality properties. The course emphasizes controller functions, profit and loss statements, statistical analysis and forecasts. Three contact hours.

ARA — Arabic Language

ARA 1000 Conversational Arabic (Y) 3 cr.

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; the student is 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).

ARH — Art History

ART COURSES (VISUAL ARTS)

Lecture Courses

ARH 1000 Art Appreciation (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on placement test. This course supplies the non-art major 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 cr.

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 cr.

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 cr.

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 cr.

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 cr.

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

ARH 2941 Gallery Practicum (Y) 1 cr.

Prerequisite: ARH 1000 or consent of the instructor. This course offers the student 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 1006C Artists' Tools and Equipment (Y) 1 cr.

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 cr.

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 cr.

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 2955 Fine Art Portfolio (Y) 1 cr.

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

Career Preparation

ART 1831 Art and Business — Studio Planning 1 cr.

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 cr.

This course is designed to instruct students in the organization of an art business. The student 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 cr.

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 art work and how to transport art to exhibitions. One contact hour.

Drawing

ART 1300C Drawing I (Y) 3 cr.

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 cr.

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

STUDIO COURSES

Ceramics

ART 2110C Ceramics: Hand-Building I (Y) 3 cr.

The student will benefit by taking ART 1300C and ART 1201C prior to enrolling in ART 2110C. 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 cr.

Prerequisite: ART 2110C. This course, a continuation of ART 2110C, emphasizes creativity and special problems. The course also includes kiln stacking and firing. Six contact hours: two lecture hours, four studio hours.

ART 2112C Ceramics: Wheel Throwing I (Y) 3 cr.

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 cr.

Prerequisites: ART 2110C, ART 2112C. This course is a continuation of ART 2112C. Emphasis is on perfecting the technique of wheel throwing and on creativity with ceramic sculpture. Six contact hours: two lecture hours, four studio hours.

ART 2115C Glaze Exploration (Y) 3 cr.

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 2230C Communication Graphics (Y) 3 cr.
 Prerequisites: ART 1201C and ART 1300C. This course is an introduction to graphic design and layout. The philosophy, disciplines and attitudes involved in designing communication material will be developed. Emphasis will be on individual creativity. Six contact hours: two lecture hours, four laboratory hours.

ART 2600C Computer Graphics (Y) 3 cr.
 This course explores various existing computer programs for visual communication. Students will gain actual experience of the steps involved in commanding the computer using keyboard and the mouse. The student will produce advertising campaigns using the computer. Six contact hours: two lecture hours, four laboratory hours.

Jewelry

ART 2150C Jewelry Fabrication (Y) 3 cr.
 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 cr.
 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 cr.
 Prerequisites: ART 1201C, ART 1300C, ART 2510C or consent of instructor. This course introduces the art student 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. The student 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 cr.
 Prerequisites: ART 1201C, ART 1300C, ART 1563C, ART 2510C or consent of instructor. A continuation of ART 1563C, this course gives the student 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. Six contact hours: two lecture hours, four laboratory hours.

ART 2510C Painting I (Y) 3 cr.
 Prerequisite: ART 1301C. This course introduces the student to basic oil painting techniques and color theory. Projects designed to lead the student toward more independent concepts, include standard subjects such as

still life, landscape, portrait and figure painting. Six contact hours: two lecture hours, four studio hours.

ART 2520C Painting II (Y) 3 cr.
 Prerequisite: ART 2510C or consent of instructor. This course, a continuation of ART 2510C, 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 each student; however, the course requires a certain specific number of paintings during this semester. Six contact hours: two lecture, four studio hours.

ART 2540C Introduction to Watercolor (Y) 3 cr.
 This course introduces the student 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 cr.
 Prerequisite: ART 2540C. This course continues the investigation of methods and materials begun in ART 2540C, with emphasis again on watercolor technique. Students are encouraged to develop a personal expression with the medium. Six contact hours: two lecture hours, four laboratory hours.

PGY — Photography

PGY 2101C Photography I (Y) 3 cr.
 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. The student must have a 35mm camera or equivalent. Six contact hours: two lecture hours, four laboratory hours.

PGY 2102C Photography II (Y) 3 cr.
 Prerequisite: PGY 2101C. This course, a continuation of PGY 2101C, emphasizes black and white and color processing. Six contact hours: two lecture hours, four laboratory hours.

PGY 2104C Creative Photography (Y) 3 cr.
 Prerequisite: PGY 2101C or portfolio. This is an intermediate level photography course designed to pursue historical, creative and manipulative techniques in alternative methods of photography. Six contact hours: two lecture hours, four laboratory hours.

**ART
 Printmaking**

ART 2400C Printmaking I (Y) 3 cr.
 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 cr.
 Prerequisite: ART 2400C. This course, a continuation of ART 2400, presents a more detailed study of intaglio

materials and techniques. With consent of the instructor, the student may request 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 cr.

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 cr.

Prerequisite: ART 2430C. This course is a continuation of ART 2430C and is designed to develop the student's technical skills in handling advanced art printing processes including photo-silk screening and multi-color registration prints. Six contact hours: two lecture hours, four laboratory hours.

Sculpture

ART 2701C Sculpture I (Y) 3 cr.

This course, designed for the beginning sculpture student, 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 cr.

Prerequisite: ART 2701C or consent of the instructor. This course, a continuation of ART 2701C, explores new and more advanced techniques and materials with individual projects encouraged. The student may repeat this course twice 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 cr.

This course is an introduction to textile processes including silkscreen 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 cr.

This course, an introduction to contemporary and traditional crafts, includes weaving, batik, silk screening, tie dye, block printing and leather crafts. The student may repeat this course for additional credit for up to a combined total of two semesters. Maximum, six semester hours total credit. Six contact hours: two lecture hours, four studio hours.

Weaving

ART 2131C Beginning Weaving (Y) 3 cr.

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 cr.

Prerequisite: ART 2131C, or consent of the instructor. This course supplements beginning weaving and increases the student's 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 cr.

Prerequisites: ART 2131C and ART 2135C or consent of the instructor. This course, designed for the experienced weaver who wants to investigate advanced processes and further skills, emphasizes the aesthetic handling of fibers. Six contact hours: two lecture hours, four studio hours.

ASC — Aeronautical Science

ASC 1010 History of Air Transportation/National Airspace System (Y) 3 cr.

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.

ASC 1210 Aviation Weather (Y) 3 cr.

This course consists of the fundamentals of aviation meteorology and its effects on aircraft and the Air Traffic Control System. Three contact hours.

ASC 1310 Federal Air Regulations/Legislation 3 cr.

This course is designed to familiarize the student 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.

ASC 2110 Advanced Air Navigation 3 cr.

Prerequisite: FAA Private Pilot Certificate. This course is designed for the aviation student who desires 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.

ASH — Asian History

ASH 2005 History of the Far East (Y) 3 cr.

This course consists of the history of the Far East from early modern times with emphasis on China and Japan. Three contact hours.

AST — Astronomy

AST 1002 Introduction to Astronomy (Y) 3 cr.

Corequisite: AST 1022L. The student 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 the student who is going to major in astronomy or other sciences. The student will become acquainted with the solar system with emphasis on the student's own planet and its satellite, the moon. The student 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.

AST 1022L Astronomy Laboratory (Y) 1 cr.

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 observe the moon, planets, stars and other objects and learn to use various types of equipment and simple procedures for obtaining useful astronomical data. If the weather is unfavorable, the instructor will schedule indoor laboratory exercises. Two contact hours (laboratory).

ATF — Aviation Technology Flight

ATF 1000 Basic Flight I 3 cr.

Corequisite: Federal Aviation Administration (FAA) Class III Medical Certificate/Student Pilot License. It is strongly recommended that ATT 1100 (Private Pilot Ground School) be completed prior to starting this course, which consists of off-campus instruction and flight training necessary for the student to accomplish a first solo flight in an airplane. The FCCJ instructor will assist the student in selecting the flight school and will screen the selected school and flight instructor on the student's behalf. The FCCJ instructor will counsel the student on the challenges involved in flight training and will participate in periodic progress checks with the student and flight instructor. In addition, the FCCJ instructor will be available to the student for individual assistance. The cost to the student for the off-campus flight training required to complete this course will be approximately \$600 in addition to FCCJ tuition. The stages the student will progress through in achieving a high degree of flying proficiency in basic flight maneuvers are pre-solo, supervised solo, basic flying techniques and solo practice. Requires FCCJ instructor approval to register. Three contact hours: one lecture hour, two laboratory hours.

ATF 1100 Basic Flight II 3 cr.

This course is a continuation of ATF 1000 and consists of the off-campus instruction and flight training required to complete the FAA Private Pilot Practical Test (Flight Check). At the completion of this course, the student will have earned the FAA Private Pilot's Certificate. The cost to the student for the off-campus flight training required to complete this course will be approximately \$2,000 in addition to FCCJ tuition. The stages the stu-

dent will progress through are pre-solo cross country, solo cross country, private pilot certificate review, advanced night operations and introduction to advanced and precision maneuvers. Requires FCCJ instructor approval to register. Three contact hours: one lecture hour, two laboratory hours.

ATF 1104 Primary Flight 4 cr.

Prerequisites: FAA Student Pilot Certificate, FAA Class III Medical Certificate. Corequisite: ATT 1100. This course consists of the briefing, debriefing, dual flight instruction, simulator instruction and supervised solo flight required in order for the student to obtain the Federal Aviation Administration (FAA) Private Pilot, Airplane Single Engine I and Certificate. The number of flight hours provided during the course is based on the number required by Federal Aviation Regulations. Additional flight time may be required depending on the individual student's aptitude, study habits and calendar time available to complete the course in a timely manner. The actual flight and simulator training is provided by the FAA approved, FAR Part 141 contractor flight school. The actual calendar time required to complete the course will vary based upon both the weather and the individual student's aptitude and study habits. Six contact hours: three lecture/discussion hours, three laboratory hours.

ATF 2200 Instrument Flight (Y) 3 cr.

Prerequisite: FAA Private Pilot's Certificate. It is strongly recommended that ATT 1120 (INSTRUMENT PILOT GROUND SCHOOL) be completed prior to beginning this course, which consists of off-campus instruction and flight training required to achieve the FAA Instrument Rating. The FCCJ instructor's role in this training is the same as ATF 1000. The cost to the student for the off-campus flight training will vary according to the student's total flight hours, but may be substantially reduced by the student taking AIO 0020 Advanced Instrument Training, a non-credit instrument training course utilizing FAA approved ATC-610K Flight Simulators. Twenty hours of this course's simulated instrument flight time may be credited toward the experience requirements of the FAA Instrument Rating with a potential savings of about \$800. The student will learn the instrument rules and procedures required to pass the FAA Instrument Rating Practical Test (Flight Check) and will satisfy the course requirements by obtaining the instrument rating. Requires FCCJ instructor approval to register. Three contact hours: one lecture hour, two laboratory hours.

ATF 2400 Commercial/Instrument Flight 9 cr.

Prerequisites: FAA Class II Medical Certificate, FAA Private Pilot, Airplane Certificate. Corequisite: ATT 1110 and ATT 1120. This course consists of the briefing, debriefing, dual flight instruction, simulator instruction and supervised solo flight required for the student to obtain the Federal Aviation Administration (FAA) Commercial Pilot Airplane Single Certificate with Instrument Rating. The number of flight hours provided during the course is based on the number required by Federal Aviation Regulations (FAR). Additional flight

hours above the FAR minimum may be required, depending on the individual student's aptitude, study habits and calendar time available to complete the course in a timely manner. The flight and simulator training is provided by the FAA approved, FAR Part 141 contractor flight school. The actual calendar time required to complete the course will vary with weather and the individual student's aptitude and study habits. Thirteen contact hours: five lecture/discussion hours, eight laboratory hours.

ATF 2530 Advanced Flight 2 cr.

Prerequisite: ATF 2400. This course consists of the briefing, debriefing, other ground instruction, dual flight instruction and supervised solo flight required for the student to obtain the Federal Aviation Administration (FAA) (Certified Flight Instructor and single engine). The number of flight hours provided during the course is based on the number required by Federal Aviation Regulations (FAR). Additional flight hours above the FAR minimum may be required, depending on the individual student's aptitude, study habits and time available to complete the course in a timely manner. The flight and ground training is provided by the FAA approved FAR Part 141 contractor flight school. The actual calendar time required to complete the course will vary with weather and the individual student's aptitude and study habits. Four contact hours: two lecture/discussion hours, two laboratory hours.

ATT — Aviation Technology Theory

ATT 1100 Private Pilot Ground School 3 cr.

This course, consisting of classroom instruction in preparation for FAA Private Pilot Written Examination, includes 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.

ATT 1110 Commercial Pilot Ground School 3 cr.

Prerequisites: Class II Medical Certificate, 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.

ATT 1120 Instrument Rating Ground School 4 cr.

Prerequisite: FAA Private Pilot Certificate. This course prepares for the FAA Instrument Pilot written examination, 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.

ATT 1810 Environment of the Air

Traffic Controller 3 cr.

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

ATT 2140 Flight Engineer Ground School 3 cr.

Prerequisites: FAA Commercial Pilot Certificate and Instrument Rating. This course, consisting of classroom instruction in preparation for the FAA flight engineer, basic and flight engineer, turbojet written tests, includes regulations, aerodynamics, aviation weather, weight and balance, turbojet engine theory and operation, performance, and aircraft Systems. The FAA flight engineer, basic and flight engineer, turbojet written tests will be offered as options immediately following the course. Three contact hours.

ATT 2150 Airline Transport Pilot Ground School 3 cr.

Prerequisites: FAA Commercial Pilot Certificate and Instrument Rating. This course, consisting of classroom instruction in preparation for the FAA Airline Transport Pilot (Part 121) written test, includes regulations, aviation weather, weight and balance, performance, flight operations, aerodynamics and instrument procedures. The FAA Airline Transport Pilot (Part 121) written test will be offered as an option immediately following the course. Note: Although there are no FAA prerequisites to take the course, the FAA does require applicants for the written test to meet all the requirements for the certificate and to have specific FAA approval to take the test. Among other things, the applicant must have 1,500 hours pilot flight time and a Class I Medical Certificate. Three contact hours.

ATT 2842 Approach Control 3 cr.

This course consists of the study of the operation of an approach control, radar and non-radar separation techniques and the safe and expeditious movement of aircraft within the vicinity of the airport. Three contact hours.

ATT 2843 Air Route Traffic Control Center 3 cr.

This course consists of a study of the operation of an air traffic control center, the radar and non-radar separation techniques and the interface of towers approach controls and other centers. Three contact hours.

ATT 2851 The Flight Service Station 3 cr.

This course presents a study of the operation in a flight service station to include weather observation, air-ground communications and flight planning briefing. Three contact hours.

AVM — Aviation Management

AVM 2941 Facility Internship/Flight Safety 4 cr.

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 ser-

vice 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.

BAN — Banking

BAN 1004 Principles of Bank Operation 3 cr.

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.

BAN 2501 Money and Banking (Y) 3 cr.

Prerequisite: economics (recommended but not required). This course provides the student with the key concepts, theories and processes that link money and banking to the workings of the U.S. economy. The role money and the money supply play 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.

BCN — Building Construction

BCN 1001 Building Construction (Y) 3 cr.

This course introduces the student to materials and methods used in building construction. This course also includes the analysis and evaluation of their adaptation in the construction of residential, commercial and small industrial buildings. Three contact hours.

BCN 2614 Planning and Estimating 3 cr.

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.

BCT — Building Construction Trades

BCT 1001 Quantitative Methods for Building Trades 2 cr.

This course provides the basic mathematical skills necessary for a career in the building trades. While focusing on important industrial applications, this course reviews the fundamental skills that are essential to success in all trades. Two contact hours.

BCT 1042 Construction Cost Estimating 3 cr.

Prerequisite: BCT 1001. This course is a study of the classification of work phases, quantity survey techniques and cost estimating applied to simple construction projects. Three contact hours.

BCT 1043 Blueprint Reading II 2 cr.

Prerequisite: BCT 1113. This course, a continuation of BCT 1113, focuses on heavy commercial and industrial

construction prints. Topics include specifications, topographies, profiles, surveys, maps and plans. Two contact hours.

BCT 1081 Construction Methods and Materials 3 cr.

This course provides an in-depth study of building materials and introduces building terminology and method of construction, with emphasis placed on site work, concrete, masonry, metal, wood, plastic, thermal moisture protection and finishes. The topics presented will focus on characteristics of the materials and products regarding their strength, heat and flow, weathering qualities and how these will affect their use in construction projects. Three contact hours.

BCT 1113 Blueprint Reading I 3 cr.

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

BCT 1114 Concrete Form Construction 3 cr.

Prerequisite: SUR 1101. This course describes the construction and use of various concrete forms employed in building construction. The forms described include concrete footings, slabs, walls, columns, beams and stairs. This course enables the student to gain practical experience in making and setting forms under supervised work conditions. Four contact hours (theory/laboratory).

BCT 1132 Construction I 3 cr.

Prerequisite: BCT 1081. This course is a study of the structure of steel and wood framed buildings, with emphasis on sill, joist, wall, bridging, bracing and sheathing. This course requires classroom and field/site work with construction of full or scale sized models required. Four contact hours: three lecture hours, one laboratory hour.

BCT 1134 Construction II 3 cr.

Prerequisite: BCT 1132. This course, a continuation of Construction I, focuses on roof construction, style, types and combinations. Attention is directed toward rafter and truss construction, sheathing, flashing and finishing through classroom and field work with construction of fullsize or scale models. Four contact hours: three lecture hours, one laboratory hour.

BCT 1710 Energy Efficient Construction 3 cr.

This course provides an overview of energy use in buildings, including the determination of heat loss/gain in buildings, specific construction techniques to control heat loss/gain, passive solar design, and active solar systems. Three contact hours.

BCT 1805 Construction Scheduling 2 cr.

Prerequisite: BCT 1081. This course is a study in the orderly flow of construction projects, through a well planned scheduled approach with emphasis on the CPM, PERT and diagram methods of scheduling. Two contact hours.

BCT 2152 Construction III 3 cr.

Prerequisite: BCT 1134. This course is a continuation of Construction II. The course focuses on exterior finishing methods and presents floor, ceiling, wall, door, window and stair finishes through classroom and field work with construction of full-size or scale models. Four contact hours: three lecture hours, one laboratory hour.

BCT 2153 Construction IV 3 cr.

Prerequisite: BCT 2152. Corequisite: BCT 2804. This course, a continuation of Construction III, focuses on interior finishes and includes instruction in floors, walls, moldings, doors, windows, cabinets and stairs. Four contact hours: three lecture hours, one laboratory hour.

BCT 2804 Construction Contracting 2 cr.

Corequisite: BCT 2153. This course is an in-depth study of the contractual relationship between the parties involved in building construction contracting. This course describes and identifies specifications, bonds, insurance, bidding, awarding and subcontracting types and conditions. Two contact hours.

BOT — Botany**BOT 1010C Botany (Y)** 4 cr.

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 cr.

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.

BRC — Banking:Related Courses**BRC 1504 Credit and Collections** 3 cr.

This course stresses the practical aspect of credit and collections. Emphasis is placed on the role of the collector, the tools of collections and collection approaches. Such problems as the legal aspects of collections and causes of temporary and chronic delinquency are covered. Theory needed by students to administer the full spectrum of collection activities while simultaneously maintaining good customer relations is addressed. Three contact hours.

BRC 2301 Foundation and Structure of Credit Unions (Y) 3 cr.

This course contains the historical background and philosophy of the credit union movement and clearly portrays the structure and function of the credit union. The course emphasizes the need for ethical patterns and behavior, and examines the relationships in the credit union and professionalism. Three contact hours.

BSC — Biological Science Introductory**BSC 1005 Life in Its Biological Environment (Y)** 3 cr.

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

BSC 1005L Biology Lab (Y) 1 cr.

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

BSC 2010C Principles of Biology I (Y) 4 cr.

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.

BSC 2011C Principles of Biology II (Y) 4 cr.

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

BSC 2085C Human Anatomy and Physiology I (Y) 3 cr.

The student will benefit by taking CHM 1032C, BSC 1005, BSC 2011C, ZOO 1010C or high school chemistry prior to enrolling in BSC 2085C. 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 cr.

Prerequisite: BSC 2085C. A continuation of BSC 2085C. 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 cr.

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 cr.

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 cr.

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 cr.

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.

BUL 2242 Business Law II (Y) 3 cr.

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 cr.

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. Three contact hours.

CCJ 1020 Introduction to Criminal Justice (Y) 3 cr.

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

CCJ 1030 Man, Crime and Society (Y) 3 cr.

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 cr.

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 cr.

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 cr.

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. Three contact hours.

CCJ 1401 Police Operations 3 cr.

This course teaches the theory and methods of police operations. The course includes information concerning the structure, function and process of the patrol unit, the traffic administration unit, the criminal investigations unit, the intelligence and vice units and the juvenile investigation unit. Three contact hours.

CCJ 2230 Criminal Evidence and Procedure (Y) 3 cr.

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 cr.

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 cr.

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 cr.

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 cr.

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 2500 Juvenile Delinquency (Y) 3 cr.

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 2930 Special Topics/Seminars Criminology (Y) 3 cr.

Each student in this course chooses 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 cr.

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 2500 Introduction to Data Communications 3 cr.**

Prerequisite: CGS 1060. This course will provide the student with the basic concepts of data communications. It will cover such topics as transmission media, modulation techniques, link control, line protocols, transmission impairments and local area networks. Lab work will include setting up communication software parameters, null modem file transfer and establishing a bulletin board. Four contact hours: three lecture hours, one laboratory hour.

CDA 2502 Computer Networks (Y) 3 cr.

Prerequisite: CGS 1060. The student will study Local Area Networks (LANs), Wide Area Networks (WANs), PC to mainframe connections, LANs gatewayed to mainframe hosts and other distributed systems. Hands on experience in generating and maintaining a LAN will be an integral part of the course. The skills taught in this course include those of a network administrator. Four contact hours: three lecture hours, one laboratory hour.

CET — Computer Engineering Technology**CET 1114 Digital Fundamentals (Y) 4 cr.**

Prerequisite: EET 1035. This is an introductory course covering basic digital concepts, devices and circuits found in modern digital and computerized equipment. Five contact hours: three lecture hours, two laboratory hours.

CET 2123 Microprocessor Fundamentals (Y) 4 cr.

Prerequisite: CET 1114. This course is intended for the technician 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.

Five contact hours: three lecture hours, two laboratory hours.

CET 2173 Microcomputer Systems Troubleshooting (Y) 3 cr.

Prerequisite: CET 2123. 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 cr.

Prerequisite: CGS 1060. This course is intended for nonelectronics 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.

CET 2901 Projects in Computer Systems (Y) 2 cr.

Prerequisite: CET 2173. Corequisite: CET 2941. This course should be taken during the student's last term in the program and enrollment requires consent from either the professor or the program manager. It is a non-lecture course wherein the student is expected to complete a major computer-related project under the supervision of a professor. The project must be approved in advance and all projects built with College funds will remain College property. When warranted by the size of the project, students will be allowed to work in teams. A minimum of four hours per week must be spent on the project and the student must demonstrate that the completed system performs satisfactorily. Four contact hours (laboratory).

CET 2941 Computer Maintenance Practicum (Y) 2 cr.

Prerequisite: CET 2173. Corequisite: CET 2901. This course should be taken during the student's last term in the program and enrollment requires consent from the program manager. It is a non-lecture course wherein the student performs 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 1000 Microcomputers in Business: A Survey (Y) 3 cr.**

This course is an indoctrination for users and/or operators who will apply microcomputers to transaction processing, accounting, operations and financial reporting in business situations. The course provides lab experience with actual microcomputers and application packages. Experience is provided in which microcomputers

are used as a stand alone business tool, as intelligent terminals within distributed processing systems and as executive tools for databased decision support. Four contact hours: three lecture hours, one laboratory hour.

CGS 1060 Introductory Computer Concepts (Y) 3 cr.

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.

CGS 1061 Introduction to IBM Personal Computers and DOS 1 cr.

This five-week course is aimed at individuals who wish to master use of personal computers for personal productivity and enjoyment. The course is directed toward novices, first time owners of personal computers and persons who would like to learn more about their computer. Covered in the course are topics such as care and handling of hardware and peripherals, the disk operating system and its utilities, programming in BASIC language and word processing. The course is oriented toward use of the IBM PC and IBM XT computers. Four contact hours: three lecture hours, one laboratory hour.

CGS 1062 Introduction to Midrange Computer Systems (Y) 3 cr.

Prerequisite: CGS 1060. This course is designed as an introduction to midrange computer systems with major emphasis on the IBM AS/400. Introduction to such topics as 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 1510 Introduction to Spreadsheet Concepts 1 cr.

This course is designed for individuals who wish to master and use software for spreadsheet operations. The course is directed toward novices, first time owners of personal or business computers and persons who would like to learn more about spreadsheet software. Covered in the course are topics such as the history and development of spreadsheet software, spreadsheet design and construction, and the command set for construction of business spreadsheets. Twenty contact hours.

CGS 1511 Advanced Spreadsheet Concepts 2 cr.

Prerequisites: CGS 1510 or demonstrated experience with spreadsheet software. This course is designed for individuals who wish to build on their prior knowledge of spreadsheet operations with such advanced topics as spreadsheet database, graphics and macros. The course is directed toward executive secretaries, administrative assistants, managers and executives with the need to perform spreadsheet activities with financial

applications. Activities in the course include constructing advanced financial spreadsheets, printing graphs from spreadsheets, searching and sorting spreadsheet databases and automating spreadsheet operations with macro programs. Forty contact hours.

CGS 1540 Introduction to Database Concepts 1 cr.

This five-week course introduces individuals to basic models and capabilities of standard database management systems packages. Database roles and advantages will be explained. Experience within this course is centered around database programs that run on microcomputers. A series of database application projects 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 1541 Advanced Database Concepts (Y) 2 cr.

Prerequisite: CGS 1540 or working knowledge of database software. This 10-week course provides individuals with basic models and capabilities of standard database management systems packages. Database roles and advantages will be explained. Experience within this course is centered around database programs that run on a microcomputer. A series of database application projects is designed to build familiarity with creating, loading, maintaining and updating the database. Conducting database queries and building database reports are covered. This course includes programming in a fourth generation database language. Projects in the course relate to construction of integrated business systems. Four contact hours: three lecture hours, one laboratory hour.

CGS 1570 Microcomputer Application Software (Y) 3 cr.

Prerequisite: knowledge of the keyboard recommended. This course is intended for students with no previous experience in data processing. It orients the student to DOS, word processing software, electronic spreadsheet software, database software and business graphics software to solve common problems of the automated office. Four contact hours: three lecture hours, one laboratory hours.

CGS 1571 Management Overview of Microcomputer Software 1 cr.

This five-week course is designed for management personnel who wish to gain an overview and experience with the kinds of software which can increase productivity in the business environment. The topical coverage includes word processing, electronic spreadsheets, database management systems, business graphics, project management and communications software. No previous experience with computers is necessary. Emphasis is placed on reviewing, evaluating and discussing theoretical applications of software. Course participants will gain the knowledge and ability to select microcomputer software for business applications. Four contact hours: two lecture hours, two laboratory hours.

CGS 1580 Introduction to Desktop Publishing (Y)**3 cr.**

Recommended prerequisite: working knowledge of IBM or Macintosh microcomputers or compatibles and experience with word processing software. This course is designed for persons who wish to develop desktop publishing skills. Persons 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 2020 Computer Concepts (Y)**3 cr.**

This course is an introduction to the computer. The course teaches computer literacy, emphasizing concepts of hardware and software. The course includes a survey of the central processing unit and its functional component, auxiliary storage devices and functions, input and output units, the program development process, programming languages, operating systems and data communications. The course includes a demonstration of programming in machine language. Three contact hours.

CGS 2100 Advanced Microcomputer Business Applications (Y)**3 cr.**

Prerequisites: CGS 2020 and CGS 1570, or equivalent work experience and ACG 2001, or equivalent work experience. This course is a skill development course in which students will process transactions, build files, maintain files and produce outputs on microcomputers. Students work with software packages and input documents from which applications are implemented. Specific application instruction includes order entry, invoicing, accounts receivable, payables, purchasing, financial reporting and projections using spreadsheets. Four contact hours: three lecture hours, one laboratory hour.

CGS 2470 Computer Aided Drafting and Design (Y)**3 cr.**

Prerequisite: ETD 1100. This course provides a student with a general understanding of Computer Aided Drafting and Design (CADD) operations. The student will acquire a working knowledge of steps required for initializing commands to the CADD system using the keyboard and the stylus. The student 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**3 cr.**

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 persons 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 applications. Also covered are spreadsheet graphics, spreadsheet database and spreadsheet automation. The course requires use of the IBM personal computers or compatibles. Four contact hours: three lecture hours, one laboratory hour.

CGS 2525 Professional Presentations Using Technology**3 cr.**

Prerequisites: CGS 1060, CGS 1570, or working knowledge of computers. This course is designed for the individual who would like to learn to use technology to enhance presentations. 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 will also be explored. Course content will place emphasis on audience reaction to a presentation. Four contact hours: three lecture hours, one laboratory hour.

CGS 2542 Database Concepts for Microcomputers (Y)**3 cr.**

Prerequisites: CGS 1060 or CGS 1570. Suggested prerequisite: COP 1000. This course is aimed at familiarizing individuals with the roles and advantages of databases. A series of database application projects on microcomputers is designed to build familiarity with creating, loading, maintaining and updating the database. Conducting database queries and building database reports are covered. The course includes an introduction to programming in a database language. Four contact hours: three lecture hours, one laboratory hour.

CHD — Child Development**CHD 1110 Infant and Toddler Care I (Development)****3 cr.**

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 (Y)**3 cr.**

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.

CHD 1710 Child Growth and Development II (Y) 3 cr.

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 cr.

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, 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 cr.

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; the student is 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 cr.

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 cr.

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

CHM — Chemistry

CHM 1020 Chemistry for Liberal Arts (Y) 3 cr.

The student 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 the non-science major, is designed especially for the student who wishes 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 cr.

Prerequisite: MAT 1033 or satisfactory score on the 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 cr.

Corequisite: MAT 1033 or satisfactory score on the placement test. The student 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 1045C General Chemistry and Qualitative Analysis I (Y) 4 cr.

Prerequisite: CHM 1025C or CHM 1032C or satisfactory score on the American Chemical Society (ACS) placement test. This course, designed to introduce the student 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.

CHM 1046C General Chemistry and Qualitative Analysis II (Y) 4 cr.

Prerequisite: Grade of "C" or better in CHM 1045C. This course, a continuation of CHM 1045C, 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 cr.

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 cr.

Prerequisite: CHM 1046C 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 cr.

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

CIS — Computer and Information Systems

CIS 2300 Command-Level CICS Programming 3 cr.

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 cr.

Prerequisite: COP 2540 or CGS 2542. 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 3 cr.

Prerequisites: CGS 1060 or CGS 1570. This course will present a host of skills critical to the success of an integrated systems specialist. They will include installing and evaluating software and hardware, dealing with printer problems, computer security issues, disaster preparedness, hard disk administration, writing RFPs, and training and supporting end-users. Four contact hours: three lecture hours, one laboratory hour.

CIS 2410 Midrange Operations and Management (Y) 3 cr.

Prerequisites: COP 2160, COP 1700 and CDA 2502. This is a capstone course designed to provide the student 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 cr.

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. May be repeated for credit. Four contact hours: three lecture hours, one laboratory hour.

CIS 2931 Special Topics In CIS 1 cr.

Prerequisite: Depends on topic. Corequisite: Depends on topic. The open-format of this course provides an opportunity to address various individual topics related to CIS curriculum or DP industry need. May be repeated for credit. Twenty contact hours.

CJD — Criminal Justice Development

CJD 2310 Police Supervision 3 cr.

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 cr.

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.

COA — Home Economics: Consumer Affairs

COA 1100 Consumer Decisions (Y) 3 cr.

This course studies practical money management applied to the family with emphasis on expenditures for food, clothing, housing, transportation and health care. The course includes a study of credit, retirement, taxes, consumer protection and the consumer movement. Three contact hours.

COP — Computer Programming

COP 1000 Introduction to Programming and Algorithm Design (Y) 3 cr.

Corequisite: CGS 1060. 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 1341 Introduction to UNIX Operating System 2 cr.

This 10-week course requires substantial lab time on microcomputers to learn about and apply the UNIX operating system functions and commands that are nec-

essary 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 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 1700 Database Concepts and Design AS/400 (Y) 3 cr.

Prerequisite: CGS 1060. Corequisite: CGS 1062. 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 2120 COBOL Programming (Y) 3 cr.

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.

COP 2121 Advanced COBOL Programming (Y) 3 cr.

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.

COP 2160 RPG Programming AS/400 3 cr.

Prerequisite: COP 1000. Recommended corequisite: CGS 1062. The 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. The 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 cr.

Prerequisite: COP 2160. This course is a continuation of COP 2160, Introduction to RPG. In this course, the student 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 2170 Programming in BASIC (Y) 3 cr.

Prerequisites: CGS 1060 and one of the following, MTB 1321, COP 1000 or MAT 1033. This beginning level computer course uses the BASIC (Beginner's All-purpose Symbolic Instruction Code) language in an interactive environment. Students will solve a variety of problems drawn from the areas of business, engineering mathematics and simulation. Four contact hours: three lecture hours, one laboratory hour.

COP 2200 FORTRAN Programming (Y) 3 cr.

Prerequisites: CGS 1060 and one of the following, MTB 1321, COT 1000 or MAT 1033. This is a comprehensive study of a scientific programming language which is also used in business applications in batched-job processing environments. File manipulation, including disk, files and efficient programming techniques, interactive programming and simulation are emphasized. Lab problems will include business, engineering and scientific applications. Four contact hours: three lecture hours, one laboratory hour.

COP 2210 Introduction to Pascal Programming (Y) 3 cr.

Prerequisites: COP 1000; or CGS 1060 and MAT 1033. This course will instruct the student in the fundamentals of Pascal program development including: algorithm design, program definition, coding, testing and debugging. Modularity will be learned, using programmer-defined functions and procedures. Pascal was designed to be easily learned and read and to encourage structured programming. It contains numerous data types and control structures and is adaptable to different computers. Students will develop Pascal programs to solve real world problems. Four contact hours: three lecture hours, one laboratory hour.

COP 2220 Introduction to C Programming (Y) 3 cr.

Prerequisite: COP 1000. This course will instruct the student 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 microcomputer 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 2400 Basic Assembly Language Programming (Y) 3 cr.

Prerequisites: CGS 1060 and COT 1000. This course introduces basic concepts in computer programming using a low level, machine-oriented language. It may also be referred to as BAL/360-370 programming, Introductory ALC or Beginning ALP. Students will analyze business problems involving sequential files, develop logic flowcharts, translate flowcharts into IBM System 360-370 DOS Assembler Language Codes, incorporate job control statements to form a job deck, and test, debug, and document their computer solutions to business problems. Four contact hours: three lecture hours, one laboratory hour.

COP 2540 Data Management and Job Control Language (Y) 3 cr.

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 2610 Advanced Computing and Programming Systems (Y) 3 cr.

Prerequisite: COP 2120 and proficiency in computer programming. This course is designed to help students with programming experience to write more efficient programs through a closer examination of hardware and system software. Topics include computer architectures, operating systems, language translators and data communication/ teleprocessing. Four contact hours: three lecture hours, one laboratory hour.

COP 2612 Microcomputer Operating Systems Concepts (Y) 3 cr.

Prerequisites: CGS 1060 or 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.

COT — Computing Theory**COT 1000 Data Processing Mathematics (Y)** 3 cr.

Prerequisites: COP 1000, CGS 1060 and MAT 0002 or satisfactory score on mathematics placement test. This is a foundation course for computer and information system majors. Topics include binary, octal and hexadecimal 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.

CPO — Comparative Politics**CPO 2002 Introduction to Comparative Government (Y)** 3 cr.

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 cr.

Prerequisite: ENC 1102. This course develops the student's capacity for imaginative writing in prose and/or poetry. The course includes critical discussion of student's work and of selected literary techniques and individual conferences. Three contact hours.

CTE — Clothing and Textiles**CTE 1310 Basic Clothing Construction (Y)** 3 cr.

This course includes the selection and use of commercial patterns, simple alterations, selection, use and care of modern sewing and pressing equipment, planning and construction of garments, and developing 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 cr.

Prerequisite: CTE 1310. This course presents to the participant the problems encountered in fitted garments construction. The student 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 cr.

Prerequisite: CTE 1310 or the equivalent. This course, designed for the student who is interested in creating individual fashions which meet the student's 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 cr.

This course, a study of fabrics used for clothing and house 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 3 cr.

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 cr.

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 cr.

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 cr.

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 cr.

This course provides the student 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 1856 Retail Salesmanship (Y) 3 cr.

This course provides students with an in-depth understanding of the personal selling process as it specifically relates to fashion merchandising sales. Emphasis will be on successful personal selling techniques, multiple and suggestive selling, and personal service, as they relate to the merchandising of clothing apparel and accessories. Three contact hours.

CTE 2200 Wardrobe Planning and Updating (Y) 3 cr.

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 2743 Pattern Drafting for Fashion Design (Y) 3 cr.

Prerequisite: CTE 1340. This course is intended for students with prior experience in clothing construction who are interested in designing garments. Major con-

cepts 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 cr.

Prerequisite: CTE 1340. 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 2831 Retail Computer Applications (Y) 3 cr.

This course is an examination of the advantages and techniques of computer use in retailing. Emphasis is placed on the applications of computer generated information as a management tool. Three contact hours.

CTE 2851 Sales Promotion (Y) 3 cr.

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 Visual Merchandising (Y) 3 cr.

This course is designed to provide students with technical and practical knowledge needed to create effective merchandise displays. While themes and techniques change regularly, students will learn basics and fundamentals that can be readily adapted to multiple situations. Practical experience in using various types of equipment is an integral part of this course. Three contact hours.

CTE 2853 Fashion Show Production 3 cr.

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 cr.

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 Retail Merchandising Internship (Y) 8 cr.

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 prac-

tically apply knowledge gained in the prerequisite courses. On-site visitations will be made by the instructor to monitor student progress and performance. Additionally, each student 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.

DAA — Dance Activities

DAA 1340 Folk Dance (Y) 1 cr.

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 cr.

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).

DEH — Dental Hygiene

DEH 1003C Principles of Dental Hygiene 5 cr.

This course, offered during the student's first term of the first year of clinical studies, is a basic introductory course to teach the theories and practices in dental hygiene and is a prerequisite to Clinical Dental Hygiene I. Through lectures, demonstrations, laboratory and clinical experiences and task assignments, the student gains knowledge and comprehension of dental hygiene services and a proficiency in coordination in technical skills necessary to prepare the student to begin preventive periodontic patient services the following semester. Eight contact hours: two lecture hours, six laboratory hours.

DEH 1800C Clinical Dental Hygiene I 6 cr.

Prerequisite: DEH 1003C. This course is a continuation of the Principles of Dental Hygiene. It is a didactic and clinical course comprised of lectures, laboratory exercises and actual clinical experience on patients. The purpose of this course is to provide the 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. This course will also include CPR. Ten contact hours: two lecture hours, eight clinical hours.

DEH 1802C Clinical Dental Hygiene II 8 cr.

Prerequisite: DEH 1800C. This course, a continuation of the practical application of the competencies and skills acquired in DEH 1003C Principles of Dental Hygiene and DEH 1800C Clinical Dental Hygiene I, devotes time to providing oral prophylaxis care for patients who present varying classifications 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. Fourteen contact hours: two lecture hours, twelve clinical hours.

DEH 2507C Dental Hygienists Expanded Duties 2 cr.

This course, designed to teach the 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 cr.

This course, designed to give the student 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 and Preventive Dentistry 3 cr.

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 the handicapped will be utilized. Four contact hours: two lecture hours; two field hours.

DEH 2804C Clinical Dental Hygiene III 8 cr.

Prerequisite: DEH 1802C. This course, a continuation of DEH 1802C, 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. The student should achieve an advanced level degree of proficiency. Fourteen contact hours: two lecture hour, twelve clinic hours.

DEH 2806C Clinical Dental Hygiene IV 8 cr.

This course is a continuation in refinement of practical application of the competencies and the proficiencies in skills learned in all the past clinical didactic courses. Emphasis is on speed and quality improvement and upon exposure to community dentistry participating in offices of general dentists, dental specialties and hospital dentistry. The student should achieve an exit level degree of proficiency. Fifteen contact hours: one lecture hour, fourteen clinic hours.

DEH 2930 Dental Hygiene Seminar I 2 cr.

This course, designed to provide a more comprehensive content coverage in all specialties of dentistry, enables the dental hygiene student to become more cognizant of techniques and procedures in dentistry outside the parameters of dental hygiene. The course consists of discussions designed to assist the dental hygiene student to understand and appreciate the several aspects of dentistry to which dental hygiene services are closely allied. Two contact hours.

DEH 2931 Dental Hygiene Seminar II 2 cr.

Prerequisite: DEH 2930. A continuation of DEH 2930, this course is designed to provide a study of professional ethics and commitments, professional organizations, state dental practice acts and practical consideration of methods and problems associated with operating and maintaining a dental practice, emphasizing the dental hygiene student's role as a professional person in the community, in private practice, and as an integral part of the dental auxiliary team. Two contact hours.

DEP — Developmental Psychology

DEP 2004 Human Growth and Development (Y) 3 cr.

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.

DEP 2102 Child Psychology (Y) 3 cr.

Prerequisite: PSY 1012. This course consists of a developmental study of the normal child 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.

DEP 2302 Adolescent Psychology (Y) 3 cr.

Prerequisite: PSY 1012. This course consists of the study of human development in the adolescent years with emphasis on psychological problems. Three contact hours.

DEP 2401 Adult Psychology (Y) 3 cr.

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 1020C Oral Development 3 cr.

This course is a comprehensive study of head and neck anatomy, physiology and histology. Laboratory sessions will be coordinated to include the study of the human dentition and surrounding tissues. Four contact hours: two lecture hours, two laboratory hours.

DES 1100C Dental Materials and Laboratory 3 cr.

This course is a series of lecture-demonstrations designed to acquaint the dental assistant/dental hygiene students with the nomenclature, proper manipulation and application of the materials used in the laboratory and clinical practice of dentistry. The course also considers the procedures for purchasing and storage of supplies. Four contact hours: two lecture hours, two laboratory hours.

DES 1220C Dental Radiology 3 cr.

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 intraoral and extra-oral. It 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 cr.

This course gives the student 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 2 cr.

This course gives the student 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 1100 Dietetic Seminar 1 cr.

This course includes a study of the role of dietetic personnel in health care food systems. This course also includes assigned problems in organization and management of dietary departments and trends in methods of food service in health care facilities. One contact hour.

DIE 1201 Clinical Nutrition, Phase II 3 cr.

The student 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 (Y) 3 cr.

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 2270 Clinical Nutrition, Practicum I Lab/Clinical (Y) 3 cr.

Prerequisite: DIE 1201. This course is a continuation of DIE 1201, 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 (Y) 3 cr.

Prerequisite: DIE 2270. Corequisite: DIE 1100. 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 cr.

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.

ECO 2023 Principles of Economics II (Y) 3 cr.

Prerequisite: ECO 2013 or consent of professor. This course in microeconomics is a continuation of ECO 2013 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.

EDF — Education Foundations

EDF 1005 Introduction to Education (Y) 3 cr.

This introductory course in education assists the student in understanding the American educational system in terms of its development and its present organization. The student is introduced to the problems and the rewards of the profession. Three contact hours.

EDG — Education General

EDG 2940 Observing and Recording Child Behavior (Y) 6 cr.

Prerequisites: CHD 1220 and EEC 1001. This course is designed for students to observe, record and analyze young children's behavior and pre-school settings. The course includes a two-hour seminar and eight hours of supervised experiences weekly, 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 (Y) 6 cr.

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 cr.

Prerequisite: PSY 1012. This course consists of an in-depth study of the relationships between sound psychology and educational process which will lead to the establishment of proper teaching techniques and to the understanding of personality dynamics of students. Three contact hours.

EEC — Education: Early Childhood

EEC 1001 Introduction to Early Childhood Education (Y) 3 cr.

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 cr.

Prerequisite: EEC 1001. This course acquaints the student 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 the child care teacher 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 cr.

Prerequisite: EEC 1001. This course acquaints the student 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 Child Care Worker Training Course and is useful for CDA (Child Development Associate) documentation. Three contact hours.

EET — Electronic Engineering Technology

EET 1035 DC/AC Fundamentals (Y) 4 cr.

Corequisite: MAC 1140. This is the first course in the electronics sequence and consists of the introduction to the concepts, laws and definitions encountered in DC and AC electric circuits. It combines laboratory and classroom work. Five contact hours: three lecture hours, two laboratory hours.

EET 1037 DC/AC Network Analysis 3 cr.

Prerequisites: EET 1035 and MAC 1140. Corequisite: MAC 1114. This is a non-laboratory course covering 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. Three contact hours.

EET 1144 Solid-State Devices (Y) 4 cr.

Prerequisite: EET 1035. 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. Five contact hours: three lecture hours, two laboratory hours.

EET 2147 Solid-State Analog Circuit**Analysis (Y)** **3 cr.**

Prerequisites: EET 1037 and EET 1144. Mathematical and functional analysis of the solid-state circuits encountered in present day electronic equipment is the main concern 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 I **3 cr.**

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

EET 2326 Communications Electronics II **3 cr.**

Prerequisite: EET 2324. This course, a continuation of a two-course sequence in communications electronics, includes the transmission and radiation of signals, transmission lines and antennas, telephone and video systems, and digital communications systems. Four contact hours: three lecture hours, one laboratory hour.

EET 2571 Marine Electrical Systems Design **3 cr.**

Prerequisite: EET 1037. The course deals with the design aspects of electrical power generation and distribution systems, as applied to ships, including standard power demand sub-systems. The basic underlying theory and principles are presented together with current drafting and design practices. Four contact hours: two lecture hours, two laboratory hours.

EET 2940 Biomedical Practicum **3 cr.**

Prerequisites: EET 2147, EST 2112 and EST 2436. This course, designed to provide the student with the essential electronic troubleshooting and clinical skills necessary to function as a competent biomedical equipment technician in a hospital setting, 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.

EGS — Engineering Geographical Science**EGS 1130 Descriptive Geometry (Y)** **3 cr.**

Prerequisite: ETD 1100. The course consists of theory and practice in solving graphic problems involving point, line and space relationships. Four contact hours: two lecture hours, two laboratory hours.

EMS — Emergency Medical Services**EMS 1059 First Responders: Emergency Care Training** **3 cr.**

Designed specifically for the non-medical person who wishes to learn basic life saving skills, this course provides the student with basic skills necessary to save a

life, minimize patient discomfort and prevent further injury. Upon successful completion of this course, one is qualified in basic life support and prepared to enter EMS 1119, 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. Three contact hours: two lecture hours, one laboratory hour.

EMS 1119 Fundamentals of Emergency Medical Care **6 cr.**

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

EMS 1401 Fundamentals of Emergency Medical Care Clinical Experience **3 cr.**

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. Six contact hours: one clinical hour, four laboratory hours, one rescue field experience hour.

EMS 2271 EMT-Paramedic Phase I **6 cr.**

Prerequisites: EMS 1119, EMS 1401, BSC 2085C and MAT 0024 or min. 13 on MAPS test. Corequisites: EMS 2271L and BSC 2086C. 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. Six contact hours.

EMS 2271L EMT-Paramedic Phase I Lab/Clinical **5 cr.**

Prerequisites: EMS 1119, EMS 1401, BSC 2085C and MAT 0024 or place into MAT 1033 based on MAPS 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 EMS 2271. Thirteen contact hours: four laboratory hours, six clinical hours, three rescue field experience hours.

EMS 2272 EMT-Paramedic Phase II **6 cr.**

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

EMS 2272L EMT-Paramedic Phase II 5 cr.
Lab/Clinical

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

EMS 2273 EMT-Paramedic Phase III 4 cr.

Prerequisites: EMS 2272 and EMS 2272L.
Corequisite: EMS 2273 L. The last part of the three term sequences of EMTParamedic instruction includes soft tissue injuries, musculoskeletal system, medical emergencies, psychological emergencies, extrication/rescue techniques, and pediatric and neonate transport. Four contact hours.

EMS 2273L EMT-Paramedic Phase III 7 cr.
Lab/Clinical

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. Fourteen contact hours: two laboratory hours, twelve clinical hours.

EMS 2311 Management of Emergency Medical Services 3 cr.

Prerequisites: EMS 2273, EMS 2273L and MAN 2021. This course is designed to prepare managers in the EMS profession. Topics covered include leadership and administrative skills, legal issues, budgeting and personnel management. Three contact hours.

EMS 2761 Emergency Medical Services Education 3 cr.

Prerequisites: EDP 2002, 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 cr.
(College Preparatory Studies course)

(This course does not apply toward the associate's degree)
Prerequisite: MAPS Score of nine or below. 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, the student should be able to write clear, adequately-developed, logically-organized, effective sentences which conform to the conventions of standard American English. Four contact hours.

ENC 0011 Introduction to Composition B 4 cr.
(College Preparatory Studies course)

(This course does not apply toward the associate's degree)
Prerequisite: ENC 0001 or MAPS Score of 10 or above. 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, the student should be able to write clear, adequately-developed, logically-organized, effective paragraphs which conform to the conventions of standard American English. Four contact hours.

ENC 1101 English Composition I (Y) 3 cr.

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, on logical and imaginative thinking and on 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.

ENC 1102 English Composition II (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. As a continuation of ENC 1101, 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 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. As additional preparation for argumentation and research, this course sharpens the student's critical thinking skills and improves his/her 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. Thus, it is advised that successful completers of ENC 1102 should not enroll in this course. Three contact hours.

ENC 2210 Technical Report Writing (Y) 3 cr.

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 places stress on 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.

ENC 2260 Advanced Skills in Communications (Y) 1 cr.

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, for students who are retaking CLAST and for students who are seeking a refresher course in communications skills. One contact hour.

ENC 2301 Advanced Writing (Y) 3 cr.

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. This course is not a creative writing course. Three contact hours.

ENL — English Literature

ENL 2013 English Literature to 1798 (Y) 3 cr.

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. Three contact hours.

ENL 2023 English Literature Since 1798 (Y) 3 cr.

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. Three contact hours.

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

ENS 1201 ESL Speech Level II (Y) 3 cr.

Prerequisites: 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 usage of correct structure and phonetic patterns in oral/aural communication. 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. Three contact hours.

ENS 1221 ESL Reading Level II (Y) 3 cr.

Prerequisites: 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. It will 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 cr.

Prerequisites: 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 begin writing simple sentences, combining sentences and developing dictation skills. Practice will include spelling and punctuation. Students will then focus upon paragraph unity with practice in identifying and writing specific types of paragraph development. Three contact hours.

ENS 1261 ESL Structure Level II (Y) 3 cr.

Prerequisites: 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 inflected forms. Activities will involve oral and written exercises in sentence transformation, communicative interaction, controlled responses and dictation. Three contact hours.

ENS 1281 ESL Combined Skills Level II (Y) 3 cr.

Prerequisites: 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. The students will participate in learning activities which promote spontaneous use of language in oral and written form. The 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 student's own culture as well as the understanding of American values and customs. Three contact hours.

ENS 1301 ESL Speech Level III (Y) 3 cr.

Prerequisites: 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 focus on purposeful and organized listening and speaking skills. 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 cr.

Prerequisites: 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 the students in comprehension techniques but also will give instruction in various aspects of American culture. Various library exercises will introduce the students to the campus library and teach them how to use the resources. Three contact hours.

ENS 1341 ESL Writing Level III (Y) 3 cr.

Prerequisites: Writing sample at Level III or successful completion of ENS 1241. Corequisites: ENS 1301, ENS 1321, ENS 1361 and ENS 1381. This course reviews the various paragraph types. Students complete original paragraphs of narration, description, argumentation and exposition utilizing their own vocabulary and main ideas and meeting the requirements of standard American English. The students also begin to explore the structure of the expository essay. Three contact hours.

ENS 1361 ESL Structure Level III (Y) 3 cr.

Prerequisites: Writing sample at Level III or successful completion of ENS 1261. Corequisites: ENS 1301, ENS 1321, ENS 1341 and ENS 1381. This course focuses on using advanced grammatical patterns in the context of realistic situations. Students will review verb tenses and be able to perform written and oral transformations of complex English structure patterns. Three contact hours.

ENS 1381 ESL Combined Skills Level III (Y) 3 cr.

Prerequisites: 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. The students will participate in learning activities which promote spontaneous use of language in oral and written form. The 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 student's own culture 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 cr.
(College Preparatory Studies course)**

(This course does not apply toward the associate's degree.)
Prerequisites: 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 (ones not part of the native language), stress, intonation and rhythm in spoken English. The lesson units serve as a guide to help students use auditory distinctions and articulatory patterns important for understanding and being understood. Three contact hours.

**ESL 0121 ESL Reading Level I 3 cr.
(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 minimum 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 cr.
(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 brief journal entries and short narratives based on personal experience. This intensive writing practice serves to help establish a purpose for writing and to 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 brief paragraphs that demonstrate their competency in using the process, the format and the standards of acceptable writing. Three contact hours.

**ESL 0161 ESL Structure Level I 3 cr.
(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. The students will apply the grammar points learned to the listening, speaking and writing activities in the prerequisite classes. Three contact hours.

ESL 0181 ESL Combined Skills Level I 3 cr.
(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. The students will participate in learning activities which promote spontaneous use of language in oral and written form. The 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 2 cr.

This course, designed to introduce the 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. Two contact hours.

EST 2112 Electrical-Electronic Control Systems 3 cr.

Prerequisite: EET 1144. 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 (Y) 3 cr.

Prerequisites: CET 1114 and EET 1144. 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 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.

EST 2438 Biomedical Instrumentation II 3 cr.

Prerequisite: EST 2436. This course, a continuation of the study of biomedical instrumentation, introduces stu-

dents 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 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.

EST 2603 Robotics (Y) 3 cr.

Prerequisites: CET 2123, EST 2112, ETG 2502 and ETM 2312. 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 the technician 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 each student. Four contact hours: three lecture hours, one laboratory hour.

EST 2633 Fundamentals of CIM Technology (Y) 3 cr.

Prerequisites: CGS 1060 and CGS 2470. The course deals with the concepts and applications of computer technology in the manufacturing process. Computer aided manufacturing, numerical control, group technology and flexible manufacturing systems are discussed together with the integration process required to link the various components to form a computer integrated manufacturing system. The major emphasis is on the use of computers in the design and production processes. The course includes both lectures and laboratory. Four contact hours: two lecture hours, two laboratory hours.

ETC — Engineering Technology: Civil

ETC 2220 Soils and Foundations 3 cr.

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 (Y) 3 cr.

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 (Y)**3 cr.**

Prerequisite: ETD 2542. 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.

ETC 2521 Hydrology and Hydraulics**3 cr.**

Corequisite: ETG 2530. This course is a study of sources, collection, drainage areas, storm water runoff and pump sizing. The subject matter includes the laws of fluid mechanics, such as fluids, energy and head, pressure flow in pipes and pumps and liquid flow in open channels. Students use laboratory time for fluid flow calculation and design. Four contact hours: three lecture hours, one laboratory hour.

ETD — Engineering Technology: Drafting**ETD 1100 Engineering Drawing (Y)****3 cr.**

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. Four contact hours: two lecture hours, two laboratory hours.

ETD 1706 Mechanical and Electrical Drafting**3 cr.**

Prerequisite: ETD 1100. Corequisite: suggested EGS 1130C. This course places emphasis on assembly and detail drawings of mechanical parts. Also included in the course is an introduction to electrical drafting. Four contact hours: two lecture hours, two laboratory hours.

ETD 2350 CAD Advanced**3 cr.**

Prerequisites: CGS 2020 and CGS 2470. The course presents AutoLISP concepts and programming methods together with customization techniques for increasing drawing/design productivity. The basics of AutoLISP, development of files and functions, customization of menus and applications of advanced techniques are presented. Five contact hours: two lecture hours, three laboratory hours.

ETD 2453 Piping Systems Design**3 cr.**

Prerequisites: ETD 1100 and ETM 2310. The course subject matter deals with drafting and design practices as applied to industrial piping systems with particular emphasis on marine applications. A study of the layout and design of piping systems and piping drafting practices is included in the course. Four contact hours: two lecture hours, two laboratory hours.

ETD 2536 CAD Mechanical Electrical**3 cr.**

Prerequisites: CGS 2470 and ETD 2538. 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 AEC 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 cr.**

Prerequisite: TAR 2120 and CGS 2470. The course covers the use of AutoCAD and/or similar software for architectural design and plan preparation. Emphasis in the course is placed on developing an understanding of AutoCAD and AEC 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 (Y)**3 cr.**

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, the student prepares 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 2545 Civil Drafting**3 cr.**

Prerequisite: ETD 1100. This course prepares the student for the fundamental concepts of civil drafting as it pertains to the field of civil engineering. Using surveyor's notes, the student will demonstrate, in pencil and ink, drafting techniques essential in preparing topographic and geographic maps. The student will also draw plot plans using all appropriate symbols and terminology that are used in civil engineers' offices. Four contact hours: two lecture hours, two laboratory hours.

ETD 2548 CAD Civil**3 cr.**

Prerequisites: CGS 2470 and ETD 2538. The course deals with the use of AutoCAD, LandCADD 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****4 cr.**

Prerequisites: MAC 1114 and ETI 1420. This course is an introduction to the basic laws of mechanics and includes a study of force systems, 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. Five contact hours: three lecture hours, two laboratory hours.

ETG 2530 Testing and Strength of Materials**4 cr.**

Prerequisite: ETG 2502. 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. Five contact hours: three lecture hours, two laboratory hours.

ETI — Engineering Technology: Industrial

ETI 1420 Engineering Materials and Processes (Y)

3 cr.

This course examines the major engineering materials used in industry, metallic and non-metallic, in terms of their properties, forming processes used and their engineering applications. Three contact hours.

ETI 1700 Industrial Safety (Y)

3 cr.

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.

ETI 2781 Industrial Supervision (Y)

3 cr.

The purpose of this course is to prepare the student for a role in the world of work as the student assumes responsibilities leading toward supervisory positions and management. Three contact hours.

ETM — Engineering Technology: Mechanical

ETM 1700 Air Conditioning Fundamentals

3 cr.

Corequisite: MAC 1140. The 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 1710 Air Conditioning Load Analysis

3 cr.

Prerequisite: ETM 1700. The course deals with psychrometric processes, heat transfer and the methods used for load analysis. Conductivity, convection and their effect on heat transfer are presented together with the methods used in determining heating and cooling loads on residential and commercial buildings. Three contact hours.

ETM 1720 Air Conditioning and Refrigeration Equipment

3 cr.

Prerequisite: ETM 1700. The course covers the design and selection of equipment and components which form parts of the air conditioning system. Included in the course is a study of air handling equipment, refrigerants, piping systems and refrigeration equipment. Three contact hours.

ETM 1725 Ventilation

3 cr.

Prerequisites: ETM 1700, ETM 1710 and ETM 1720. Corequisite: ETM 1730. The course deals with ventilation system design principles and practices currently in use for maintaining indoor air quality. Included in the course is the study of OSHA ventilation standards, hood selection and design, as well as ventilation design prac-

tices as an integral part of air conditioning systems design. Three contact hours.

ETM 1730 Air Distribution

3 cr.

Prerequisites: ETM 1700, ETM 1710 and ETM 1720. Corequisite: ETM 1725. The course deals with air flow theory and practice as applied to residential and commercial air distribution systems. Duct design, fans and blowers, pressure analysis and room air distribution are included. Three contact hours.

ETM 1740 Air Conditioning Control Systems

3 cr.

Prerequisites: EET 1035, ETM 1710 and ETM 1720. Corequisite: ETM 1730. The course covers the theory, operation and design of control systems used in refrigeration and air conditioning. The course includes a study of control fundamentals, electric and electronic controls, pneumatic controls, direct digital controls and control systems design for residential and commercial installations. Three contact hours.

ETM 2201 Elements of Applied Energy

3 cr.

Prerequisites: MTB 1322 and ETI 1420. This introductory course in applied thermodynamics consists of the study of the transformation of energy to useful work through mechanical elements: heat engines, I.C. engines, compressors, turbines and ancillary equipment. Three contact hours.

ETM 2310 Fluid Mechanics (Y)

3 cr.

Prerequisites: MAC 1114 and ETI 1420. The 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.

ETM 2312 Fluid Power

3 cr.

Prerequisite: ETM 2310. The course deals with the fundamentals of fluid power technology and the use of both hydraulic and pneumatic fluid power systems for power-transmission in a variety of technical applications. A study of fluid power circuits and systems, instrumentation and fluidics is included in the course. Three contact hours.

ETM 2580 Introduction to Naval Architecture

3 cr.

Prerequisites: ETM 2310, ETI 1420, ETG 2502 and ETG 2530. The course provides an introduction to naval architecture and marine engineering. The basic underlying theory is presented together with current drafting and design practices. Four contact hours: two lecture hours, two laboratory hours.

ETM 2610 Air Conditioning and Heating

3 cr.

Prerequisites: MAC 1114 and ETI 1420. This introductory course to environmental control of buildings and houses emphasizes equipment performance and system design. Three contact hours.

ETM 2750 Air Conditioning Systems Design I

3 cr.

Prerequisites: ETM 1730 and ETM 1740. The course deals with system selection and design to meet the heating, cooling, humidity control and ventilation require-

ments of residential and commercial buildings. The course includes preparation of engineering drawings by the student. This is the first course in a series of two courses dealing with systems design. Four contact hours: two lecture hours, two laboratory hours.

ETM 2752 Air Conditioning Systems Design II 3 cr.

Prerequisite: ETM 2750. The course is a continuation of ETM 2750 and deals with the design of large central air conditioning systems. Students develop an understanding of the design process through design analysis, calculations, equipment selection, preparation of engineering drawings and preparation of cost estimates. Four contact hours: two lecture hours, two laboratory hours.

ETM 2775 Air Conditioning Estimating 3 cr.

Prerequisites: ETM 1720, ETM 1730 and ETM 1740. The course covers current practices and procedures used in estimating air conditioning and heating systems. Quantity survey methods, classification of work, cost estimating and preparation of bid proposals are included in the course of study. Three contact hours.

ETM 2781 CAD Mechanical (HVAC) 3 cr.

Prerequisite: CGS 2470. Corequisite ETM 2752. The course deals with the application of CAD systems in heating, ventilating and air conditioning design and other building-mechanical applications. Four contact hours: two lecture hours, two laboratory hours.

EUH — European History

EUH 1000 Western Civilization Through 1715 (Y) 3 cr.

This course consists of a survey of the cultural beginnings of civilization, and the diffusion and accumulation of culture through 1715: Ancient Egypt, Mesopotamia, Greece, Rome, Byzantium, Islam, the Medieval Period, the Renaissance and the Protestant Revolt. Three contact hours.

EUH 1001 Western Civilization From 1715 to the Present (Y) 3 cr.

This course in modern western institutions from 1715 to the present day includes the developing capitalistic system, absolutism, the Enlightenment, the era of revolutions, the Constitution of the United States, the development of democracy, the industrial revolution, nationalism, the world wars and the cold war. The course includes reading and writing competencies. This course serves to meet the Gordon Rule writing requirement. Three contact hours.

FAD — Home Economics: Family Development

FAD 1230 Dynamics of Modern Living (Y) 3 cr.

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 home and family life education. Three contact hours.

FFP — Fire Fighting and Protection

FFP 1000 Introduction to Fire Protection 3 cr.

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.

FFP 1100 Fire Service Organization 3 cr.

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 cr.

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 cr.

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 cr.

The student will be able 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 cr.

A study of private fire and detection systems to include fixed extinguishing systems and standard and/or special fire alarms. Includes a review of the design, installation, maintenance and testing of the systems. Three contact hours.

FFP 2150 Fire Service Instructor 3 cr.

This course is designed for students seeking the State Fire Company Officer I Certification. The student 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.

FFP 2210 Fire Investigation 3 cr.

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 cr.

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; the principles and practices used in building construction. Three contact hours.

FFP 2326 Blueprints Reading and Plans 3 cr.

This course present the structure and function of the fire prevention the interpretation and application of blueprints. Using these codes, standards and inspection techniques learned previously, the student 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 cr.

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 cr.

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. Also, topics 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 cr.

Prerequisite: FFP 2500. This course is a continuation of FFP 2500 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 2600 Fire Fighting Equipment and Apparatus 3 cr.

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, trouble shooting and related subjects. The course also includes the principles of the care, mainte-

nance 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 trouble shooting, 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 cr.

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).

FIN — Finance

FIN 2000 Principles of Finance (Y) 3 cr.

Prerequisites: OST 1324 and ACG 1003 or ACG 2001, or consent of professor. 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 history and nature of money and financial management. Three contact hours.

FIN 2100 Personal Finance (Y) 3 cr.

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 (Y) 3 cr.

The student will explore the scientific rationale for sanitation and safety practices which are enforced for group protection in institutions and food service facilities. The student 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. Four contact hours: three lecture hours, one laboratory hour.

FRE — French Language

FRE 1000 Conversational French (Y) 3 cr.

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; the student is 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 cr.

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.

FRE 1121 Beginning French II (Y) 4 cr.

Prerequisite: FRE 1120 or equivalent. This course is a continuation of FRE 1120. Five contact hours: four lecture hours, one unsupervised laboratory hour.

FRE 2200 Intermediate French I (Y) 3 cr.

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.

FRE 2201 Intermediate French II (Y) 3 cr.

Prerequisite: FRE 2200. This course is a continuation of FRE 2200. Four contact hours: three lecture hours, one unsupervised laboratory hour.

FSS — Food Service Systems

FSS 1002 Introduction to Culinary Arts 3 cr.

This course introduces the student to the culinary and hospitality field. They will become familiar with the organization and function of a commercial kitchen; the function of foods and its basic food preparation techniques. Students will practice with culinary knives. Students will perform culinary math, convert recipes and utilize culinary terms. Students will explore food distribution industry through guest lecturers and field trips. Students will learn of the American Culinary Federation; its educational and certification programs. Three contact hours.

FSS 1100 Menu and Marketing Management 3 cr.

The student 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 cr.

The student 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. Four contact hours: two lecture hours, two laboratory hours.

FSS 1202 Food Production I 3 cr.

The student 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.

FSS 1221 Food Production II 3 cr.

Prerequisite: FSS 1202 or consent of program manager. The student will plan and prepare menus that demonstrate various American regional and modified service styles. They will utilize principles from Food Production I 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 1241 A la Carte Preparation 3 cr.

Prerequisite: FSS 1221. In this course the student will study and practice a la carte menu preparation for dining room service. Students will examine the classical repertoire and utilize culinary terminology. Students will explore the international menus of Europe and the Orient. Special focus will be given to portion control, to plate presentation and expediting the food. Eight contact hours: three lecture, five laboratory.

FSS 1246 Baking 3 cr.

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

FSS 1247 Pastries and Desserts 3 cr.

Prerequisite: FSS 1246. In this advanced course in pastry and dessert production the student prepares the advanced products presented at a fine hotel, restaurant or bake shop. These products include danish and puff pastry, fine cake preparation; cake decoration, petit fours sec and glace, soft desserts and ices. Students will be exposed to chocolate work and sugar work. Platter presentation will be practiced. Eight contact hours: three lecture, five laboratory.

FSS 1248 Garde-Manger 3 cr.

The student 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 1250 Dining Room Management 3 cr.

The student will acquire knowledge of various types of service appropriate to coffee shops, dining rooms, luncheons, banquets and buffets. The course will demonstrate the relationship of menu, equipment, supplies, merchandising and personnel to create good

patron acceptance. Eight contact hours: two lecture hours, six laboratory hours.

FSS 1288 Pantry and Fast Foods (Y) 3 cr.

This course assists the student in developing skills for knife usage, basic salad and dressing preparation, sandwich preparation and portion control. The student also will be introduced to the fast food service functions, including grilling, deep-fat frying, breakfast production, beverage preparation and control. Eight contact hours: two lecture hours, six laboratory hours.

**FSS 1410 Food Service Equipment/
Facility Planning 3 cr.**

The student will evaluate the various types of food service equipment relative to cost, structure, function and maintenance. The student will design a layout for a food service operation to include equipment specifications, energy conservation measures, diversity of function, cost control and consideration toward future adaptability. Three contact hours.

FSS 2284 Catering and Buffet Management (Y) 3 cr.

Prerequisites: HFT 1265 and FSS 1221. This course provides the future manager with skills in catering and buffet operation functions. The student 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 cr.**

The student 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 2501 Food and Beverage Control
Management 3 cr.**

This course presents the basic principles and procedures of effective food and beverage cost control, including food and beverage purchasing, receiving, issuing, calculation of standards, production, and planning special control. Three contact hours.

FSS 2942 Culinary Management Internship I (Y) 3 cr.

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

FSS 2943 Culinary Management Internship II (Y) 3 cr.

Prerequisite: FSS 2942. The student will participate in a supervised internship at an advanced level. This internship will be designed to provide the student with an opportunity to enhance technical skills in a specific food service area. Ten contact hours: one-half hour

(one hour every other week) lecture, ten field experience hours.

FSS 2945 Food Service Internship 9 cr.

The student will work on-the-job as an intern under the supervision of qualified personnel in food service establishments within the community. The student will apply course theories and skills in this work experience. The internship training program requires a minimum of 12 weeks for a total of 450 hours. Thirty-eight contact hours: one lecture hour, thirty-seven field experience hours.

GEA — Geography: Regional Areas

GEA 1000 World Geography (Y) 3 cr.

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 and problems of conservation of natural resources. Three contact hours.

GEB — General Business

GEB 1011 Introduction to Business (Y) 3 cr.

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

GEO — Geography: Systematic

GEO 2074 Geography for Teachers (Y) 3 cr.

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

GEO 2370 Conservation of Resources (Y) 3 cr.

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.

GER — German and Germanic Languages

GER 1000 Conversational German (Y) 3 cr.

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; the student is 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 cr.

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.

GER 1121 Beginning German II (Y) 4 cr.

Prerequisite: GER 1120 or equivalent. This course is a continuation of GER 1120. Five contact hours: four lecture hours, one unsupervised laboratory hour.

GER 2200 Intermediate German I (Y) 3 cr.

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.

GER 2201 Intermediate German II (Y) 3 cr.

Prerequisite: GER 2200. This course is a continuation of GER 2200. Four contact hours: three lecture hours, one laboratory hour.

GLY — Geology

GLY 1001 Earth and Space Science (Y) 3 cr.

This course acquaints the student with the development of science, with the integrating principles and theories in the earth sciences, with 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 cr.

Corequisite: GLY 1001 or following 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 cr.

Physical Geology, for majors and non-majors, is the study of the earth. The 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.

GLY 1010L Physical Geology Laboratory (Y) 1 cr.

Corequisite: GLY 1010 or following 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 cr.

Corequisite: GRA 1502. This lecture course, designed to give an introduction to major processes of the printing industry, includes all methods of typesetting, photo typesetting, hand and other machine methods of typesetting, mechanical art preparation, printer's math and proofreading. Five contact hours.

GRA 1502 Printing Processes — Laboratory 4 cr.

Corequisite: GRA 1500. This laboratory course, designed to be an introduction to and experience in the basic skills of three of the major processes of the printing industry, emphasizes cold type and phototypesetting and mechanical art preparation. Also introduced are typesetting and form makeup (hand and machine), lockup and letterpress operation. Eight contact hours (theory/laboratory).

GRA 1503 Theory of Lithographic Processes 5 cr.

Corequisite: GRA 1504. This lecture course, designed to give an introduction to three major processes of the lithographic industry, includes process camera operation, negative stripping, platemaking and offset press operation. Five contact hours.

GRA 1504 Lithographic Processes Laboratory 4 cr.

Corequisite: GRA 1503. This laboratory course, designed to give an introduction to and experience in the basic skills of three major processes of the lithographic industry, includes process camera operation, negative stripping and platemaking, offset press operation and related bindery functions. Eight contact hours (theory/laboratory).

GRA 1540 Layout and Design (Y) 3 cr.

This course teaches the technique of preparing layouts to be used for customer approval and the preparation of camera-ready mechanicals of work ready to be printed. Three contact hours.

GRA 1706 Graphic Arts Estimating (Y) 3 cr.

This course uses the industry accepted Franklin Printing Catalog to develop the basic technique of estimating the cost of printed matter and its production methods, from layout to finished product. Three contact hours.

GRA 2537 Cold Type Typesetting and Pasteup 3 cr.

Prerequisite: GRA 1504. Corequisite: GRA 1540. This course teaches the basic techniques of setting type by strike-on and photographic typesetting equipment and also the preparation of mechanical art forms. The course also includes pen ruling and machine forms. Six contact hours (theory/laboratory).

GRA 2538 Advanced Cold Type Typesetting and Pasteup 5 cr.

Prerequisite: GRA 2537. This advanced course provides for skill development in the techniques of setting type by strike-on and photographic typesetting equipment and also the preparation of mechanical art forms.

The course emphasizes the application of basic techniques toward greater job complexity, increased quality and increased productivity. Ten contact hours (theory/laboratory).

GRA 2571 Camera Operation and Film Processing 3 cr.

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. Six contact hours (theory/laboratory).

GRA 2573 Advanced Camera Operation and Film Processing 5 cr.

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. Ten contact hours (theory/laboratory).

GRA 2601 Negative Stripping and Offset Platemaking 3 cr.

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. Six contact hours (theory/laboratory).

GRA 2602 Advanced Negative Stripping and Offset Platemaking 5 cr.

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. This course emphasizes the application of basic techniques toward greater job complexity, increased quality and increased productivity. Ten contact hours (laboratory).

GRA 2635 Offset Press Operation 3 cr.

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. Six contact hours (theory/laboratory).

GRA 2638 Advanced Offset Press Operation 5 cr.

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 the application of basic techniques toward greater job complexity, increased quality and increased productivity. Ten contact hours (theory/laboratory).

GRA 2945 Practicum 6 cr.

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

HBR— Modern Hebrew Language

HBR 1000 Conversational Hebrew (Y) 3 cr.

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

HFT — Hotel and Restaurant

HFT 1000 Introduction to Hospitality Management (Y) 3 cr.

This course introduces the student to the hospitality industry and to the management of hotels, motels and restaurants. This orientation course presents the history, organization, problems and opportunities in the hotel, motel and restaurant industry. Three contact hours.

HFT 1250 The Management of Hotel/Motel Operations (Y) 3 cr.

This course acquaints the student with the operation of a hotel or motel to include 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.

HFT 1265 Restaurant Management 3 cr.

This course includes the basic principles of analysis of food management problems, job analysis methods, selection, control and supervision of personnel, facilities, layout, labor and food cost control, purchasing, legal problems, and furniture and decor for clubs, restaurants and related institutions. Eight contact hours: two lecture hours, six laboratory hours.

HFT 1300 Hotel/Motel Housekeeping Management 3 cr.

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 1320 Hotel/Motel Maintenance and Engineering 3 cr.

This course will supply fundamental principles of the technical functions for hotel/motel operations. It will provide insight enabling future managers to make appropriate and cost-effective decisions. Three contact hours.

HFT 1410 Front Office Management — Hotel/Motel 3 cr.

This course guides the student 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 the student with the operation of all the departments as they apply to the student's primary responsibility of selling rooms and serving guests. Three contact hours.

HFT 1434 Club Operations Management (Y) 3 cr.

Prerequisites: HFT 1000 and FSS 2300. This course introduces the student 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 1444 Managing Computers In The Hospitality Industry (Y) 3 cr.

Prerequisite: CGS 1060. This course provides an overview of the information needs of the hospitality industry. It addresses essential aspects of computer systems, such as hardware, software and generic applications. It focuses on computer-based property management systems for both front and back of the house on restaurant management systems. Three contact hours.

HFT 1503 Marketing and Sales Management 3 cr.

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 (Y) 3 cr.

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

HFT 2220 Customer-Personnel Relations 3 cr.

This course explores the various successful techniques involved in establishing effective communications and functional relationships with the customer and with personnel at all levels. Three contact hours.

HFT 2223 Training for the Hospitality Industry 3 cr.

This course considers the assessment and analysis of training needs, the systematic design of instruction, the evaluation of training programs and management of the training function for the hospitality industry. Three contact hours.

HFT 2700 Tourism (Y) 3 cr.

Prerequisite: HFT 1000. This course consists of a study of tourism, which is travel and includes 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 the student 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 (Y) 3 cr.

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 (Y) 3 cr.

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 instructions accompanied by one, one hour seminar per week. Eleven contact hours: one lecture hour, ten field work experience hours.

HFT 2942 Hospitality Internship II 3 cr.

Prerequisite: HFT 2941. This course, an extension of HFT 2941, consists of on-the-job work experience supplied by the hotel, motel and restaurant industries. The student 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 one, one hour seminar per week. Eleven contact hours: one lecture hour, ten field experience hours.

HHD — Housing and Home Design**HHD 1122 Housing Alternatives 3 cr.**

This course includes a study of selection of housing and furnishings, housing values, needs, renting, buying a home and characteristics of and plans for desirable housing. It emphasizes selection and arrangement of furnishings through the use of color principles and elements of design. Three contact hours.

HHD 1232 Functions and Psychology of Space 3 cr.

Prerequisite: HHD 1321. This course analyzes social, private and work spaces for psychological use of space, efficiency of traffic patterns and effectiveness of design. The student 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. Four contact hours: two lecture hours, two laboratory hours.

HHD 1321 Principles of Interior Design (Y) 3 cr.

The course content includes an in-depth study of the elements and principles of design. The student 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.

HHD 1426 Materials and Sources 3 cr.

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 gives special emphasis to customer relations and providing product information to the customer. Three contact hours.

HHD 1450 Fundamentals of Restoration and Preservation 3 cr.

This course is designed to introduce the student 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.

HHD 1452 Home Maintenance and Repair 3 cr.

The course content and instruction, directed toward making the home owner self sufficient in handling minor care, repair and maintenance problems, includes problems with electric power, plumbing emergencies, care and repair of floors and floor coverings, interior painting, wallpapering, furniture care and repairs, and miscellaneous repairs. This course will also discuss tools needed, work safety, and combatting pests and fungi. The course provides opportunities for laboratory experiences in practical applications. Three contact hours.

HHD 1611 History of Interiors I (Y) 3 cr.

The student will acquire the ability to identify furniture styles, architectural details and ornamental motifs from the time of our primitive beginnings through the Renaissance period. Three contact hours.

HHD 1618 History of Interiors II (Y) 3 cr.

Prerequisite: HHD 1611. The student will acquire the ability to identify furniture styles, architectural details and ornamental motifs from the Renaissance period through the 20th century. Three contact hours.

HHD 2234 Residential and Commercial Design 3 cr.

Prerequisites: HHD 1232, TAR 2120 and HHD 2324. This laboratory course is designed to provide skill development in planning residential and commercial interiors from blue prints to the final assembly of all furnishings. A study of commercial furnishings, fabrics, building codes and fire regulations is emphasized. Working drawings, specifications and competency in budgeting will also be synthesized. Four contact hours: two lecture hours, two laboratory hours.

HHD 2240 Why Preservation? 3 cr.

This course is designed to make the student 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.

HHD 2323 Perspective Renderings — Housing 3 cr.

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, the student will develop skills in graphically conveying design concepts into visual illustrations. Four contact hours: two lecture hours, two laboratory hours.

HHD 2324 Graphic Presentation Techniques 3 cr.

Prerequisite: HHD 2323. Professionalism of graphic illustration is the focus of this course. Various media for graphic interior design presentations will be explored, such as pencil, pen and ink, and watercolor renderings. Student projects will also provide experience in assembling and presenting collages. Four contact hours: two lecture hours, two laboratory hours.

HHD 2600 Architectural Style 3 cr.

This course includes a comparative analysis of American architecture based on elements of construction. The course emphasizes Jacksonville's unique contributions in the 20th century. Three contact hours.

HHD 2810 Marketing Techniques for the Interior Designer 3 cr.

Prerequisites: HHD 1426 and HHD 1232. Utilization of marketing techniques in selling interior design materials is the focus of this course. To provide consumer information to the client, the student will plan and execute marketing strategies utilizing visual aids and display areas. Three contact hours.

HHD 2943 Practicum in Economic Revitalization of Homes and Business Dwellings 6 cr.

This course requires a minimum of 20 hours per week of practical work experience approved by the student's adviser. The student will acquire on-the-job experience in housing preservation, restoration or construction under the supervision of qualified individuals within the business community. Twenty contact hours: one lecture hour, nineteen field experience hours.

HHD 2945 Interior Design Internship and Seminar 6 cr.

Prerequisite: Approval of program director. After completion of professional courses, the student will work on the job as an intern 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. Enrollment in this course requires consent of the program director. Twenty-one contact hours: one lecture hour, twenty field experience hours.

HIS — General History**HIS 1907 Honors Survey of History (Y) 3 cr.**

Prerequisites: Outstanding performance in AMH 2010 and 2020 or EUH 1000 and 1001; 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) 3 cr.**

Recommended corequisite: a physical fitness conditioning course (PEM 1148 Walking for Fitness; PEM 1146 Beginning Jogging; PEM 1351 Cycling for Safety and Fitness; PEM 1171 Aerobics to Music; or PEM 1131 Strength Training (Nautilus/Universal)). This course is designed to introduce the principles, concepts and values of physical activity, nutrition and fitness as they relate to optimal health and the lifelong process of wellness. It involves lectures, assessment of student's 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. It is recommended and, in some cases, required that the student obtain medical approval prior to participation in the course. Three contact hours.

HME — Home Management and Equipment**HME 1200 Home Management (Y) 3 cr.**

This course introduces the student to problems in home management, including values and goals in the management process, the efficient use of time, money and human resources, and earning and spending the family income. The course presents a decision-making orientation to sharpen problem solving skills in managing home and physical resources. Three contact hours.

HSC — Health Science**HSC 1100 Health Education (Y) 3 cr.**

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.

HSC 1531 Medical Terminology (for Health Professions) (Y) 2 cr.

This course is designed to provide a basic working knowledge of medical terminology to students entering the health field. This course will cover word analysis of the terminology for the various body systems as well as basic terminology for pathology, microbiology, surgery, psychiatry and aging specialties. Two contact hours.

HSC 2400 Standard First Aid and CPR (Y) 3 cr.

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

HUM — Humanities**HUM 1470 Intercultural Topics 1 cr.**

This course is a survey of contemporary topics related to a specific culture. The course may be repeated for credit when the cultural setting is changed. One contact hour.

HUMA 1740 Overseas Humanities (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on the placement test. The first half of a humanities course offers students a study/abroad program centered on the cities and countries of the tour. The course will include field experiences, lectures, discussions and other experiences in the humanities area. The student will visit great European cities where special attention will be given to forces contributing to the culture of these nations. The student will gain an understanding and appreciation of great and vital ideas through on-site study within the political, economic and social historical framework in art, music, literature, architecture, philosophy and religion in specific cultural settings. This course contains reading and writing competencies. Three contact hours.

HUMB 1740 Overseas Humanities (Y) 3 cr.

The second half of a humanities course offers students a study/abroad program centered on the cities and countries of the tour. The course will include field experiences, lectures, discussions and other experiences in the humanities area. The student will visit great European cities where special attention will be given to forces contributing to the culture of these nations. The student will gain an understanding and appreciation of great and vital ideas through on-site study within the political, economic and social historical framework in art, music, literature, architecture, philosophy and religion in specific cultural settings. (Elective credit only). Three contact hours.

HUM 2021 Humanities Forum (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on the placement test. 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 cr.

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, lit-

erature, 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 cr.

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 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 cr.

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 cr.

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 philosophic thought. This course includes reading and writing competencies. Three contact hours.

HUM 2450 Humanities in the Americas (Y) 3 cr.

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.

HUM 2472 Intercultural Explorations (Y) 3 cr.

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. A student may repeat this course for credit three times when 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. Three contact hours.

HUM 2511 Music and Art of the Romantic Era (Y) 3 cr.

Prerequisites: 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. We shall study the major composers, painters and sculptors and explore the common characteristics which they share. 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.

HUN — Human Nutrition

HUN 1003 Weight Management Through Nutrition and Fitness (Y) 3 cr.

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 cr.

The student 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 cr.

Prerequisite: FSS 1202. This course in culinary nutrition combines a study of the basic principles of nutrition with practical volume preparation of meals for cafeteria and restaurant. The student will study nutrients and their characteristics, nutrients and their body performance and nutrition and the American diet. Students will examine modern culinary nutrition trends and analyze healthy diet alternatives. Students will plan and prepare meals in volume for the cafeteria and dining room. Five contact hours: two lecture hours, three laboratory hours.

HUN 1410 Pediatric Nutrition 3 cr.

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 cr.

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 cr.

This course introduces the student 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 3 cr.

Prerequisite: HUS 1345. This course enables the student 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. Three contact hours.

HUS 2306 Theoretical Aspects of Human Behavior and Addiction Counseling 3 cr.

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

HUS 2502 Special Issues in Addictions 4 cr.

Prerequisites: HUS 1345, HUS 2682 and HUS 2683. The student will review critical special issues and special populations associated with counseling and prevention in addiction. 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, one laboratory (clinical).

HUS 2682 Addiction Counseling: Core Functions I 4 cr.

Prerequisite: HUS 1345. This course enables the student 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, the student will learn how to respond to an individual's needs during acute emotional and physical distress. Four contact hours: three lecture, one laboratory (clinical).

HUS 2683 Addiction Counseling: Counseling Theories Core Functions II 4 cr.

Prerequisite: HUS 2682. The course enables the student to master the core functions of making appropriate referrals; study the relationship in which the

counselor helps the client mobilize resources to resolve his/her problems and/or modify attitudes and values. Additionally, the student 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, one laboratory (clinical).

IDS — Interdisciplinary Studies**IDS 1935 Interdisciplinary Studies Seminar (Y)** 1 cr.

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

IND — Interior Design**IND 2410 Specialized Design: Kitchen and Bath Planning** 3 cr.

Prerequisite: HHD 1232. This laboratory course is designed to provide specialized training in the area of kitchen and bath planning. The course will enable the student to create a final assembly of materials, trades, specifications, plans and contracts necessary for presentation. Three contact hours.

IND 2420 Art Acquisitions for Interior Environments 1 cr.

This course covers a broad range of information pertinent to the selection, acquisition, framing and installation of artwork in residential and commercial projects. The student will be aware of all phases, including: policy/philosophy, budget, site selection, time and legal constraints, sources, propriety and client image enhancement. One contact hour.

IND 2433 Lighting Design 3 cr.

Prerequisite: HHD 1232. 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 2434 Commercial Lighting Design 3 cr.

Prerequisites: HHD 1232 and IND 2433. This course covers corrective lighting for commercial and institutional spaces, with the intent being to raise a student's awareness level relative to the psychological, emotional and aesthetic effects of commercial lighting design. Information on lighting for the aged and infirm will also be included. This course is outlined by the Illuminating Engineering Society of North America. Work experience in the area of basic lighting may substitute for the prerequisites. Three contact hours.

IND 2462 Computer Aided Commercial Design 3 cr.

Prerequisites: CGS 2470 and HHD 1232. This course is a study in the automation of the design process through computerization. Using proven, specific products and methods, students will glean pro-

fessional knowledge of the most current practices in this field. As a continuation of existing CADD courses, students will move from an overview of this technology to hands-on practical commercial applications from programming studies through final presentation graphics. Five contact hours: one lecture hour, four laboratory hours.

INR — International Relations

INR 2002 International Relations (Y) 3 cr.

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 cr.

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 cr.

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.

ITA — Italian Language

ITA 1000 Conversational Italian (Y) 3 cr.

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; the student is 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 cr.

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 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 cr.

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.

JPN — Japanese Language

JPN 1000 Conversational Japanese (Y) 3 cr.

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; the student is 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).

LAH — Latin American History

LAH 2000 History of the Americas (Y) 3 cr.

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

LEI — Leisure

LEI 1262 Outdoor Adventure Initiatives (Y) 2 cr.

This outdoor adventure course provides a student 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 each student with the experience of functioning as a member of a highly supportive group. Two contact hours: one lecture hour, one activity hour.

LEI 1263 Wilderness Adventure Training (Y) 3 cr.

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 cr.

Prerequisite: LEI 1263. This course is a coeducational course which provides the opportunity for students to acquire the knowledge and skills to safely hike and backpack. Backpacking trips are included. A cost for trips will be assessed. Three contact hours. (Lecture/Laboratory)

LEI 2265 Facilitating Outdoor Challenge Activities (Y) 3 cr.

Prerequisite: Basic First Aid and current CPR certification. This course is designed for individuals who are interested in developing facilitator skills for working

with small groups using outdoor challenge activities. It provides an overview of experimental learning theory as applied to these activities, specific strategies for managing issues of safety and group dynamics, basic knowledge and practical experience in managing approximately 30 to 40 activities (low ropes challenges and non-ropes initiatives), and the development of processing skills based on a brief-experience-debrief model. Appropriate group goals for these activities include trust and cooperation, communication, problem solving/decision making and leadership/team-building. Three contact hours.

LEI 2266 Outdoor Adventure Education Seminar (Y) 2 cr.

Corequisites: LEI 2268 and LEI 2269 or instructor's consent. This course provides a foundation for developing outdoor education skills and knowledge in a practical environmental and wilderness setting. Emphasis will be on the student learning techniques and methods to be applied as an outdoor leader. A cost for activities and trips will be assessed. Two contact hours.

LEI 2268 Introduction to Outdoor Adventure Leadership (Y) 3 cr.

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

LEI 2269 Outdoor Adventure/Education Practicum (Y) 5 cr.

Corequisites: LEI 2268 and LEI 2266 or instructor's consent. This course provides a practicum for outdoor leadership training by means of a field expedition in a range of situations, a variety of weather conditions and a long term exposure to group dynamics. Students will conduct and lead in a set of diverse outdoor activities such as backpacking, camping, canoeing, mountaineering and rockclimbing. A cost for activities and trips will be assessed. Seven contact hours: five lecture hours, two activity hours.

LEI 2330 Camp Counseling (Y) 3 cr.

Prerequisite: LEI 1263. The purpose of this course is to develop leadership qualities for working with people in a recreation situation and also to provide knowledge and skill necessary for living in, enjoying and preserving the out-of-doors. The course includes two overnight camping trips. Three contact hours.

LIN — Linguistics

LIN 2670 English Grammar: Usage and Mechanics (Y) 3 cr.

Prerequisite: ENC 0011 or satisfactory score on the placement test. This course provides an intensive study of traditional grammar usage and mechanics for those students who desire to improve both their under-

standing and use of English. The course also provides an in-depth review of grammar to returning students and may prepare students for the CLAST writing test. Students will use their writing skill in writing tasks to improve their ability to write clearly and accurately as well as edit proficiently. The course does not replace a college preparatory course which a student may be required to take. Three contact hours.

LIS — Library Sciences

LIS 2001 Use of Books and Libraries (Y) 1 cr.

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).

LIT — Literature

LIT 2000 Introduction to Literature (Y) 3 cr.

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 the student for further literary study. Three contact hours.

LIT 2100 Great Ideas in World Literature (Y) 3 cr.

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 twentieth 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 2374 The Bible as Literature (Y) 3 cr.

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 cr.

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.

MAC — Mathematics: Calculus and Precalculus

MAC 1102 College Algebra (Y) 3 cr.

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 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 the algebraic, geometric, and measurement skills measured by CLAST. Three contact hours.

MAC 1114 College Trigonometry (Y) 3 cr.

Prerequisite: MAC 1102 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. Three contact hours.

MAC 1140 Precalculus Algebra (Y) 4 cr.

Prerequisite: MAC 1102 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. Four contact hours.

MAC 2233 Calculus for Business and Social Sciences (Y) 3 cr.

Prerequisite: 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. Linear programming and topics from linear algebra will also be presented. 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 3 cr.

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 cr.

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 cal-

culus. 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.

MAC 2312 Calculus With Analytic Geometry II (Y) 4 cr.

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 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 cr.

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.

MAN — Management

MAN 2021 Principles of Management (Y) 3 cr.

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 the student with the framework for further study in the field or the background for practical application of management principles. Three contact hours.

MAN 2300 Human Resources Management (Y) 3 cr.

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.

MAN 2800 Small Business Management (Y) 3 cr.

This course is designed for the student who is 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 cr.

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 differen-

tial equations, systems of linear differential equations, the Laplace transform and applications. Three contact hours.

MAR — Marketing

MAR 1011 Principles of Marketing (Y) 3 cr.

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.

MAS — Mathematics: Algebraic Structures

MAS 2103 Elementary Linear Algebra (Y) 3 cr.

Prerequisite: MAC 1102 or MAC 1140 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 (College Preparatory Studies) 4 cr.

(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. Four contact hours.

MAT 0024 Elementary Algebra (College Preparatory Studies) 4 cr.

(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, radicals and graphing. Students must attain a passing score on the exit test for satisfactory completion. Four contact hours.

MAT 1033 Intermediate Algebra (Y) 3 cr.

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 1102, MAC 1140 or MGF 1207. The major topics include sets and real numbers, linear equations and inequalities, polynomials and factoring, algebraic fractions (rational expressions), exponents, roots and radicals, quadratic equations and inequalities, relations and functions, graphs and systems of linear equations. The algebraic skills

measured by CLAST are among the skills taught in this course. This course does not satisfy the general education requirement for mathematics in most of the state universities. Three contact hours.

MCB — Microbiology

MCB 2013C Microbiology (Y) 4 cr.

Prerequisite: CHM 1020, 1032C, 1045C, or high school chemistry. In addition, the student will benefit by taking BSC 1005 or BSC 2010C prior to enrolling in MCB 2013C. 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.

MET — Meteorology

MET 1010 Meteorology (Y) 3 cr.

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.

MGF — Mathematics: General and Finite

MGF 1207 Finite Mathematics (Y) 3 cr.

Prerequisite: MAC 1102 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 indepth study of mathematics. The major topics introduced in this course are set theory, symbolic logic, probability, number theory and matrices. The course also includes an introduction to topics from combinatorics, descriptive and inferential statistics, computers, linear programming-geometrical approach, and the history of mathematics. The logical reasoning, probability, and statistics skills measured by CLAST are among the skills taught in this course. Three contact hours.

MGF 2204 Topics in Finite Mathematics (Y) 1 cr.

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, to provide a foundation for the mathematical study of uncertainties, to familiarize students with the terminology and concepts of both statistics and informal geometry. MGF 2204 is intended for students who are planning to take 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 cr.

Prerequisite: MAC 2311. This course is a chronological study of the evolution of mathematical thought from primitive counting to modern ideas of the twentieth century. This course does not satisfy the General Education requirements for mathematics. Three contact hours.

MIS — Military Science

MIS 1000 Introduction to the Army as a Profession (Y) 1 cr.

This course introduces students to military science and the organizational approach to leadership. Military topics will include first aid, communication and introductory map reading. The leadership portion will include the leader's responsibilities, the problem-solving process, basic traits of a leader and counseling techniques. The first aid portion will cover the four life-saving steps of mouth-to-mouth resuscitation, treatment of an open and closed fracture, stopping arterial bleeding and treatment for shock. Introductory map reading will include the use of a map, the grid system and identification of major terrain features. Two contact hours (drill training).

MIS 1020 Organization of the Army and ROTC (Y) 1 cr.

This introductory course outlines the organization and mission of the Army, Army Reserve, National Guard and Reserve Officer Training Corps. The course places special emphasis on the different branches of the Army, the Officer Personnel Management System and the benefits of a commission in the active Army, Army Reserve or National Guard. Discussions include the role of the Army officer, the noncommissioned officer and the relationship between these two positions. The course also examines the customs and traditions of the service with courtesy. Two contact hours (drill training).

MIS 2400 Leadership Development Through Personal Growth (Y) 1 cr.

Presents the future leader, through a combination of classroom theory and laboratory practical application an in-depth view of strengths and weaknesses through self-assessment instruments; then, offer tools for development and growth as a leader in today's society. This course is designed to prepare students for progression into advanced leadership skills at the upper division level. Students must attend a two-hour weekly leadership workshop in which experimental adult learning takes place through individual and group development exercises. Three contact hours (lecture/leadership training).

MIS 2621 Survival and Adventure Training (Y) 1 cr.

Teaches survival skills by examining the mental aspects of learning how to find food, water and shelter, how to determine direction and how to travel through different types of terrain. In addition, the student will

learn how to maintain health and to administer emergency first aid techniques. Students will be encouraged to attend a weekend training seminar in a survival setting and will be required to attend a two-hour leadership laboratory. Three contact hours (lecture/leadership laboratory).

MKA — Marketing Applications

MKA 1021 Salesmanship (Y) 3 cr.

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 cr.

The course enables the student to master basic mathematical concepts, medical laboratory ethics and basic medical laboratory techniques. Given instruction in integrated health sciences and their application to clinical laboratory science, the student will practice the manipulative skills of medical laboratory technology. Four contact hours (lecture/laboratory).

MLT 1300C Hematology 4 cr.

Prerequisite: MLT 1022C or 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 hemo-globin analysis are emphasized. Six contact hours (lecture/laboratory).

MLT 1330C Hemostasis 2 cr.

Prerequisite: MLT 1300C. 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 cr.

Prerequisite: MCB 2013C or consent of department. This course presents the student 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).

MLT 1440C Parasitology/Mycology 2 cr.

Prerequisite: consent of department. This course presents the student 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 1930C Histology Seminar 1 cr.

Prerequisite: consent of department. This course introduces the student to the histology laboratory and its role in medical, research and industrial settings. The medical application of histotechnology and the role of the histotechnician in patient care are emphasized. Included in the course are aspects of medical ethics, laboratory safety and career preparation. Two contact hours (lecture/ laboratory).

MLT 2150C Clinical Correlations 3 cr.

Prerequisites: MLT 1300C, MLT 1405C and MLT 2610C. This course presents selected topics in advanced laboratory techniques, together with their significance in the diagnosis of diseases. The student builds on a fundamental knowledge of clinical laboratory analysis and human pathology to understand more complex laboratory diagnostic procedures in the areas of hematology, endocrinology, toxicology and microbiology. Four contact hours (lecture/ laboratory).

MLT 2190C Histology 4 cr.

Prerequisite: MLT 1930C. Corequisite: MLT 2191C. The 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. Six contact hours (lecture/laboratory).

MLT 2191C Histotechniques I 4 cr.

Prerequisite: MLT 1930C. Corequisite: MLT 2190C. The course will introduce the student to the fundamental skills of tissue processing. Included in this course are the laboratory aspects of specimen preparation, fixation, sectioning and routine staining. Laboratory safety and quality assurance are emphasized. Six contact hours (lecture/laboratory).

MLT 2192C Histotechniques II 4 cr.

Prerequisite: MLT 2191C. Corequisite: MLT 2840L. This course is a continuation of MLT 2191C Histotechniques I. The student will continue to develop and learn the complex laboratory procedures employed in current histotechnology settings, including special stains, immunochemistry, electron microscopy, plastic embedding and cryostat procedures. Six contact hours (lecture/laboratory).

MLT 2193C Histopathology 4 cr.

Prerequisite: MLT 2192C. Corequisite: MLT 2841L. This course provides the student with the correlations between histotechnological procedures and disease processes. The student will continue development of skills necessary to perform complex histotechnological procedures while learning the pathological correlations between the tissue evaluation and the disease process. Evaluation of acceptability of tissue procedures will be stressed. Six contact hours (lecture/laboratory).

MLT 2230C Clinical Microscopy 2 cr.

Prerequisites: MLT 1300C and MLT 2610C. This course instructs the student 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 cr.

Prerequisite: MLT 1405C. This course relates the biology of the immune response to the clinical manifestations of selected diseases. Course content includes antigen-antibody reactions, immuno-globulin structures and functions, and lymphocyte interactions. As well, the clinical significance and laboratory procedures related to HTLV viruses, syphilis, hepatitis, inflammatory conditions, bacterial and viral pathogens, autoimmune disorders, immunogenetics and chromosomal disorders are included. Six contact hours (lecture/laboratory).

MLT 2525C Immunoematology 3 cr.

Prerequisite: MLT 2500C. This course relates the concepts of immunology to blood banking procedures using the guidelines of the American Association of Blood Banking (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 4 cr.

Prerequisites: MLT 1022C and CHM 1032C. This course instructs the student in the theory, clinical correlations and laboratory procedures related to the study of proteins, enzymes, carbohydrates, lipids, non-protein nitrogen compounds and hormones. Included in the course are quality assurance principles, laboratory mathematics and the study of hepatic, renal and endocrine profiles. Six contact hours (lecture/laboratory).

MLT 2760C Principles of Clinical Instrumentation 3 cr.

Prerequisite: consent of program director. This course presents the principles of operation and the laboratory applications of selected instruments commonly used in clinical analyses. Students will learn instrument operation, maintenance and quality control parameters for major instruments used in hematology, microbiology and clinical chemistry. Automation and computerization are included. Four contact hours (lecture/laboratory).

MLT 2800L Clinical Practicum I 10 cr.

Prerequisite: consent of program director. Assigned to a clinical affiliate of the Medical Laboratory Technology program, the student will be instructed in current laboratory procedures and instrument use appropriate for developing career entry level 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 10 cr.

Prerequisites: MLT 2800L. This course is a continuation of MLT 2800L, 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 8 cr.

Prerequisite: consent of the department. Corequisite: MLT 2192C. Assigned to a clinical affiliate of the Histologic Technology program, the student will be instructed in current laboratory procedures and instrument use appropriate for developing career entry level skills as a histotechnologist. The supervised learning experiences are under the coordination and responsibility of the program faculty. Twenty-four contact hours (laboratory).

MLT 2841L Histotechnology Practicum II 8 cr.

Prerequisite: MLT 2840L. Corequisite: MLT 2193C. This course is a continuation of MLT 2840L, Histotechnology Practicum I. Students continue in their assigned clinical affiliate under the coordination and supervision of the program. Twenty-four contact hours (laboratory).

MMC — Mass Media Communications

MMC 1000 Introduction to Mass Communications (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. The course is an introduction to mass communications and includes the history and development of mass media with emphasis on newspaper, radio, television and magazines. Effective communications rules and responsibilities of mass communications will be taught. Three contact hours.

MMC 2100 Writing for Mass Communications (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course provides fundamental instruction and practice in developing and writing news stories for print and broadcast media. Three contact hours.

MNA — Management: Applied

MNA 1392 Postal Management Customer Service 3 cr.

This course is designed to prepare students for employment in management positions in the postal service as postmasters, mail superintendents, and supervisors of delivery and collection, as well as provide supplemental training to persons previously and currently employed in these occupations. Topics to be covered are analysis of real unit operations and an in-depth study of rural and city delivery systems. Three contact hours.

MNA 1394 Postal Management Finance 3 cr.

This course is designed to provide extensive understanding of financial management principles in the U.S. Postal Service. Three contact hours.

MNA 2395 Postal Management Mail Processing I 3 cr.

This course is an introduction to the various aspects of processing U.S. mail. The major emphasis is on manual mail processing operations. Topics studied include distribution, dispatch and routing procedures, scheduling and staffing, schemes utilization, attendance control, case diagrams, safety and operational planning. Three contact hours.

MNA 2396 Postal Management Mail Processing II 3 cr.

This course is an introduction to mechanized and automated mail processing procedures. This course will provide an overview of the optical character reader, bar code sorter, multi-position letter sorting machine, multi-position flat sorting machine, sack sorter and air mail facility. Emphasis will also be given to the issues involved in the supervision of a mail processing operation. Discussion topics will include safety, planning, productivity, quality control, training, EEO and management style. Three contact hours.

MNA 2397 Postal Management Employee Relations 3 cr.

Prerequisite: MAN 2300 may be desirable. This course will provide the student with a basic understanding of postal personnel administration. It will provide background which will be useful to the potential postal manager in administering the hiring process, obtaining applicants and selecting candidates for assignment and promotion. The student will gain an understanding as well as an introduction to the various handbooks and manuals used as regulation reference points. The course will include mock interviews for selection and promotion procedures. Three contact hours.

MNA 2398 Postal Management Labor Relations 3 cr.

This course is an introduction to labor relations as it applies to the United States Postal Service. The course is descriptive of the roles of both management and postal unions as they interpret policies and regulations in the context of the postal environment. The course will present the bargaining agreements negotiated with the major postal unions and the day-to-day interpretation of those agreements. The subject will be presented by classroom lecture, reading of the texts (EL901, EL902 and EL903), discussions, class projects including a term paper, oral presentation to the class and role playing exercises. Three contact hours.

MNA 2400 Labor Relations (Y) 3 cr.

This course is an introduction to labor relations. It presents an overview of labor relations beginning with the history of the subject, progressing through developments in the field, federal laws and recent trends. The

course is designed to present a definition of labor relations and a working knowledge of the basic concepts involved. Three contact hours.

MRE — Medical Records

MRE 1000 Health Information Management I (Y) 4 cr.

Prerequisites: BSC 2085C and HSC 1531. This course is introduction to the health information management system, the role of the health information professional as a member of the health care team, principles of medical record management, including record content and format. Four contact hours.

MRE 1202 ICD-9-CM Coding Principles and Laboratory (Y) 4 cr.

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, one laboratory.

MRE 1430 Concepts of Disease 3 cr.

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 cr.

Prerequisites: MRE 1000 and MRE 2640. This course will provide each student a supervised experience in an assigned health care facility's Medical Record Department. Emphasis will be placed on primary medical record functions of record assembly, analysis, medicolegal procedures, preparing records for microfilming and equipment use. Five contact hours (health care facility).

MRE 2201 Health Information Management II 3 cr.

Prerequisites: MRE 1000, MRE 2640 and MRE 1800. Corequisite: OST 2335. This course will provide the student 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 cr.

Prerequisites: MRE 1430, MRE 1000, MRE 1800, MRE 2201 and MRE 2810. 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 cr.

Prerequisites: MRE 1000, MRE 1800, 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 cr.

Prerequisite: HSC 1531. This course is an in-depth study of Federal, State, and Local Laws which govern the preparation and use of health records and health information in the health care delivery system. Three contact hours.

MRE 2810 Health Information Practicum II (Y) 2 cr.

Prerequisites: MRE 1000 and MRE 1800. Corequisite: MRE 2201. This course will provide training for the student 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 cr.

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 — Mathematics: Technical and Business

MTB 1321 Technical Algebra 3 cr.

Prerequisite: two years of high school algebra. This course in applied mathematics involves principles and laws of basic algebra, solution of linear equations and basic analytical geometry. In each presentation, students develop solutions to problems of a technical nature. Three contact hours.

MTB 1322 Technical Trigonometry (Y) 3 cr.

Prerequisite: MAC 1140 or MTB 1321. A continuation of MTB 1321, this course covers the laws and principles of trigonometry, vector analysis, complex numbers and geometric consideration of trigonometry functions, and emphasizes practical work in solution of engineering problems. Three contact hours.

MUSIC COURSES

MUC — Music: Composition

MUC 1301 Introduction to Electronic Music (Y) 2 cr.

Prerequisite: approval 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 cr.

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 cr.

The course, open to music majors, teaches basic performance skills on clarinet or flute. Two contact hours (rehearsal).

MUE 1460 Brass Techniques (Y) 1 cr.

This course, open to music majors, teaches basic performance skills on trumpet or trombone. Two contact hours (rehearsal).

MUE 1470 Percussion Techniques (Y) 1 cr.

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 cr.

Prerequisite: MUT 1121 and/or consent of professor. This course provides the student 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 cr.

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 cr.

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, and Latin and North America. Three contact hours.

MUH 2052 Music in Contemporary Cultures (Y) 3 cr.

Prerequisite: ANT 2410. Open to all students as an elective, Music in Contemporary Cultures 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 cr.

Prerequisite: ENC 1101 or satisfactory score on placement test. 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 Afro-American Music: A Vocal Study (Y) 3 cr.

Open to all students as an elective, this course studies the origins of the styles of Afro-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. To facilitate courage, 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 cr.

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 student's 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 cr.

This course is open to all students. It offers the 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 cr.

Prerequisite: MUM 1600. This course is 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 the second semester student 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 cr.

Prerequisite: permission of instructor/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 permission of the instructor 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 cr.

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, to refine techniques of ensemble playing, and to 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 cr.

Prerequisite: Previous choral experience and audition, and by directors permission. Corequisite: enrollment in MUNB 1310. The repertoire of the Chamber Choir includes sacred and secular compositions, with an emphasis on a capella literature of the 17th through 20th centuries. With membership limited to 15 to 20 singers, a student 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 cr.

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. The student 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 cr.

Prerequisite: open to all students who have experience as players on bowed string instruments, with permission of 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 music performing 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 and Accompanying (Y) 1 cr.

Prerequisite: open to piano majors and principals by approval of the professor. This course provides the student with an introduction to multiple piano skills, chamber music skills, and the art of piano accompanying, both choral and instrumental. May be repeated for credit. Approval of the professor is required for piano minors and non-music majors. Three contact hours (rehearsal).

MUN 1710 Jazz Ensemble (Y) 1 cr.

Prerequisite: permission of the director/audition. Corequisite: MUN 1130 for Woodwind, Brass and Percussion Players (unless waived by director). The repertoire includes various styles from jazz and popular literature. The student may select this course for credit each semester, with up to four credits counting toward A.A. degree. Three contact hours (rehearsal).

MUN 1711 Jazz Combo (Y) 1 cr.

Prerequisite: Audition and permission of instructor. 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. The student may select this course for credit each semester, with up to four credits counting toward A.A. degree. Three contact hours (lecture/discussion).

MUNA 1310 College Chorus (Y) 1 cr.

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 A.A. degree. Three contact hours (rehearsal).

MUNB 1310 College Chorale (Y) 1 cr.

Prerequisite: permission of director; previous choral experience and/or audition with professor. The repertoire of the College Chorale includes the more difficult sacred and secular compositions, accompanied and unaccompanied. The student 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 cr.

Prerequisite: open by audition. This course is open by audition to persons interested in theatre and music in the areas of performance and technical operation. A student 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 cr.

This course will equip the church musician 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 cr.

This course is required for all music majors. In conjunction with one class meeting each week, the student must attend an announced number of FCCJ related concerts. Each music major enrolled for two hours of applied music is to perform in student recital at least once during the academic year. Meeting hour is flexible to coincide with special performance time. One contact hour.

MUT — Music: Theory

MUT 1001 Introduction to Music Theory (Y) 3 cr.

This course, designed for students whose background and theory placement test scores indicate further preparation is needed for MUT 1121, includes work with elementary music terminology, notation, intervals, scales, chords, rhythm, sight singing and diction. Three contact hours.

MUT 1121 Music Theory I (Y) 4 cr.

Prerequisite: MUT 1001 or satisfactory score on placement test or permission of instructor. Corequisite: music majors must also enroll in Applied Music, MUS 1010 and a performing organization. This elementary course in music theory and the principles underlying all music includes music terminology, notation, harmony, keyboard harmony, melody and rhythm in addition to sight singing and ear training. Designed for music majors, the course is also open to qualified students. To successfully complete this course, the student must receive a passing grade in each of the following areas: written theory, ear training, sight singing and keyboard harmony. Five contact hours: three lecture hours, two rehearsal hours.

MUT 1122 Music Theory II (Y) 4 cr.

Prerequisite: MUT 1121. Corequisite: music majors must also enroll in Applied Music, MUS 1010, and a performing organization. This basic course, a continuation of MUT 1121, includes music terminology, notation, harmony, keyboard harmony, melody, rhythm and form as well as sight singing and ear training. Designed for music majors, the course is also open to qualified students. To successfully complete this course, the student must receive a passing grade in each of the following areas: written theory, ear training, sight singing and keyboard harmony. Five contact hours: three lecture hours, two rehearsal hours.

MUT 1641 Jazz Improvisation I (Y) 2 cr.

Prerequisite: permission 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 cr.

This course is a continuation of MUT 1641. 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 advance study. Two contact hours.

MUT 2126 Music Theory III (Y) 4 cr.

Prerequisite: MUT 1122. Corequisite: music majors must also enroll in Applied Music, MUS 1010, and a performing organization. This continuing course in the techniques of analysis and part writing in vocal, keyboard

and instrumental styles includes advanced tertian harmony, modulation, sequence, and phrase, and part forms along with sight singing and ear training. Designed for music majors, the course is also open to qualified students. To successfully complete this course, the student must receive a passing grade in each of the following areas: written theory, ear training, sight singing and keyboard harmony. Five contact hours: three lecture hours, two rehearsal hours.

MUT 2127 Music Theory IV (Y) 4 cr.

Prerequisite: MUT 2126. Corequisite: music majors must also enroll in Applied Music, MUS 1010, and a performing organization. This continuing course in music theory includes altered and chromatic chords, extension of tonality, 20th century harmonic, melodic, and rhythmic styles, also with advanced sight singing and ear training. Designed for music majors, this course is also open to qualified students. To successfully complete this course, the student must receive a passing grade in each of the following areas: written theory, ear training, sight singing and keyboard harmony. Five contact hours: three lecture hours, two rehearsal hours.

MVK — Music: Keyboard

MVKA 1111 Class Piano I (Y) 1 cr.

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. Two contact hours (rehearsal).

MVKB 1111 Class Piano II (Y) 1 cr.

Prerequisite: MVKA 1111. This course is a continuation of MVKA 1111 and is a requirement for all music majors. Two contact hours (rehearsal).

MVKA 2121 Class Piano III (Y) 1 cr.

Prerequisite: MVKB 1111. This course is a continuation of MVKB 1111 and is a requirement for all music majors. Two contact hours (rehearsal).

MVKB 2121 Class Piano IV (Y) 1 cr.

Prerequisite: MVKA 2121. This course is a continuation of MVKA 2121. Two contact hours (rehearsal).

MVKA 2621 Basic Piano Pedagogy I (Y) 2 cr.

This introductory class prepares the student for professional class piano teaching at the beginner and early elementary level. Three contact hours (lecture/discussion).

MVKB 2621 Basic Piano Pedagogy II (Y) 2 cr.

This class, a continuation of piano pedagogy, prepares students for professional 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 cr.

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 cr.

Prerequisite: MVSA 1116. This course is a continuation of MVSA 1116 Class Guitar I, perfecting and advancing skills learned therein. Two contact hours (rehearsal).

MVSA 2126 Class Guitar III (Y) 1 cr.

Prerequisite: MVSB 1116. This course is a continuation of MVSB 1116, perfecting and advancing skills learned therein. Two contact hours (rehearsal).

MVSB 2126 Class Guitar IV (Y) 1 cr.

Prerequisite: MVSA 2126. This course is a continuation of MVSA 2126, perfecting and advancing skills learned therein. Two contact hours (rehearsal).

MVV — Music: Voice

MVVA 1111 Class Voice I (Y) 1 cr.

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 cr.

Prerequisite: MVVA 1111. This course is a continuation of MVVA 1111. Two contact hours (rehearsal).

MVVA 2121 Class Voice III (Y) 1 cr.

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 cr.

Prerequisite: MVVA 2121. This course is a continuation of MVVA 2121. Two contact hours (rehearsal).

APPLIED MUSIC COURSES

**MVB — Music: Brasses
Baritone**

MVBA 1014 Applied Preparatory Baritone I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.

Prerequisite: MVBA 1014. 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 cr.

Prerequisite: placement by audition before the music faculty. 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.

MVBB 1314 Applied Principal Baritone II (Y) 2 cr.

Prerequisite: MVBA 1314. Second 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.

MVBA 2324 Applied Principal Baritone III (Y) 2 cr.

Prerequisite: MVBB 1314. Third 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.

MVBB 2324 Applied Principal Baritone IV (Y) 2 cr.

Prerequisite: MVBA 2324. Fourth 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.

MVBA 1214 Applied Secondary Baritone I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVBA 1214. 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 cr.

Prerequisite: MVBB 1214. 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 cr.

Prerequisite: MVBA 2224. Fourth 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.

MVBA 1414 Applied Major Baritone I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBB 1414 Applied Major Baritone II (Y) 3 cr.

Prerequisite: MVBA 1414. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBA 2424 Applied Major Baritone III (Y) 3 cr.

Prerequisite: MVBB 1414. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBB 2424 Applied Major Baritone IV (Y) 3 cr.
 Prerequisite: MVBA 2424. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVW — Music: Woodwinds
Bassoon

MVWA 1014 Applied Preparatory Bassoon I (Y) 2 cr.
 Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.
 Prerequisite: MVWA 1014. 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 cr.
 Prerequisite: placement by audition before the music faculty. 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.

MVWB 1314 Applied Principal Bassoon II (Y) 2 cr.
 Prerequisite: MVWA 1314. Second 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.

MVWA 2324 Applied Principal Bassoon III (Y) 2 cr.
 Prerequisite: MVWB 1314. Third 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.

MVWB 2324 Applied Principal Bassoon IV (Y) 2 cr.
 Prerequisite: MVWA 2324. Fourth 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.

MVWA 1214 Applied Secondary Bassoon I (Y) 1 cr.
 Prerequisite: placement by audition before the music faculty. 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 cr.
 Prerequisite: MVWA 1214. 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 cr.
 Prerequisite: MVWB 1214. 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 cr.
 Prerequisite: MVWA 2224. Fourth 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.

MVWA 1414 Applied Major Bassoon I (Y) 3 cr.
 Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWB 1414 Applied Major Bassoon II (Y) 3 cr.
 Prerequisite: MVWA 1414. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWA 2424 Applied Major Bassoon III (Y) 3 cr.
 Prerequisite: MVWB 1414. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWB 2424 Applied Major Bassoon IV (Y) 3 cr.
 Prerequisite: MVWA 2424. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVS — Music: Strings
Cello

MVSA 1013 Applied Preparatory Cello I (Y) 2 cr.
 Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.
 Prerequisite: MVSA 1013. 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 cr.
 Prerequisite: placement by audition before the music faculty. 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 1313 Applied Principal Cello II (Y) 2 cr.
 Prerequisite: MVSA 1313. Second 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.

MVSA 2323 Applied Principal Cello III (Y) 2 cr.
 Prerequisite: MVSB 1313. Third 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 2323 Applied Principal Cello IV (Y) 2 cr.
 Prerequisite: MVSA 2323. Fourth 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.

MVSA 1213 Applied Secondary Cello I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVSA 1213. 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 cr.

Prerequisite: MVSB 1213. 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 cr.

Prerequisite: MVSA 2223. Fourth 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.

MVSA 1413 Applied Major Cello I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSB 1413 Applied Major Cello II (Y) 3 cr.

Prerequisite: MVSA 1413. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSA 2423 Applied Major Cello III (Y) 3 cr.

Prerequisite: MVSB 1413. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSB 2423 Applied Major Cello IV (Y) 3 cr.

Prerequisite: MVSA 2423. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVW — Music: Woodwinds
Clarinet**

MVWA 1013 Applied Preparatory Clarinet I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.

Prerequisite: MVWA 1013. 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 cr.

Prerequisite: placement by audition before the music faculty. 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.

MVWB 1313 Applied Principal Clarinet II (Y) 2 cr.

Prerequisite: MVWA 1313. Second 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.

MVWA 2323 Applied Principal Clarinet III (Y) 2 cr.

Prerequisite: MVWB 1313. Third 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.

MVWB 2323 Applied Principal Clarinet IV (Y) 2 cr.

Prerequisite: MVWA 2323. Fourth 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.

MVWA 1213 Applied Secondary Clarinet I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVWA 1213. 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 cr.

Prerequisite: MVWB 1213. 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 cr.

Prerequisite: MVWA 2223. Fourth 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.

MVWA 1413 Applied Major Clarinet I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWB 1413 Applied Major Clarinet II (Y) 3 cr.

Prerequisite: MVWA 1413. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWA 2423 Applied Major Clarinet III (Y) 3 cr.
Prerequisite: MVWB 1413. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWB 2423 Applied Major Clarinet IV (Y) 3 cr.
Prerequisite: MVWA 2423. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVW — Music: Woodwinds
Flute

MVWA 1011 Applied Preparatory Flute I (Y) 2 cr.
Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.
Prerequisite: MVWA 1011. 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 cr.
Prerequisite: placement by audition before the music faculty. 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.

MVWB 1311 Applied Principal Flute II (Y) 2 cr.
Prerequisite: MVWA 1311. Second 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.

MVWA 2321 Applied Principal Flute III (Y) 2 cr.
Prerequisite: MVWB 1311. Third 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.

MVWB 2321 Applied Principal Flute IV (Y) 2 cr.
Prerequisite: MVWA 2321. Fourth 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.

MVWA 1211 Applied Secondary Flute I (Y) 1 cr.
Prerequisite: placement by audition before the music faculty. 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 cr.
Prerequisite: MVWA 1211. 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 cr.
Prerequisite: MVWB 1211. 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 cr.
Prerequisite: MVWA 2221. Fourth 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.

MVWA 1411 Applied Major Flute I (Y) 3 cr.
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWB 1411 Applied Major Flute II (Y) 3 cr.
Prerequisite: MVWA 1411. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWA 2421 Applied Major Flute III (Y) 3 cr.
Prerequisite: MVWB 1411. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWB 2421 Applied Major Flute IV (Y) 3 cr.
Prerequisite: MVWA 2421. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVB — Music: Brasses
French Horn

MVBA 1012 Applied Preparatory French Horn I (Y) 2 cr.
Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.
Prerequisite: MVBA 1012. 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 cr.
Prerequisite: placement by audition before the music faculty. 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.

MVBB 1312 Applied Principal French Horn II (Y) 2 cr.
Prerequisite: MVBA 1312. Second 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.

MVBA 2322 Applied Principal French Horn III (Y) 2 cr.

Prerequisite: MVBB 1312. Third 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.

MVBB 2322 Applied Principal French Horn IV (Y) 2 cr.

Prerequisite: MVBA 2322. Fourth 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.

MVBA 1212 Applied Secondary French Horn I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVBA 1212. 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 cr.

Prerequisite: MVBB 1212. 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 cr.

Prerequisite: MVBA 2222. Fourth 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.

MVBA 1412 Applied Major French Horn I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBB 1412 Applied Major French Horn II (Y) 3 cr.

Prerequisite: MVBA 1412. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBA 2422 Applied Major French Horn III (Y) 3 cr.

Prerequisite: MVBB 1412. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBB 2422 Applied Major French Horn IV (Y) 3 cr.

Prerequisite: MVBA 2422. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVS — Music: Strings Guitar

MVSA 1016 Applied Preparatory Guitar I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.

Prerequisite: MVSA 1016. 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 cr.

Prerequisite: placement by audition before the music faculty. 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 1316 Applied Principal Guitar II (Y) 2 cr.

Prerequisite: MVSA 1316. Second 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.

MVSA 2326 Applied Principal Guitar III (Y) 2 cr.

Prerequisite: MVSB 1316. Third 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 2326 Applied Principal Guitar IV (Y) 2 cr.

Prerequisite: MVSA 2326. Fourth 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.

MVSA 1216 Applied Secondary Guitar I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVSA 1216. 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 cr.

Prerequisite: MVSB 1216. 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 cr.

Prerequisite: MVSA 2226. Fourth 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.

MVSA 1416 Applied Major Guitar I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSB 1416 Applied Major Guitar II (Y) 3 cr.

Prerequisite: MVSA 1416. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSA 2426 Applied Major Guitar III (Y) 3 cr.

Prerequisite: MVSB 1416. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSB 2426 Applied Major Guitar IV (Y) 3 cr.

Prerequisite: MVSA 2426. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVW — Music: Woodwinds
Oboe**

MVWA 1012 Applied Preparatory Oboe I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lessons a week.

MVWB 1012 Applied Preparatory Oboe II (Y) 2 cr.

Prerequisite: MVWA 1012. 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 cr.

Prerequisite: placement by audition before the music faculty. 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.

MVWB 1312 Applied Principal Oboe II (Y) 2 cr.

Prerequisite: MVWA 1312. Second 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.

MVWA 2322 Applied Principal Oboe III (Y) 2 cr.

Prerequisite: MVWB 1312. Third 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.

MVWB 2322 Applied Principal Oboe IV (Y) 2 cr.

Prerequisite: MVWA 2322. Fourth 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.

MVWA 1212 Applied Secondary Oboe I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVWA 1212. 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 cr.

Prerequisite: MVWB 1212. 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 cr.

Prerequisite: MVWA 2222. Fourth 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.

MVWA 1412 Applied Major Oboe I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. 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 cr.

Prerequisite: MVWA 1412. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWA 2422 Applied Major Oboe III (Y) 3 cr.

Prerequisite: MVWB 1412. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWB 2422 Applied Major Oboe IV (Y) 3 cr.

Prerequisite: MVWA 2422. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVK — Music: Keyboard Organ

MVKA 1013 Applied Preparatory Organ I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.

Prerequisite: MVKA 1013. 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 cr.

Prerequisite: placement by audition before the music faculty. 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.

MVKB 1313 Applied Principal Organ II (Y) 2 cr.

Prerequisite: MVKA 1313. Second 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.

MVKA 2323 Applied Principal Organ III (Y) 2 cr.

Prerequisite: MVKB 1313. Third 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.

MVKB 2323 Applied Principal Organ IV (Y) 2 cr.

Prerequisite: MVKA 2323. Fourth 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.

MVKA 1213 Applied Secondary Organ I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVKA 1213. 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 cr.

Prerequisite: MVKB 1213. 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 cr.

Prerequisite: MVKA 2223. Fourth 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.

MVKA 1413 Applied Major Organ I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVKB 1413 Applied Major Organ II (Y) 3 cr.

Prerequisite: MVKA 1413. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVKA 2423 Applied Major Organ III (Y) 3 cr.

Prerequisite: MVKB 1413. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVKB 2423 Applied Major Organ IV (Y) 3 cr.

Prerequisite: MVKA 2423. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVO — Music: Other Instruments Other

MVOA 1010 Applied Preparatory Other I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.

Prerequisite: MVOA 1010. 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 cr.

Prerequisite: placement by audition before the music faculty. 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.

MVOB 1310 Applied Principal Other II (Y) 2 cr.

Prerequisite: MVOA 1310. Second 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.

MVOA 2320 Applied Principal Other III (Y) 2 cr.

Prerequisite: MVOB 1310. Third 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.

MVOB 2320 Applied Principal Other IV (Y) 2 cr.
Prerequisite: MVOA 2320. Fourth 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.

MVOA 1210 Applied Secondary Other I (Y) 1 cr.
Prerequisite: placement by audition before the music faculty. 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 cr.
Prerequisite: MVOA 1210. 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 cr.
Prerequisite: MVOB 1210. 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 cr.
Prerequisite: MVOA 2220. Fourth 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.

MVOA 1410 Applied Major Other I (Y) 3 cr.
Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVOB 1410 Applied Major Other II (Y) 3 cr.
Prerequisite: MVOA 1410. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVOA 2420 Applied Major Other III (Y) 3 cr.
Prerequisite: MVOB 1410. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVOB 2420 Applied Major Other IV (Y) 3 cr.
Prerequisite: MVOA 2420. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVP — Music Percussion

MVPA 1011 Applied Preparatory Percussion I (Y) 2 cr.
Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.
Prerequisite: MVPA 1011. 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 cr.
Prerequisite: placement by audition before the music faculty. 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.

MVPB 1311 Applied Principal Percussion II (Y) 2 cr.
Prerequisite: MVPA 1311. Second 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.

MVPA 2321 Applied Principal Percussion III (Y) 2 cr.
Prerequisite: MVPB 1311. Third 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.

MVPB 2321 Applied Principal Percussion IV (Y) 2 cr.
Prerequisite: MVPA 2321. Fourth 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.

MVPA 1211 Applied Secondary Percussion I (Y) 1 cr.
Prerequisite: placement by audition before the music faculty. 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 cr.
Prerequisite: MVPA 1211. 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 cr.
Prerequisite: MVPB 1211. 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 cr.
Prerequisite: MVPA 2221. Fourth 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.

MVPA 1411 Applied Major Percussion I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVPB 1411 Applied Major Percussion II (Y) 3 cr.

Prerequisite: MVPA 1411. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVPA 2421 Applied Major Percussion III (Y) 3 cr.

Prerequisite: MVPB 1411. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVPB 2421 Applied Major Percussion IV (Y) 3 cr.

Prerequisite: MVPA 2421. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVK — Music: Keyboard
Piano****MVKA 1011 Applied Preparatory Piano I (Y) 2 cr.**

Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

MVKB 1011 Applied Preparatory Piano II (Y) 2 cr.

Prerequisite: MVKA 1011. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

MVKA 1311 Applied Principal Piano I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. 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.

MVKB 1311 Applied Principal Piano II (Y) 2 cr.

Prerequisite: MVKA 1311. Second 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.

MVKA 2321 Applied Principal Piano III (Y) 2 cr.

Prerequisite: MVKB 1311. Third 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.

MVKB 2321 Applied Principal Piano IV (Y) 2 cr.

Prerequisite: MVKA 2321. Fourth 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.

MVKA 1211 Applied Secondary Piano I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVKA 1211. 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 cr.

Prerequisite: MVKB 1211. 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 cr.

Prerequisite: MVKA 2221. Fourth 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.

MVKA 1411 Applied Major Piano I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVKB 1411 Applied Major Piano II (Y) 3 cr.

Prerequisite: MVKA 1411. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVKA 2421 Applied Major Piano III (Y) 3 cr.

Prerequisite: MVKB 1411. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVKB 2421 Applied Major Piano IV (Y) 3 cr.

Prerequisite: MVKA 2421. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVW — Music: Woodwinds
Saxophone****MVWA 1015 Applied Preparatory
Saxophone I (Y) 2 cr.**

Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.**

Prerequisite: MVWA 1015. 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 cr.
 Prerequisite: placement by audition before the music faculty. 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.

MVWB 1315 Applied Principal Saxophone II (Y) 2 cr.
 Prerequisite: MVWA 1315. Second 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.

MVWA 2325 Applied Principal Saxophone III (Y) 2 cr.
 Prerequisite: MVWB 1315. Third 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.

MVWB 2325 Applied Principal Saxophone IV (Y) 2 cr.
 Prerequisite: MVWA 2325. Fourth 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.

MVWA 1215 Applied Secondary Saxophone I (Y) 1 cr.
 Prerequisite: placement by audition before the music faculty. 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 cr.
 Prerequisite: MVWA 1215. 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 cr.
 Prerequisite: MVWB 1215. 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 cr.
 Prerequisite: MVWA 2225. Fourth 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.

MVWA 1415 Applied Major Saxophone I (Y) 3 cr.
 Prerequisite: placement by audition before the entire full-time faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWB 1415 Applied Major Saxophone II (Y) 3 cr.
 Prerequisite: MVWA 1415. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWA 2425 Applied Major Saxophone III (Y) 3 cr.
 Prerequisite: MVWB 1415. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWB 2425 Applied Major Saxophone IV (Y) 3 cr.
 Prerequisite: MVWA 2425. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVS — Music: Strings
String Bass

MVSA 1014 Applied Preparatory String Bass I (Y) 2 cr.
 Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.
 Prerequisite: MVSA 1014. 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 cr.
 Prerequisite: placement by audition before the music faculty. 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 1314 Applied Principal String Bass II (Y) 2 cr.
 Prerequisite: MVSA 1314. Second 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.

MVSA 2324 Applied Principal String Bass III (Y) 2 cr.
 Prerequisite: MVSB 1314. Third 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 2324 Applied Principal String Bass IV (Y) 2 cr.
 Prerequisite: MVSA 2324. Fourth 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.

MVSA 1214 Applied Secondary String Bass I (Y) 1 cr.
 Prerequisite: placement by audition before the music faculty. 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 cr.
 Prerequisite: MVSA 1214. 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.

ciency on an instrument other than their principal or major. One half-hour lesson a week.

MVSA 2224 Applied Secondary String Bass III (Y) 1 cr.

Prerequisite: MVSB 1214. 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 cr.

Prerequisite: MVSA 2224. Fourth 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.

MVSA 1414 Applied Major String Bass I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSB 1414 Applied Major String Bass II (Y) 3 cr.

Prerequisite: MVSA 1414. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSA 2424 Applied Major String Bass III (Y) 3 cr.

Prerequisite: MVSB 1414. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSB 2424 Applied Major String Bass IV (Y) 3 cr.

Prerequisite: MVSA 2424. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVB — Music: Brasses Trombone

MVBA 1013 Applied Preparatory Trombone I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.

Prerequisite: MVBA 1013. 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 cr.

Prerequisite: placement by audition before the music faculty. 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.

MVBB 1313 Applied Principal Trombone II (Y) 2 cr.

Prerequisite: MVBA 1313. Second 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.

MVBA 2323 Applied Principal Trombone III (Y) 2 cr.

Prerequisite: MVBB 1313. Third 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.

MVBB 2323 Applied Principal Trombone IV (Y) 2 cr.

Prerequisite: MVBA 2323. Fourth 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.

MVBA 1213 Applied Secondary Trombone I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVBB 1213. 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 cr.

Prerequisite: MVBB 1213. 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 cr.

Prerequisite: MVBA 2223. Fourth 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.

MVBA 1413 Applied Major Trombone I (Y) 3 cr.

Prerequisite: placement by audition before the full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBB 1413 Applied Major Trombone II (Y) 3 cr.

Prerequisite: MBVA 1413. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBA 2423 Applied Major Trombone III (Y) 3 cr.

Prerequisite: MVBB 1413. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBB 2423 Applied Major Trombone IV (Y) 3 cr.

Prerequisite: MVBA 2423. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVB — Music: Brasses
Trumpet

MVBA 1011 Applied Preparatory Trumpet I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.

Prerequisite: MVBA 1011. 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 cr.

Prerequisite: placement by audition before the music faculty. 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.

MVBB 1311 Applied Principal Trumpet II (Y) 2 cr.

Prerequisite: MVBA 1311. Second 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.

MVBA 2321 Applied Principal Trumpet III (Y) 2 cr.

Prerequisite: MVBB 1311. Third 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.

MVBB 2321 Applied Principal Trumpet IV (Y) 2 cr.

Prerequisite: MVBA 2321. Fourth 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.

MVBA 1211 Applied Secondary Trumpet I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVBA 1211. 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 cr.

Prerequisite: MVBB 1211. 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 cr.

Prerequisite: MVBA 2221. Fourth 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.

MVBA 1411 Applied Major Trumpet I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBB 1411 Applied Major Trumpet II (Y) 3 cr.

Prerequisite: MVBA 1411. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBA 2421 Applied Major Trumpet III (Y) 3 cr.

Prerequisite: MVBB 1411. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBB 2421 Applied Major Trumpet IV (Y) 3 cr.

Prerequisite: MVBA 2421. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVB — Music: Brasses
Tuba

MVBA 1015 Applied Preparatory Tuba I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.

Prerequisite: MVBA 1015. 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 cr.

Prerequisite: Placement by audition before the music faculty. 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.

MVBB 1315 Applied Principal Tuba II (Y) 2 cr.

Prerequisite: MVBA 1315. Second 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.

MVBA 2325 Applied Principal Tuba III (Y) 2 cr.

Prerequisite: MVBB 1315. Third 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.

MVBB 2325 Applied Principal Tuba IV (Y) 2 cr.

Prerequisite: MVBA 2325. Fourth 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.

MVBA 1215 Applied Secondary Tuba I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVBA 1215. 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 cr.

Prerequisite: MVBB 1215. 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 cr.

Prerequisite: MVBA 2225. Fourth 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.

MVBA 1415 Applied Major Tuba I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBB 1415 Applied Major Tuba II (Y) 3 cr.

Prerequisite: MVBA 1415. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBA 2425 Applied Major Tuba III (Y) 3 cr.

Prerequisite: MVBB 1415. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVBB 2425 Applied Major Tuba IV (Y) 3 cr.

Prerequisite: MVBA 2425. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

**MVS — Music: Strings
Viola**

MVSA 1012 Applied Preparatory Viola I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.

Prerequisite: MVSA 1012. 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 cr.

Prerequisite: placement by audition before the music faculty. 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 1312 Applied Principal Viola II (Y) 2 cr.

Prerequisite: MVSA 1312. Second 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.

MVSA 2322 Applied Principal Viola III (Y) 2 cr.

Prerequisite: MVSB 1312. Third 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 2322 Applied Principal Viola IV (Y) 2 cr.

Prerequisite: MVSA 2322. Fourth 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.

MVSA 1212 Applied Secondary Viola I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVSA 1212. 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 cr.

Prerequisite: MVSB 1212. 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 cr.

Prerequisite: MVSA 2222. Fourth 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.

MVSA 1412 Applied Major Viola I (Y) 3 cr.

Prerequisite: placement by audition before the full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSB 1412 Applied Major Viola II (Y) 3 cr.

Prerequisite: MVSA 1412. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSA 2422 Applied Major Viola III (Y) 3 cr.

Prerequisite: MVSB 1412. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSB 2422 Applied Major Viola IV (Y) 3 cr.

Prerequisite: MVSA 2422. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVS — Music: Strings
Violin

MVSA 1011 Applied Preparatory Violin I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons 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 cr.

Prerequisite: MVSA 1011. 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 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVSA 1311. Second 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.

MVSA 2321 Applied Principal Violin III (Y) 2 cr.

Prerequisite: MVSB 1311. Third 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 2321 Applied Principal Violin IV (Y) 2 cr.

Prerequisite: MVSA 2321. Fourth 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.

MVSA 1211 Applied Secondary Violin I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVSA 1211. 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 cr.

Prerequisite: MVSB 1211. 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 cr.

Prerequisite: MVSA 2221. Fourth 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.

MVSA 1411 Applied Major Violin I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSB 1411 Applied Major Violin II (Y) 3 cr.

Prerequisite: MVSA 1411. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSA 2421 Applied Major Violin III (Y) 3 cr.

Prerequisite: MVSB 1411. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVSB 2421 Applied Major Violin IV (Y) 3 cr.

Prerequisite: MVSA 2421. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVV — Music: Voice
Voice

MVVA 1011 Applied Preparatory Voice I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVVB 1011 Applied Preparatory Voice II (Y) 2 cr.

Prerequisite: MVVA 1011. Second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVVA 1311 Applied Principal Voice I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. 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.

MVVB 1311 Applied Principal Voice II (Y) 2 cr.

Prerequisite: MVVA 1311. Second 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.

MVVA 2321 Applied Principal Voice III (Y) 2 cr.

Prerequisite: MVVB 1311. Third 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.

MVVB 2321 Applied Principal Voice IV (Y) 2 cr.

Prerequisite: MVVA 2321. Fourth 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.

MVVA 1211 Applied Secondary Voice I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. 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 cr.

Prerequisite: MVVA 1211. 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 cr.

Prerequisite: MVVB 1211. 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 cr.

Prerequisite: MVVA 2221. Fourth 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.

MVVA 1411 Applied Major Voice I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. First semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVVB 1411 Applied Major Voice II (Y) 3 cr.

Prerequisite: MVVA 1411. Second semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVVA 2421 Applied Major Voice III (Y) 3 cr.

Prerequisite: MVVB 1411. Third semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVVB 2421 Applied Major Voice IV (Y) 3 cr.

Prerequisite: MVVA 2421. Fourth semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

NUR — Nursing Practice and Theory

NUR 1000C Transitional Nursing Process I 9 cr.

Prerequisites: BSC 2085C, BSC 2086C, MCB 2013C, ENC 1101, ENC 1102, PSY 1012, DEP 2004, MAT 1033 (or MAC 1102) and any one of the following: SYG 2000, humanities (Refer to A.S. degree General Education requirements) or social science (refer to A.S. degree General Education requirements). This course, designed for and limited to the Florida Licensed Practical Nurse, 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.

NUR 1021C Nursing Process I — Fundamentals of Nursing 10 cr.

Prerequisite: BSC 2086C. Nursing 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 intervention and adaptations for specific age groups, particularly the elderly client, to meet the basic needs of man in health maintenance. Content and experience focus on observations, communications, the interpersonal process, recording, hygienic practices, administration of drugs, asepsis, nutrition, elimination, fluid balance and oxygen. The course introduces current trends and legal implications of nursing. Fifteen contact hours: five lecture hours, ten laboratory hours.

NUR 1212C Nursing Process II — Medical Surgical Nursing 10 cr.

Prerequisite: NUR 1021C and MCB 2013C. With Nursing 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 four 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 cr.

Prerequisite: NUR 1000C. Corequisites: may be enrolled in two of the following, any course listed under A.S. degree Humanities, SYG 2000, or a social science course, EUH 1000, AMH 2010, POS 2041 or ISS 1120. A continuation of NUR 1000C, this course, designed for and limited to the Florida Licensed Practical Nurse, introduces the student to the use of the nursing process in his/her newly developing role 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 to theoretical concepts and evaluates clinical skills in the campus nursing laboratory. Twelve contact hours: six lecture hours, six laboratory hours (in campus lab or clinical facility).

NUR 2313C Nursing Process IIIB — Nursing Care of Children 6 cr.

Prerequisite: NUR 1212C, DEP 2004. Corequisite: NUR 2420C. With Nursing I and II as a basis, Nursing IIIB encompasses the study of physical and psychological problems of children from infancy through adolescence. This course uses the family-centered approach for learning the skills needed to care for sick children. Pediatric nursing supports the belief that children, by

nature of their growth and development, physical and emotional immaturity, have needs in health and illness different from those of adults. Through the utilization of the nursing process and the interpersonal process, this course also assists the student to apply knowledge of pediatric nursing in the solving of common recurring health problems associated with the child. Nine and one-half contact hours (lecture/discussion).

NUR 2420C Nursing Process IIIA — Nursing Care of the Child Bearing Family 6 cr.

Prerequisites: NUR 1212C and DEP 2004. Corequisite: NUR 2313C. With Nursing Process I and II as a basis, Nursing 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 intervention with families who are experiencing the stresses of the child bearing period. The nursing care of the child bearing family given by the student nurse 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 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 cr.

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. Five contact hours (over a four-week period) (lecture/discussion).

NUR 2730C Nursing Process IVA — Medical-Surgical Nursing Care of the Adult Patient 9 cr.

Prerequisites: NUR 2420C, NUR 2313C and MCB 2013C. Corequisite: NUR 2520C. This 11-week course is a continuation of the study of commonly recurring health problems of patients 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. The student will give nursing care to patients with medical-surgical deviations. 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 the beginning associate degree nurse practitioner, this course includes a transitional clinical experience. Fifteen contact hours: three lecture hours, twelve laboratory hours. (Students will receive learning experiences on campus or in a clinical facility.)

OCB — Oceanography: Biological

OCB 2003C Fundamentals of Marine Biology (Y) 4 cr.

The student will benefit by taking BSC 2011C and/or high school chemistry, physics or CHM 1025C 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 cr.

Prerequisite: MAT 1033. Corequisite: MAC 1140 and OCE 2001L. The student 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 cr.

Corequisite: OCE 2001. This is a laboratory course intended to supplement OCE 2001 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 cr.

This course provides the student 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 cr.

Recommended prerequisite: SPC 2600. This course consists of critical analysis and appreciation of literature from both the emotional and the intellectual viewpoints. Designed to enhance the student's 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. Three contact hours.

OST — Office Systems Technology

OST 1100 Keyboarding (Typing)/Introduction to Word Processing (Y) 3 cr.

The major objectives of the course, designed for the student who has little or no typewriting/keyboarding experience, are to learn the keyboard and to develop correct keyboarding techniques. The course introduces horizontal and vertical centering, letters, simple forms and reports. (Students who have satisfactorily completed one year of high school typewriting should enroll in OST 1108.) Three contact hours.

OST 1108 Keyboard Skill/Speed Building (Y) 3 cr.

Prerequisite: ability to keyboard at 20 words per minute or higher. In this course, computerized diagnosis

tic tests will be used to identify weaknesses in keying speed and accuracy. Alphabetic, number (including ten-key number pad) and speed building techniques will then be designed to build individual keyboarding skills. Three contact hours.

OST 1141 Basic Computer Keyboarding (Y) 1 cr.

This course is designed to give the academic student the skills necessary to adequately manipulate a computer keyboard. It will provide basic knowledge of touch keyboarding (typing on a computer). Students requiring higher levels of proficiency in keyboarding are encouraged to enroll in other courses more suited to their needs. Credit cannot be earned for both this course and OST 1100. One contact hour.

OST 1145 Data Entry Applications 3 cr.

Prerequisite: OST 1100 or equivalent. 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 will be placed on accurate inputting of data, whatever the application. Three contact hours.

OST 1211 Shorthand I (Y) 3 cr.

Corequisite: OST 1100. This is a beginning course which includes principles of Gregg Shorthand with some dictation and transcription practice. Students with no typewriting skill should take OST 1100 concurrently with OST 1211. Three contact hours.

OST 1324 Business Mathematics Using Calculators (Y) 3 cr.

Prerequisite: Satisfactory score on the placement test. This course consists of a mathematical treatment of financial problems arising in modern businesses. The principal purpose of this course is to review the fundamental processes (addition, subtraction, multiplication and division) while developing the numeric touch system and calculating skills in handling business transactions. The course covers percentages, simple and compound interest, inventories, depreciation, payroll, commissions, taxes, metrics and other business related topics. Three contact hours.

OST 1355 Introduction to Information and Records Management 3 cr.

This course gives the student 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. Three contact hours.

OST 1384 Introduction to Customer Service 3 cr.

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 1401 Fundamental Support Systems and Procedures (Y) 3 cr.

Prerequisite: OST 1100 or ability to type 25 words per minute. This course is an introduction to office systems as the integration of people, procedures, equipment and the environment. It provides a study of the information processing cycle utilizing both manual and electronic procedures and stresses the development of human relations skills for survival in today's office. Three contact hours.

OST 1581 Professional Development in the Work Environment 3 cr.

This course is designed to provide techniques for the development of people skills essential for job success. Topics include developing a positive self image, a professional self image, ethics, time management, human relations and communications skills, organizational dynamics, interpersonal development skills, employability skills, conflict management skills and professional development. Three contact hours.

OST 1601 Fundamentals of Business Communications (Y) 3 cr.

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 develop notetaking and transcription skills as they relate to document development and office productivity. Proofreading and editing applications will stress the knowledge and skills needed for managing the accuracy and quality of document creation and production. Listening and verbal skills will be emphasized with the computer and videos used as teaching tools. Three contact hours.

OST 1611 Medical Transcription 3 cr.

Prerequisites: typing speed of 45 words per minute; completion of HSC 1531. This course is designed for the student seeking entry level employment as a medical transcriptionist. The objective is to provide the basic knowledge, understanding and skills required through actual transcription of a variety of medical reports. Medical specialties include, but are not limited to, general surgery, pulmonary diseases, trauma and cardiology. Three contact hours.

OST 1621 Legal Transcription 3 cr.

Prerequisite: keyboard at least 45 words per minute and have word processing experience. 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. Three contact hours.

OST 1711 Word Processing I (Y) 3 cr.

Prerequisite: ability to type 40 words per minute for five minutes on straight copy. This course includes concepts of word processing and applications on text-editing equipment. It includes creating, saving, revis-

ing, editing, printing and using special features in basic word processing files. Three contact hours.

OST 1731 Word Processing/Level I 1 cr.

As an introduction to basic word processing skills, this course will present the essential skills for creating, saving, revising and editing basic word processing files. Topics will include basic text editing and print features, moving and copying blocks, spelling, search and replace and simple macros. (OST 1731, 1732 and one of 1733, 1734, 1735, or 1736 may be substituted for OST 1711 Word Processing I.) Twenty contact hours.

OST 1732 Word Processing/Level II 1 cr.

Prerequisite: OST 1731 or instructor's consent. As an extension to Word Processing/Level I this course covers topics necessary to refine the use of basic word processing techniques. Topics will include headers and footers, initial codes, forms, fonts, hyphenation, disk maintenance, modifying defaults and an introduction to text columns and merging. (OST 1731, 1732 and one of 1733, 1734, 1735, or 1736 may be substituted for OST 1711 Word Processing I.) Twenty contact hours.

OST 1733 Word Processing/Merging 1 cr.

Prerequisite: OST 1732 or instructor's consent. This course is specifically designed to address the production of standardized documents. Topics include different merging techniques, developing paragraph libraries and sorting and selecting data. In addition, paragraph numbering, outlining and math functions will also be presented. (OST 1731, 1732 and one of 1733, 1734, 1735, or 1736 may be substituted for OST 1711 Word Processing I. Any three of 1733, 1734, 1735 and 1736 may be substituted for OST 2712 Word Processing II.) Twenty contact hours.

OST 1734 Word Processing/Desktop Publishing/Graphics 1 cr.

Prerequisite: OST 1732 or instructor's consent. This course is specifically designed to address the desktop publishing applications available in word processing software. Topics include text columns, styles, font selection, importing and utilizing graphic elements, and line draw. (Three of OST 1733, 1734, 1735, or 1736 may be substituted for OST 2712 Word Processing II.) Twenty contact hours.

OST 1735 Word Processing/Authoring 1 cr.

Prerequisite: OST 1732 or instructor's consent. This course is specifically designed for individuals interested in authoring work or producing text prepared for publication. Topics will include styles, paragraph numbering and outlining, automatic footnoting, preparing tables of contents or authorities, indexes or lists, redlining, and simple graphics. (Three of OST 1733, 1734, 1735 or 1736 may be substituted for OST 2712 Word Processing II.) Twenty contact hours.

OST 1736 Word Processing/Macros 1 cr.

Prerequisite: OST 1732 or instructor's consent. This course is specifically designed to address advanced macros and macro programming. Other power user top-

ics such as using predefined keyboard layouts, redefining the keyboard and setting up multiple default files will be presented. (Three of OST 1733, 1734, 1735 or 1736 may be substituted for OST 2712 Word Processing II.) Twenty contact hours.

OST 1743 Basic Electronic Writing (Y) 1 cr.

This course will present essential skills for creating, saving, revising and editing basic word processing files. It is intended to assist the student in the preparation of assignments for other classes (such as term papers, essays or reports) that require word processing skills. Topics will include basic text editing and print features, moving and copying blocks, spelling, search and replace, outlining, endnotes and simple macros. Basic touch typing skills are recommended for successful completion of this course. Those requiring higher levels of proficiency in word processing are encouraged to enroll in other courses more suited to their goals. Credit cannot be earned for both this course and OST 1711. One contact hour.

OST 2335 Applied Business Communications (Y) 3 cr.

Prerequisite: OST 1601 or ENC 1101 or consent of professor. 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, practice recording and translating information using the latest technology and develop effective verbal and nonverbal communication and listening skills. Three contact hours.

OST 2356 Specialized Functions in Information and Records Management 3 cr.

Prerequisite: OST 1355. This course is designed to introduce students to the specialized functions within Information/Records Management. Students will explore several functions including technical aspects of forms management, micrographics, reprographics, disaster recovery, computer indexing methodologies, and optical disk technology. Three contact hours.

OST 2357 Systems and Functions in Records Management 3 cr.

Prerequisites: OST 1355 and CIS 2321. This course focuses on the systems and functions of Information/Records Management. Students are introduced to the scope of problems involved in administering a Information/Records Management program. There are several exercises involving analysis by case study designed to teach informed decision making. Four contact hours: three lecture, one laboratory.

OST 2501 Office Systems Management (Y) 3 cr.

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 (Y) 3 cr.

Prerequisite: Keyboard at least 45 words per minute and have word processing experience. This course is a continuation of OST 1601 and provides a simulation of office tasks to aid the student 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. Three contact hours.

OST 2712 Word Processing II (Y) 3 cr.

Prerequisite: OST 1711. This course is designed to teach the student how to produce complex documents using advanced word processing functions. Three contact hours.

**PCB — Process Biology
(Cell/Molecular/Ecology/Genetics/Physiology)****PCB 2033 General Ecology (Y) 3 cr.**

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.

**PEL — Physical Education Acts
(General) — Object Centered, Land****PEL 1041 Recreational Games (Y) 1 cr.**

This course introduces the student to the basic skills, rules and strategy of a variety of recreational games, such as table tennis, deck tennis, horseshoes, paddle tennis, croquet, etc. Two contact hours (activity).

PEL 1121 Beginning Golf (Y) 1 cr.

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 (Y) 1 cr.

Prerequisite: PEL 1121. 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 (Y) 1 cr.

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 Volleyball (Y) 1 cr.

This course teaches the fundamental skills, strategy and knowledge necessary for game and tournament participation. Two contact hours (activity).

PEL 1341 Beginning Tennis (Y) 1 cr.

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 (Y) 1 cr.

The student will benefit by taking PEL 1341 prior to enrolling in PEL 1342. 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 1346 Beginning Badminton (Y) 1 cr.

This course covers the history, scoring, basic skills and game strategy of badminton. It also consists of appropriate class tournaments. Two contact hours (activity).

PEL 1622 Advanced Basketball (Y) 1 cr.

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 (Y) 1 cr.

This course introduces power volleyball techniques, tactics and strategy to the student 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 (Y) 1 cr.**

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 the Universal Gym set, dumbbell and wand drills, rope jumping and running. Two contact hours (activity).

PEM 1109 Circuit Training (Y) 1 cr.

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 1131 Strength Training
(Nautilus/Universal) (Y) 2 cr.**

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 the student 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 cr.

Recommended prerequisite or corequisite: HLP 1081. This course introduces basic concerns of the beginning jogger 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 the student 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 1148 Walking for Fitness (Y) 2 cr.

Recommended prerequisite or corequisite: HLP 1081. This course introduces an everyday activity that can be transformed into a regular lifelong exercise program to help develop and maintain fitness. It is recommended and in some cases may be required, that the student 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 1171 Aerobics to Music (Y) 2 cr.

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 the student 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 (Y) 1 cr.

This course includes an introduction to the basic skills and knowledge involved in sprinting, distance running, relays and hurdling. Two contact hours (activity).

**PEN — Physical Education Acts
(General) — Water, Snow, Ice**

PEN 1136 Underwater Diving Skills (Y) 3 cr.

Prerequisite: Students must demonstrate underwater and surface swimming skills required for SCUBA training during first class meeting. Students will benefit by taking MAT 0024 prior to enrolling in PEN 1136, the scientific study of underwater judgement, attitude, discipline and fitness leading to a Professional Association of Diving Instructors (PADI) certification. This course will stress the latest underwater diving techniques which will be used for making physical and biological collections in the field. The course will include all classroom and pool instruction necessary to qualify students for a national diving certification and open water checkout. Students must participate in field trips for open water diving as integral components of the course's learning experience. Six contact hours: three lecture hours, three laboratory hours.

PEN 1251 Adventure Canoeing (Y) 2 cr.

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 trips will be included. A cost for trips will be assessed. Three contact hours (lecture/laboratory).

**PEO — Physical Education Acts
(Professional) — Object Centered, Land**

PEO 2003 Sports Officiating (Y) 3 cr.

This course, designed to acquaint the student with the techniques of officiating team, individual and dual sports, and covers baseball, basketball, track and field, volleyball, tennis and handball. Three contact hours.

PET — Physical Education Theory

PET 2000 Introduction to Physical Education (Y) 3 cr.

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 problems of physical education. Three contact hours.

PGY — Photography

PGY 2101C Photography I

See page 150 of College catalog.

PGY 2102C Photography II

See page 150 of College catalog.

PGY 2104C Creative Photography

See page 150 of College catalog.

PHI — Philosophy

**PHI 1103 Practical Logic: A Course in Critical
and Creative Thinking (Y) 3 cr.**

This course is design 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 cr.

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. The student encounters 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 cr.

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 the student 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 cr.

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.

PHY — Physics

PHY 1020 Physics for Liberal Arts (Y) 3 cr.

Corequisite: MAT 1033 or equivalent. This course is a general education course for the non-science student and not for one who is planning to major in physics or other sciences. It is a survey of the physical environment as applied to mechanics, electricity and magnetism, and modern physics. Three contact hours.

PHY 2048C Physics I With Calculus (Y) 5 cr.

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 cr.

Prerequisite: PHY 2048C. Corequisite: MAC 2313. This course, a continuation of PHY 2048C, includes electricity, magnetism, light and some areas of modern physics. Laboratory work is similar to and a continuation of the laboratory in PHY 2048C. Seven contact hours: four lecture hours, three laboratory hours.

PHY 2053C General Physics I (Y) 4 cr.

Prerequisite: 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 cr.

Prerequisite: PHY 2053C. This course, a continuation of PHY 2053C, 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 PHY 2053C. Six contact hours: three lecture hours, three laboratory hours.

PHY 2101 Modern Physics (Y) 3 cr.

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 cr.

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 cr.

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 cr.

Corequisite: PLA 1003. This course is designed to sharpen oral communication skills. The student receives training in interpersonal communication and interview techniques. The student learns 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 cr.

Corequisite: 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 1308 Criminal Law and Procedure for Legal Assistants (Y) 3 cr.

Prerequisite: PLA 1003. This course is designed for legal Assistants who want to work exclusively in criminal law, this course includes the sources and philosophy of criminal law, the organization of law enforcement, and substantive criminal law, rules and procedure, while emphasizing the drafting of legal documents. Three contact hours.

PLA 2114 Legal Research and Writing II 3 cr.

Prerequisites: grade of "C" or better in ENC 1101 and PLA 1104. This course is a continuation of PLA 1104 and is intended to familiarize both practicing and potential legal assistants with the problems and procedures in legal research and writing. The student learns to prepare various legal documents, including case briefs, legal memoranda and pleadings. Three contact hours.

PLA 2203 Litigation (Y) 3 cr.

Prerequisite: PLA 1003. This course covers the process of civil and criminal litigation. It defines basic principles of pre-trial procedures and includes a survey of courts and their jurisdiction, investigation of facts, set-

tlement of lawsuits, judgments and post-trial considerations. The emphasis is on drafting legal documents in each of these areas. Three contact hours.

PLA 2273 Torts and Insurance Law (Y) 3 cr.

Prerequisite: PLA 1003. This course prepares the student to assist attorneys and corporations in tort and insurance law. The course covers the primary legal principles of tort and insurance law as well as the proper procedures for investigating such cases. The course includes intentional torts, negligence, strict liability, fire and casualty insurance and workers' compensation claims. Three contact hours.

PLA 2433 Business Organizations (Y) 3 cr.

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 (Y) 3 cr.

Prerequisites: PLA 1003 and PLA 1104. This course prepares the student 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 (Y) 3 cr.

Prerequisites: PLA 1003 and PLA 1104. This course will prepare the student for a career with a firm involved in administrative agency practice such as Workers' Compensation, Employment Discrimination and Social Security Disability. It also prepares the student for governmental and private industry work that involves working with administrative regulations. Three contact hours.

PLA 2603 Wills, Trusts and Estates (Y) 3 cr.

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 (Y) 3 cr.

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 2803 Family Law (Y) 3 cr.

Prerequisite: PLA 1003. This course familiarizes the practitioners and the potential legal assistant 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.

PMT - Precision Metals Trades

PMT 1123 Welding for Related Trades 4 cr.

This course, for students not enrolled in a welding program, provides the student with a basic introduction to those welding skills used in related trades and a practical understanding of welding safety, arc welding fundamentals, oxyacetylene welding fundamentals, oxyacetylene cutting skills, brazing and silver soldering. The course stresses in class practice to develop the skills necessary to produce quality welds in the flat position on mild carbon steel. Eight contact hours (laboratory).

POS — Political Science

POS 2041 American Federal Government (Y) 3 cr.

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.

POS 2112 State and Local Government (Y) 3 cr.

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 cr.

The student will benefit by taking high school algebra or MAT 0024 prior to enrolling in PSC 1341. This course acquaints the individual 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.

PSY — Psychology

PSY 1012 General Psychology (Y) 3 cr.

This course consists of an analysis of human behavior through the study of the adaptation of the individual to the physical and social environment. Three contact hours.

REA — Reading

REA 0008 Reading Skills 4 cr.

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

Prerequisite: satisfactory score on MAPS test. This course is a fundamental reading course that utilizes a thematic approach to presenting the reading skills. Vocabulary, comprehension, learning strategies and essential study skills are presented through a wide range of interdisciplinary readings centered around a

specific content. REA 0008 is designed for those who do not have reading placement scores high enough to enter REA 0010. Students must satisfy appropriate exit level requirements to complete this course successfully. Four contact hours.

REA 0010 Introduction to Reading Techniques 4 cr.
(College Preparatory Studies course)

(This course does not apply toward the associate's degree.)
Prerequisite: REA 0008 or satisfactory score on MAPS test. This reading course, designed to develop each student's reading skills, emphasizes the basic reading skills. This course uses a diagnostic/prescriptive approach to strengthen individual skills in vocabulary and comprehension. This course is designed for those students who do not score high enough on the reading placement test to enter REA 1105. Individualized work provides self-paced practice in specific skills. Students must satisfy appropriate exit level requirements to complete this course successfully. Four contact hours.

REA 1105 College Reading Techniques (Y) 3 cr.

Prerequisite: REA 0010 or satisfactory score on the placement test. This course is a college level reading course that emphasizes textbook reading techniques, learning strategies, vocabulary and comprehension skills needed for success in college. This course covers CLAST reading competencies. Students must satisfy appropriate exit level requirements to complete this course successfully. Three contact hours.

REA 2205 Reading for Speed and Comprehension (Y) 3 cr.

Prerequisite: REA 1105 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 cr.

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 salespersons. Successful completion of this course and the end of course examination meets the Florida Real Estate Commission requirements. Four contact hours.

REE 1100 Real Estate Appraisal (Y) 3 cr.

This is an intensive course that has been developed to impart a broad understanding of real property appraisal concepts, to teach technical skills employed in their applications to residential properties and to give the experienced real estate person a basic knowledge of appraisal fundamentals. 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.

REE 2200 Real Estate Finance (Y) 3 cr.

Prerequisite: REE 1040 or Real Estate Salesperson's Registration Certificate. This course consists of concepts, principles and practices pertaining to real property finance, including detailed information covering legal aspects of mortgages, brokerage regulations and ethics, all major sources of funds for real estate financing, relevant government agencies and ownership forms. Three contact hours.

REE 2270 Mortgage Broker in Mortgage Lending 3 cr.

This course offers an exposure to the principles and techniques of mortgage financing and brokerage operations and a background study of the Florida Mortgage Brokerage Act. The course prepares the student for the Florida state examination to be a licensed mortgage broker. The course incorporates a detailed study of mortgage lending practices into the course. Three contact hours.

REE 2300 Real Estate Investment (Y) 3 cr.

The student will benefit by taking REE 1000 prior to enrolling in REE 2300. This course familiarizes the student with real estate investment fundamentals, depreciation, capital gain and loss and installment sales, non-taxable exchange, ownership forms, commercial leasehold financing, creative financing, financing analysis and projection, land investments, industrial property, shopping centers, office buildings, residential property, mobile home parks, Economic Recovery Tax Act of 1981, apartment complexes and warehouse properties. Three contact hours.

REE 2430 Real Estate Law (Y) 3 cr.

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.

REE 2500 Real Estate Management 3 cr.

Prerequisite: REE 1040 or Real Estate Salesperson's or Broker's Registration Certificate. This course presents a comprehensive coverage of property management, with emphasis placed 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.

REL — Religion

REL 2210 Religious Thought in the Old Testament (Y) 3 cr.

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 cr.

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 cr.

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.

REL 2691 Topics In Jewish History (Y) 3 cr.

This course covers topics and events of Jewish history. Topics may include but 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 1024 Fundamentals of Respiratory Therapy 4 cr.

This introductory course covers basic respiratory therapy equipment, medical gases, gas therapy and the respiratory therapy department. Four contact hours.

RET 1276 Clinical Skills for the Respiratory Therapist 4 cr.

Corequisite: RET 1024. This course introduces the student to and trains the student in the nursing and rehabilitative skills necessary to provide quality respiratory care. Four contact hours.

RET 1350 Pharmacology for the Respiratory Therapist (Y) 4 cr.

Prerequisite: RET 1485. This course offers the student 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. Four contact hours.

RET 1485 Cardiopulmonary Anatomy and Physiology 4 cr.

This course, designed to offer a thorough anatomical and physiological examination of the cardiopulmonary system, consists of an introduction to electrocardiology and chestroentgenology. In addition, the course includes a correlated examination of the renal system and circulatory system where relevant. Four contact hours.

RET 1824 Orientation to the Hospital Environment 4 cr.

Prerequisite: consent of the professor. This course provides the student with an introduction to the hospital environment, the function of the respiratory therapy department and the role and responsibilities of the respiratory therapist. Eight contact hours (clinical).

RET 2264 Ventilatory Management 4 cr.

Prerequisite: RET 1485 or consent of professor. This course introduces the student to artificial mechanical ventilation, classification of ventilators, indications, contra-indications and side effects of mechanical ventilators, and modes of ventilation. Four contact hours.

RET 2272L Respiratory Therapy Clinical Applications 6 cr.

Prerequisite: RET 1485 or consent of professor. This course introduces the respiratory therapy student into the hospital departments and situations in which the student may be expected to perform the procedures applicable to this point in the student's education. The course includes close supervision of the performance of these procedures. Twelve contact hours (clinical).

RET 2273L Clinical Seminar in Intensive Respiratory Care I 1 cr.

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 (Y) 1 cr.

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 2414 Pulmonary Function Studies (Y) 2 cr.

Prerequisite: RET 1485. This course is designed to introduce the student 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 cr.

Prerequisite: RET 1485. This course introduces the student to arterial blood gas analysis and various techniques of monitoring the critically ill patient. The course also includes the interpretation and clinical significance of the data gained from these monitoring techniques. Two contact hours.

RET 2484 Pulmonary Pathology (Y) 4 cr.

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 2714 Neonatal and Pediatric Respiratory Care (Y) 3 cr.

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 Respiratory Intensive Care Practicum I 12 cr.

Prerequisite: RET 2264. This course provides the student with the essential clinical skills necessary to function as a competent respiratory therapist in the critical care areas. Twenty-four contact hours (clinical).

RET 2833 Respiratory Intensive Care Practicum II 12 cr.

Prerequisite: RET 2832. In continuation, this course provides the student with the essential clinic skills necessary to function as a competent respiratory therapist in the critical care areas. Twenty-four contact hours (clinical).

RMI — Risk Management and Insurance**RMI 1500 Principles of Life Insurance 3 cr.**

This course is an introduction to the principles of life insurance, the basic life insurance plans and the more common types of individual life insurance contracts. It also includes a survey of industrial life insurance, health insurance and group life insurance and it constitutes a general survey of the major kinds of personal insurance coverages available. Three contact hours.

RMI 1521 Principles of Insurance (Y) 3 cr.

This course outlines the process of marketing insurance products to the ultimate consumer and, as such, will benefit all insurance professionals from the novice to the seasoned producer. In addition, it prepares students to take part one of the Accredited Adviser in Insurance program, thus completing Part I of this professional designation. Three contact hours.

RMI 1522 Personal Insurance 3 cr.

This is an in-depth course in all forms of personal insurance, including car, home, life, health and miscellaneous coverages. It is designed for all insurance professionals from underwriters to producers. In addition, it prepares the student for the INS-22 National Exam offered by the Insurance Institute of America. Three contact hours.

RMI 1523 Commercial Insurance 3 cr.

This course presents an in-depth study of all forms of commercial insurance including bonding, Workers Compensation, package policies and garage coverages. It is intended for all insurance professionals from the producer to the underwriter. Also, this course prepares the student to take the INS-23 test offered by the Insurance Institute of America. Three contact hours.

RMI 1612 Principles of Casualty Insurance and Surety Bonding 3 cr.

Prerequisite: RMI 1521. 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, (fidelity and surety bonds, theft coverages, multiple line trends and coverages), health insurance and miscellaneous casualty coverages. (This course as taught on the Kent Campus prepares the student for the General Agent Examination. As taught on

the South Campus, it prepares the student for the IIA Insurance Certificate). Three contact hours.

RMI 1613 Principles of Fire and Allied Lines 3 cr.

Prerequisite: RMI 1521. This course is an introduction to the four areas of fire insurance, ocean marine and inland marine insurance 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.

RMI 1615 Principles of Property Insurance Adjusting 3 cr.

This course, an introduction to the general principles of insurance and property loss of adjusting, covers risk and insurance, suretyship, risk management principles of law 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.

RMI 1631 Principles of Insurance and Liability Claim Adjusting 3 cr.

This course which corresponds to Part II of the Insurance Institute of America course in adjusting examines the principles and practices of adjusting liability claims. Three contact hours.

RMI 1664 Marketing Principles of Life and Health Insurance 3 cr.

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 1666 Principles of Health Insurance 3 cr.

This introduction to health insurance covers health losses and protection, expense and income coverage and health insurance, its growth and many areas of coverage offered by government, commercial and Blue Cross-Blue Shield organizations. Three contact hours.

RMI 2535 Principles of Insurance Production 3 cr.

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 will provide 32 hours of continuing education credit for the insurance professional. Three contact hours.

RMI 2536 Multiple-Lines Insurance Production 3 cr.

This course includes an in-depth study into the proper method for marketing commercial lines insurance coverages. Also, it will prepare the student to take part two 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 3 cr.

Included in this course will be a thorough study of the management and operations of an insurance agency. This course will prepare the student to take part three of the Accredited Adviser in Insurance program, thus completing Part III of the AAI professional designation. Three contact hours.

RMI 2543 Life Insurance Accounting 3 cr.

The course corresponds to Part IV of the Life Office Management Association (LOMA) Insurance Education program. The course covers the principles of bookkeeping and accounting as an aid in understanding the life insurance accounting practices. Three contact hours.

RTE — Radiologic Technology

RTE 2202 Radiologic Management and Education 3 cr.

Prerequisite: proof of current registration with the registration with the American Registry of Radiologic Technologist. This course is designed to familiarize the radiologic technologist with the latest advances in the health care field in general, with specific emphasis on the areas of management and education that relate to the profession of radiologic technology. Three contact hours.

RTE 2587 Advanced Developments in Radiologic Technology 3 cr.

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.

RTV — Radio - Television

RTV 2001 Introduction to Broadcasting (Y) 3 cr.

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 cr.

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 cr.

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 cr.

Prerequisite: RTV 2200. This course, a continuation of RTV 2200, is intended for broadcast majors. Major topic is the direction of TV programs. Four contact hours: two lecture hours, two laboratory hours.

RUS — Russian Language

RUS 1000 Conversational Russian (Y) 3 cr.

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; the student is 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 cr.

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 cr.

Prerequisite: RUS 1120 or equivalent. This course is a continuation of RUS 1120. Five contact hours: four lecture hours, one unsupervised laboratory hour.

RUS 2200 Intermediate Russian I (Y) 3 cr.

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 cr.

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 cr.

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 cr.

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: 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 cr.

This course, designed to acquaint the student 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 the student 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 cr.

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, the student will utilize decision-making techniques to select a career direction which is compatible with his or her aptitudes, abilities, interests and personal values. Two contact hours.

SLS 1931 Selected Topics in Student Life Skills (Y) 1 cr.

The open format of this course provides an opportunity to address various selected topics in student life skills development. A student may only repeat SLS 1931, 1932 and 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 cr.

The open format of this course provides an opportunity to address various selected topics in student life skills development. A student may only repeat SLS 1931, 1932 and 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 cr.

The open format of this course provides an opportunity to address various selected topics in student life skills development. A student may only repeat SLS 1931, 1932 and 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 cr.

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 the stu-

dent who plans 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 cr.

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 1332 American Sign Language I (Y)** 3 cr.

As a beginning course for sign language, the course introduces the student to the basic syntax and vocabulary needed for A.S.L. At the conclusion of this course, the student will be able to express themselves with the use of hands, eyes, face and body to communicate with hearing impaired individuals. Three contact hours.

SPA 1380 American Sign Language II (Y) 3 cr.

Prerequisite: Completion of SPA 1332 or ASL I. This course, a continuation of SPA 1332, will present American Sign Language (Ameslan), which is the idiomatic and dialectic language used by the hearing impaired. The student will learn specialized sentence structure, grammar and usage of this language. The course will include dialogues with hearing-impaired students and will emphasize practice for receptive skills. Three contact hours.

SPA 1382 American Sign Language III (Y) 3 cr.

Prerequisite: SPA 1332 and SPA 1380 with grade of "C" or better in both courses. This course is a continuation of SPA 1380, expanding the receptive and expressive usage competencies, and/or understanding modalities of American Sign Language ("Ameslan" — the idiomatic and dialectic language used by the deaf and hearing impaired). The student will learn in-depth specialized sentence formation structures of the language called American Sign Language, intertwined with explicit, specific information about the deaf culture. Major emphasis will be directed toward the mastery of conversational, interpretational, transliterational competencies. Three contact hours.

SPC — Speech Communication**SPC 2062 Speech Communication for Business and the Professions (Y)** 3 cr.

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 multi-media materials effectively. It is strongly recommended that students have completed ENC 1101 or have equivalent writing skills. Three contact hours.

SPC 2440 Small Group Communication (Y) 3 cr.

This course emphasizes the development of discussion skills in four areas: the formats of discussion, the means of discussion, reasoning, evidence and cooperative idea development, both leadership and participation conduct, and audience analysis and listening techniques. Three contact hours.

SPC 2594 Forensic Activity (Y) 1 cr.

This course is comprised of directed participation in forensic activities with emphasis of individual speech events. Tournament activities involve a major feature of forensic. Three contact hours (studio/rehearsal).

SPC 2600 Fundamentals of Speech Communication (Y) 3 cr.

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.

SPN — Spanish Language**SPN 1000 Conversational Spanish (Y) 3 cr.**

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; the student is 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 cr.

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.

SPN 1121 Beginning Spanish II (Y) 4 cr.

Prerequisite: SPN 1120 or equivalent. This course is a continuation of SPN 1120. Five contact hours: four lecture hours, one unsupervised laboratory hour.

SPN 2200 Intermediate Spanish I (Y) 3 cr.

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. The student will study readings in the history and culture of Spain and Hispanic America. Four contact hours: three lecture hours, one unsupervised laboratory hour.

SPN 2201 Intermediate Spanish II (Y) 3 cr.

Prerequisite: SPN 2200. This course is a continuation of SPN 2200. Four contact hours: three lecture hours, one unsupervised laboratory hour.

STA — Statistics**STA 2014 Introduction to Statistics (Y) 3 cr.**

Prerequisite: MAC 1102 or MAC 1140, 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 frequency distributions, 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. Three contact hours.

SUR — Surveying and Related Areas**SUR 1101 Surveying I (Y) 3 cr.**

Prerequisites: MAC 1114, 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.

SUR 2140 Surveying II (Y) 3 cr.

Prerequisite: SUR 1101. This course is a continuation of Surveying I and includes a study of the theory and practice of surveying with emphasis on electronic distance measurement, topographic surveying, land surveying, surveying astronomy and curves. The program of study includes lectures, computing laboratory and field practice. Four contact hours: two lecture hours, two laboratory hours.

SYG — Sociology, General**SYG 2000 Introductory Sociology (Y) 3 cr.**

This course includes a survey of the scope, methods and concepts of sociology, enhancing the student's awareness of social values, norms, groups and other aspects of the social world. Three contact hours.

SYG 2010 Social Problems (Y) 3 cr.

Prerequisite: SYG 2000. This course includes a consideration of major social problems which affect individuals and groups in industrial societies, with attention to American society. Three contact hours.

SYG 2430 Marriage and Family (Y) 3 cr.

This course includes a sociological study of mate selection, courtship, marriage and child rearing, with special attention to the contemporary American family. Three contact hours.

TAR — Architecture**TAR 2120 Architectural Drafting (Y) 3 cr.**

Prerequisite: 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, wall sections, but 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.

TAX — Tax

TAX 2000 Individual Taxes (Y) 3 cr.

Prerequisite: ACG 2001 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 cr.

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 cr.

This course surveys theatre history and drama from the theatre's origin in ancient Greece to the present. Three contact hours.

THE 2945 Drama Practicum (Y) 1 cr.

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 2202 Media and Technique: Stagecraft (Y) 3 cr.

This course is an introduction to skills and crafts of stage design including knowledge of materials, techniques, tools and supplies for the basic execution of the environment. Three contact hours: one lecture hour, two laboratory/lecture combination hours.

TPP — Theatre Arts

TPP 2110 Acting I (Y) 3 cr.

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 cr.

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 TPP 2110 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.

TRA — Transportation

TRA 1010 Principles of Transportation (Y) 3 cr.

This course is an introduction to transportation. Material includes the role and importance of transportation in the economy and to the user, 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 cr.

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 the student 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 cr.

The fundamental procedures of traffic management are treated from the viewpoint of on-the-job requirements in the field. This course provides training and practice in freight classification, tariff interpretation and selection, rate checking techniques, zip code pricing, contracts and negotiations, routing and other elements of everyday incidences in the transportation department. Completion of this course partially covers requirements for certification by the Institute of Logistical Management. Three contact hours.

TRA 1033 Carrier Liability and Claims 3 cr.

This course covers the principles of claims and proper procedures to be applied by shippers and carriers in loss, damage, or delay of goods in transit and techniques for prevention. The basic laws of shipper/carrier liability (common and statute) are explained and illustrated by leading cases. Students also benefit from the opportunity to share problems, situations and experiences with their peers in active participation. Three contact hours.

TRA 1052 Transportation and Traffic Management II 3 cr.

This course is concerned with advanced aspects of traffic management techniques. Rate construction and tariff compilation are studied. Freight rate relationships are examined by use of tariff publications which express them. Terminal facilities and switching, demurrage and storage, reconsignment and diversion, transit, and embargoes are similarly treated in this course. The objective is to explore the full scope of the transportation plant and its services as a necessary preparation to the efficient use of the transportation system. Completion of this course partially covers the requirements for certification by the Institute of Logistical Management. Three contact hours.

TRA 1121 Rate Clerk 3 cr.

This is a beginning course in the practical application of motor carrier tariffs. Students completing this course are able to interpret and apply any published tariff to the actual movement of raw materials and/or manufactured products. Training in freight classification, tariff interpretation and selection, rate checking techniques, zip code pricing and routing is provided. Knowledge provided in this course gives a good foundation to those students planning to participate in the transportation and traffic management series in the future. Three contact hours.

TRA 1230 Material Handling 3 cr.

This introduction to the field of material handling includes an analysis of jobs and career opportunities, general description of qualifications for entry-level positions, shipping and receiving procedures, warehouse problems and inventory control. This course presents the entire field of material handling from the producer-manufacturer to the ultimate user-consumer. Three contact hours.

TRA 1905 Independent Study of Transportation (Y) 3 cr.

This course introduces the student to the ever broadening area of transportation literature and causes the student to report his/her findings after careful study and research into an area of transportation of personal interest. Three contact hours.

TRA 2020 Economics of Transportation (Y) 3 cr.

Economic patterns and forces are studied in conjunction with carrier cost structures, inter-carrier competition and the economic and regulatory pressures which influence rate making policy and build freight rate floors and ceilings. Rate theory, rate making, rate structure, marketing, distribution strategies and available alternatives are discussed. This course is a requirement for an associate in science degree in transportation and must be taken at either FCCJ or UNF to obtain a B.B.A. in transportation and logistics. Completion of this course partially covers the requirements for certified member in the American Society of Transportation and Logistics. Three contact hours.

TRA 2053 Transportation and Traffic Management III 3 cr.

This course deals with import/export transportation and documentation to provide the student with the proper techniques in foreign commerce through a proper understanding of the basic tools and terminology, the techniques of import/export, the requirements of governmental agencies, and methods of identifying and entering export markets. Also covered are terms of sale, banking and financial documents, marine insurance, shipping containers, commercial invoices, export licenses, and export declarations. Completion of this course partially covers the requirements for certification by the Institute of Logistical Management. Three contact hours.

TRA 2054 Transportation and Traffic Management IV 3 cr.

This course is designed for managers and persons aspiring to advance in transportation, distribution, marketing or materials management with industrial companies of carriers. 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 that want an extensive overview of transportation and its relationship to the corporate structure. Completion of this course partially covers the requirements for certification by the Institute of Logistical Management. Three contact hours.

WCL — Ward Clerk

WCL 1200 Health Unit Coordinator I 3 cr.

Prerequisite: OST 1581. Corequisites: OST 1100, OST 1324 and OST 1601. This course is designed to introduce the student to the fundamental concepts and knowledge underlying health care and health unit coordinating. It will orient the student to the health care industry, medical terminology, legal and ethical aspects of the occupation, communication principles, diagnostic therapeutics and the use of automation. Three contact hours.

WCL 1203 Health Unit Coordinator II 4 cr.

Prerequisites: OST 1100, OST 1324, OST 1601 and WCL 1200. This course is designed to introduce students to the role and responsibilities of the health unit coordinator. Included will be content on transcription of physicians' orders, pharmacology, diagnostics and therapeutics, health unit coordinator tasks and unit management. Students will have hands-on experience in health agencies in a planned practicum experience. Eleven contact hours: three lecture hours, eight laboratory hours.

ZOO — Zoology

ZOO 1010C General Zoology (Y) 4 cr.

The student will benefit by taking BSC 1005 or BSC 1011C or high school biology prior to enrolling in ZOO 1010C. 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 cr.

The first work experience in cooperative education provides the student with meaningful experiences that will enhance the student's 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 cr.

The second work experience in cooperative education provides the student with further meaningful experiences that will enhance the student's college education through career exploration and job training. Forty contact hours.

COMPENSATORY COURSES

College Level Academic Skills Test (CLAST) Review

ENC 0007 Writing Review and Remediation for CLAST

This course is designed to meet the needs of associate in arts and associate in science degree students to further their mastery of the writing skills seeking as related to the College Level Academic Skills Test.

MAT 0012 Mathematics Review and Remediation for CLAST

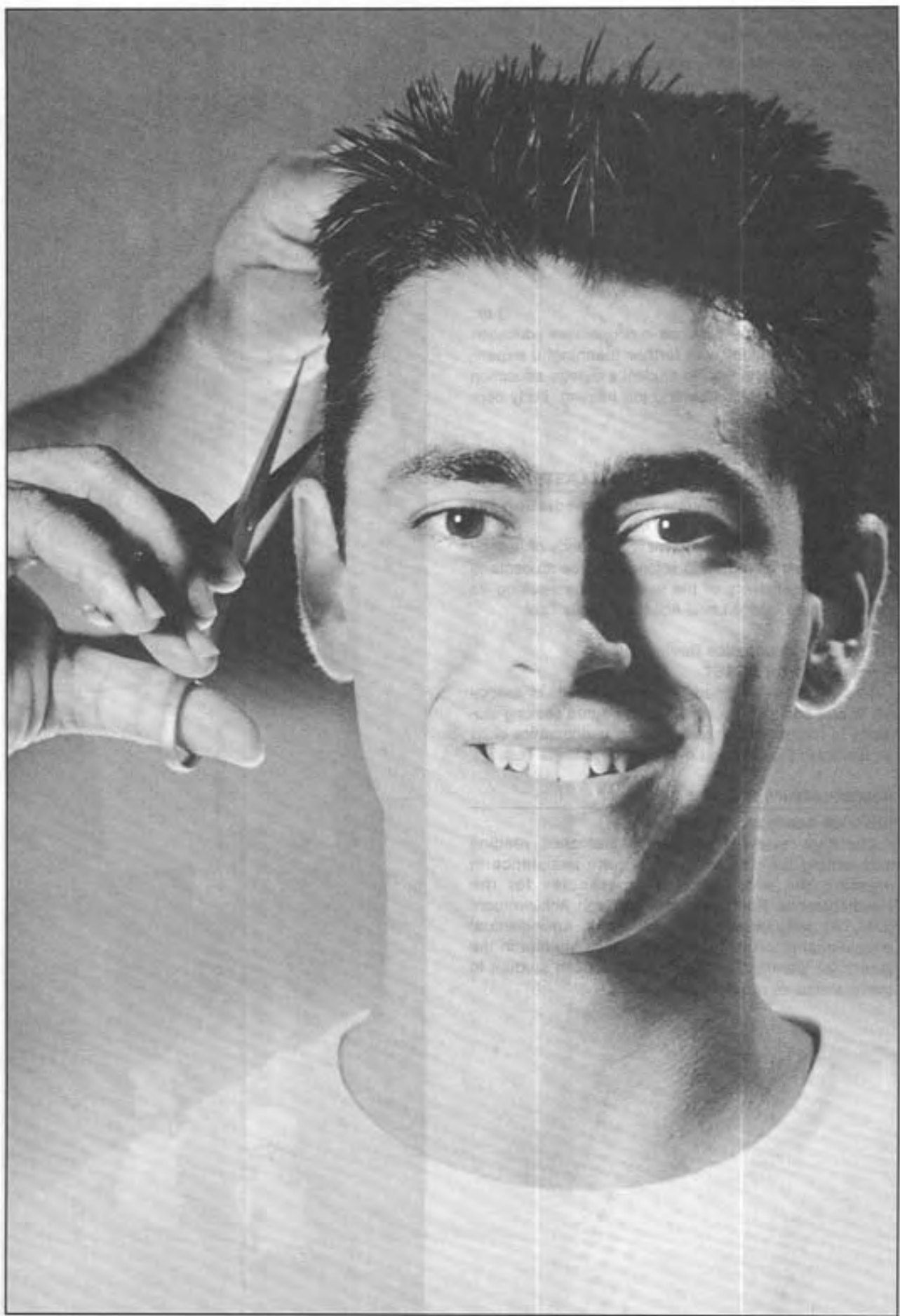
This course is designed to meet the needs of associate in arts and associate in science degree seeking students to further their mastery of the mathematics skills as related to the College Level Academic Skills Test.

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. An individual educational plan is developed for each student in the subject(s) identified in order to allow each student to move ahead as rapidly as possible.





Continuing Education 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 ACR 0001 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 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 Applied Heating II

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 the student 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 the Container Refrigeration Mechanic

Corequisite: ACR 0781. This course is designed especially for the container refrigeration mechanic seeking entry-level job training in electrical controls, safety devices, components, test equipment, symbols and schematic diagrams.

AER 0110 Rider Mower Engine Repair

Prerequisite: SER 0001. Laboratory experience or consent of instructor. This course is designed to teach job level skills. Topics include instruction and hands-on experiences on the tune-up procedures and maintenance repairs necessary on many types of lawn and garden equipment. It is required for the job entry-level mechanic and completion certificate.

AER 0211 Clutch and Transmissions

This course is designed to teach entry-level job skills in the theory and repair of clutches, manual transmissions and differentials. Instruction includes basic service and repair of automatic transmissions (lecture and shop experience).

AER 0310 Automotive Electrical Systems

This course is designed to teach entry-level job skills in mechanics. Topics include instruction in engine electrical systems, starting systems, charging systems, accessory systems, basic emission controls and an introduction to computer control systems (combination of classroom and shop experience).

AER 0410 Brake Systems

This course is designed to teach entry-level job skills in the theory, operation and repair of brake systems. Includes both drum and disc brakes, and also includes an introduction to anti-lock brake systems (combination of lecture and shop experience).

AER 0450 Steering and Suspension

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 (lecture and shop experience).

AER 0511 Fuel and Emission Control Systems

Prerequisite: AER 0590 and AER 0310, or consent of instructor. This course is designed to teach entry-level job skills in fuel systems and emission control systems and also includes computer control and fuel injection (both lecture and shop experience).

AER 0522 Drivability and Diagnosis

Prerequisite: AER 0511, or consent of instructor. This course is designed to teach entry-level job skills and will provide skills in the diagnosis and repair of drivability problems. Areas covered will be engine, transmission, vibrations and noises, AC problems, computer and electrical systems. Emphasis on the use of manufacturer's diagnostic charts and testing equipment (lecture and shop experience).

AER 0590 Engines

This course is designed to teach entry-level job skills for mechanics and includes instruction in engine tune, engine repair and diagnosis. Instruction includes a combination of lecture and shop experience.

AER 0610 Air Conditioning and Heating

This course is designed to teach entry-level job skills in the theory, service and repair of automotive heating and air conditioning systems. Instruction includes both classroom lecture and shop experience.

AIC 0300 Heating, Air Conditioning and Refrigeration Pre-Apprentice

This course is designed for the student desiring to enter a registered heating, air conditioning and refrigeration program at the next application opening. The individual will learn the basics of the heating, air conditioning and refrigeration trade and will follow the curriculum as outlined for first apprentices.

AIC 0315 Air Conditioning, Refrigeration and Heating

This course is designed primarily for apprenticeship instruction and its contents will include the proper procedure to install and service commercial and residential air conditioning systems, to compute heat gain and heat loss of buildings for summer and winter air conditioning, to diagnose and repair problems with commercial refrigeration systems of both medium and low temperature, and to read blueprints, plans, electrical diagrams and schematics necessary to perform the aforementioned tasks.

AMT 0130 Aircraft Tools and Devices

This course instructs the student in the specialized hand tools, measuring instruments, power tools and metal working machines utilized in the aircraft sheet metal trade. It provides the basis for the shop work required in later courses. A strong emphasis is placed on the appropriate safety practices.

AMT 0131 Aircraft Materials and Metallurgy

This course instructs the student in various materials used in aircraft construction and their physical properties. Emphasis will also be placed on non-destructive testing techniques and corrosion control methods.

AMT 0132 Airframe Structures

This course instructs the student in aircraft fuselage construction, industry publications and their usage, and types of aircraft hardware. The student also learns to read and interpret basic blueprints and sketches.

AMT 0133 Metal Fabrication and Damage Repair

In this course the student develops the manipulative skills for the trade by constructing various projects. The student is expected to read and interpret appropriate documentation in the same manner as will be required in the job setting.

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 0271 Basic Automotive Glass

This course is designed specifically for job entry 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 included are door operating mechanism, and 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 job entry 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

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 Damage Appraising and Frame Straightening

This course is designed specifically for job entry training in damage appraising and frame straightening. Topics covered include collision estimating, vehicle identification, types of estimates, contracts, replacement, repair, discounting and markups.

ARR 0411 Basic Automotive Painting

This course is designed specifically for job entry 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 and Custom Painting

Prerequisite: ARR 0411. This course is a continuation of Basic Automotive Painting and is designed to teach entry-level job skills. Topics include emphasis on safety, air equipment, sanding techniques and equipment, paint problems, surface preparation, spot repair, paint additives, special effects and clean up.

BCN 0315 Laborer's Apprenticeship Training

Training in skills required by a laborer in the construction industry, including safety and first aid, hand tools, handling construction materials, soil preparation, pipe laying, gasoline and electric powered equipment, concrete preparation and handling, concrete chipping and cutting, sandblasting, oxyacetylene cutting, carpentry labor and other skills prescribed by apprenticeship standards. Enrollment limited to apprentices in Construction Laborer's Apprenticeship Training Program.

BCV 0221 Tile Setting

This course is designed primarily for apprenticeship instruction and in its contents will include wall preparation for ceramic tile, drywall techniques, wet wall techniques, layout of wall and floors, use of tools, installation on different surfaces, material estimation and how to prepare the setting mix.

BCV 0350 Basic Electronics for Electricians

This course is designed to teach entry-level job skills. Topics include basic electron flow, transistor theory, amplifiers, oscillators, symbols, diodes and liquid crystal display.

BCV 0351 Basic Electrical Fundamentals (DC Theory)

This course is designed to teach entry-level job skills. Topics include basic electrical concepts, electrical theory, Ohm's Law, National Electric Code I and blueprint reading.

BCV 0352 Advanced Electrical Fundamentals (AC Theory)

Prerequisite: BCV 0351. This course is designed to teach entry-level job skills. Topics include basic electrical circuits, laws and measurements, AC principles, magnetism and electromagnetism, transformers and distribution systems.

BCV 0354 Fundamentals of Construction Electricity — Residential Wiring

This course is designed to teach entry-level job skills. Topics include electrical materials, measuring and test equipment, electric power and hand tools, and electrical wiring.

BCV 0361 Introduction to Industrial Electricity — Commercial and Industrial Wiring

This course is designed to teach entry-level job skills. Topics include National Electricity Code II, principle of motor operation and principle of motor control.

BCV 0362 Fundamentals of Industrial Electricity — DC Motors and Controls

This course is designed to teach entry-level job skills. Topics include motor and motor control including DC motors and generators, starters, pilot devices, speed control, sequence control, controller wiring and armature reaction.

BCV 0365 Advanced Industrial Electrical Fundamentals I — Maintenance and Troubleshooting

Prerequisite: BCV 0362. This course is designed to teach entry-level job skills. Topics include maintenance of AC and DC motors, couplings, bearings, controllers and motor control troubleshooting.

BCV 0366 Advanced Industrial Electrical Fundamentals II — AC Motors and Controls

Prerequisite: BCV 0365. This course is a continuation of Advanced Industrial Electrical Fundamentals I and teaches entry-level job skills. Topics include AC motors and generators, starters, control, regulation, shaded-pole, induction and construction.

BCV 0380 Introduction to Plumbing

This course is designed to teach entry-level job skills and to familiarize the student 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 0382 Hand and Power Tools/Joint Fabrication

This course is designed to teach entry-level job skills. Topics include hand and power tools, steel-fabricating dies and machines, copper fabricating torches and cutters, collecting or installing various types and sizes of fittings, assembling fittings and fixtures to sanitary and potable water systems, and safety.

BCV 0383 Plumber's Mathematics

This course is designed to teach entry-level job skills and to familiarize the student with measuring techniques including fitting and fixture allowances. Skills in calculating fractions, decimals and mixed numbers will be reviewed. Practical problems in running pitch and grade as well as volumetric calculations will also be covered as well as practical problems in developed length, volume, area, triangulation and percentages.

BCV 0384 Plans, Blueprints and Isometrics

This course is designed to teach entry-level job skills and to familiarize the student with common types of residential blueprints and pipe drawings on an isometric angle. Included in this course is wall construction and location, scale drawings, grade relationships, symbols, measurements, isometric drawings and piping review.

BCV 0391 Plumbing Code 10-D-9/SSBC

Prerequisite: Water supply/potable water systems and drain, waste and venting/sanitary layout and design or consent of instructor. This course is designed to teach entry-level job skills and to familiarize the student with the rules and guidelines of the plumbing code (10-D-9) and the SSBC (Southern Standard Building Code). With the background of the previous courses along with any trade-related work, the student will be able to apply code specifications where needed.

BCV 0393 Water Supply/Potable Water Systems

This course is designed to teach entry-level job skills and to equip the student with the ability to design and lay out 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 0395 Drain, Waste and Venting/Sanitary Layout and Design

This course is designed to teach entry-level job skills and to equip the student with the ability to design and lay out sanitary drainage systems. The student 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 0397 Fixtures, Valves and Faucets

This course is designed to teach entry-level job skills and to familiarize the student with various plumbing fixtures such as kitchen sinks, water closets, bathtubs, showers, hose bibbs, urinals and water coolers. The student will also be able to recognize and repair the major types and brands of faucets and valves.

BCV 0401 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 0402 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 0403 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 0404 Wood Products, Substitutes, Lumber and Building Adhesives

This course is designed to teach entry-level job skills in carpentry. Topics include wood, wood substitutes, differ-

ent kinds of construction lumber, its growth and how wood finally becomes lumber. This course also includes building adhesives, their types and their applications.

BCV 0405 Exterior and Hardware Finishes

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.

BRC 0100 Teller

This course is designed as job entry training to enable individuals to quickly 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 co-workers and customers.

CAP 0315 Carpentry

This course is designed primarily for apprenticeship instruction and its contents will include training in general carpentry work involved in erection of wooden building frames, installation of exterior and interior trim, floorlaying, form building, scaffold construction, stair building and other similar types of woodwork.

COR 0418 Correctional Officer

Prerequisite: M.A.P.S. entrance exam to FCCJ, physical examination, polygraph, drug screening, background investigation, Cooper Test, oral interview, sponsored by a Law Enforcement Agency. This basic training course for correctional officers is designed specifically for job entry training to give each student basic understanding of the duties and responsibilities of the line correctional officer. In addition, it is designed to give the student an overview of the other related fields within the criminal justice system. Specific areas in which the student will receive instruction include operational procedures, legal aspects of corrections, United States and Florida constitutional and criminal law, arrest law, search and seizure concepts.

COS 0080 Cosmetology I

Prerequisite: TABE. Corequisites: VPI 0100, VPI 0200, 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. Corequisites: VPI 0100, VPI 0200, VPI 0300 (as needed). This course provides students with the beginning theoretical principles and practical procedures of haircutting 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. Haircutting tasks will include low elevation cutting, selection of appropriate haircut and haircut checking.

COS 0082 Cosmetology III

Prerequisites: COS 0080 and COS 0081. Corequisites: VPI 0100, VPI 0200, VPI 0300 (as needed). This course, a continuation of Cosmetology II, provides students with additional haircutting 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. Corequisites: VPI 0100, VPI 0200, VPI 0300 (as needed). 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 standard 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. Corequisites: VPI 0100, VPI 0200, VPI 0300 (as needed). 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. Corequisites: VPI 0100, VPI 0200, VPI 0300 (as needed). This course, a continuation of Cosmetology V, provides students with new information being 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. Corequisites: VPI 0100, VPI 0200 and VPI 0300 (as needed). 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. Corequisites: VPI 0100, VPI 0200, VPI 0300 (as needed). This course, a continuation of Cosmetology VII, offers stu-

dents 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, and overview of entrepreneurship and beginning review for 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. Corequisites: VPI 0100, VPI 0200, VPI 0300 (as needed). 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 the following: enhancing students professional image, enhancing students 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. Corequisites: VPI 0100, VPI 0200, VPI 0300 (as needed). 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 0990 Barber-Styling I

Prerequisite: TABE. Corequisites: 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 0991 Barber-Styling II

Prerequisite: TABE and COS 0990. 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 haircutting and hair-styling; shaving, beard and mustache trims; women's haircutting and hairstyling.

COS 0992 Barber-Styling III

Prerequisites: COS 0990 and COS 0991. 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. Barber-Styling III includes instruction in the following topics: airwaving; curling iron techniques; fingerwaving and permanent waving.

COS 0993 Barber-Styling IV

Prerequisites: COS 0990, COS 0991 and COS 0992. 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 0994 Barber-Styling V

Prerequisites: COS 0990, COS 0991, COS 0992 and COS 0993. 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 DPR.

COS 0995 Barber-Styling VI

Prerequisites: COS 0990, COS 0991, COS 0992, COS 0993 and COS 0994. This course is a continuation of Barber-Styling V with the focus on theoretical and practical review of all topics and tasks.

COS 0996 Barber-Styling VII

Prerequisites: COS 0991, COS 0992, COS 0993, COS 0994 and COS 0995. 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 0997 Barber-Styling VIII

Prerequisites: COS 0991, COS 0992, COS 0993, COS 0994, COS 0995 and COS 0996. 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 0998 Professional Barber-Styling I

Prerequisites: COS 0991, COS 0992, COS 0993, COS 0994, COS 0995, COS 0996 and COS 0997. 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 0999 Professional Barber-Styling II

Prerequisites: COS 0990, COS 0991, COS 0992, COS 0993, COS 0994, COS 0995, COS 0996, COS 0997 and COS 0998. 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.

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 50 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.

CTE 0401 Basic Textiles

This course consists of a study of fabrics used for clothing and home furnishings. Emphasis will be on fibers, yarns, constructions, designs and finishes that determine the qualities and performance of a fabric. Use and care of fabrics and cost factors also will be included.

CTE 0827 Retail Buying

This course is designed to provide students with an indepth study of buying functions and techniques. Emphasis will be placed on determining consumer demand as well as planning, selecting, controlling and evaluating purchases.

CTE 0856 Retail Salesmanship

This course provides students with an in-depth understanding of the personal selling process as it specifically relates to consumer and human service sales. Emphasis will be on successful personal selling techniques, multiple and suggestive selling, and personal service as related to the merchandising of clothing apparel, food, floral designs, interior fashions, and the sales of hair and body products.

DEA 0001 Introduction to Dental Assisting

This course consists of orientation to the dental profession, terminology, specialties in dentistry and basic human anatomy, supporting structures and development, basic microbiology and sterilization with lecture demonstration and laboratory.

DEA 0021 Preclinical and Clinical Dental Assisting

This course covers the preclinical and clinical theory and practices of dental assisting including basic procedures for dental set-ups, operative preparations, handling of equipment, instruments, supplies, sterilization procedures, anesthesia and pharmacology, oral pathology and certification in CPR.

DEA 0029 Dental Specialties

This course consists of preventative dentistry, operative dentistry, endodontics, oral surgery, pedodontics, periodontics, prosthodontics and orthodontic procedures, techniques, instrumentation, chairside assisting, two and four-handed dentistry, and therapeutic and restorative procedures.

DEA 0201 Office Management and Procedures

This course consists of dental office procedures and management principles including clinical records, recall systems, filing, written communications, appointment control, telephone techniques, supply and inventory, insurance, bookkeeping, computers, human relations, banking, billing, collections, ethics and jurisprudence.

DEA 0805 Dental Externship

Externship program students will rotate through dental offices in the community, Veterans Administration Dental Clinic, University of Florida Dental Clinic and Naval Air Station Dental Clinic. Evaluation of the dental assisting student by the supervising dentist and the FCCJ instructor.

DES 0103 Dental Materials and Expanded Duties

This course consists of the properties of dental materials and their use in chairside procedures and the expanded duties, authorized by the Board of Dentistry.

DES 0204 Radiology

This course consists of the theory, use and hazards of radiation in dentistry, the bisecting and parallel techniques, development and darkroom techniques and safety procedures and processing and mounting of X-rays, identification of landmarks and pathologies.

DIE 0277 Clinical Nutrition I

The course consists of a supervised field experience in which the student 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.

DIM 0001 Introduction to Diesel Engines

This course is designed to teach entry-level job skills in diesel engines. Topics include diesel engine basic components, engine performance and cycle of operation, an overview on combustion chambers, tools and equipment, engine oils and diesel fuel. Special emphasis will be placed on safety procedures.

DIM 0135 Cummins Diesel Engine Overhaul

This course is designed to teach entry-level job skills in the overhaul and repair of Cummins diesel engines and their components. Topics include service manual utilization, engine disassembly, use of precision measuring instruments, engine systems theory, engine assembly and run-in procedures. Special emphasis will be placed on safety and manufacturer's overhaul procedures.

DIM 0137 Detroit Diesel Engine Overhaul

This course is designed to teach entry-level job skills in the overhaul and repair of Detroit diesel engines and their components. Topics include service manual utilization, engine disassembly, use of precision measuring instruments, engine systems theory and engine assembly and run-in procedures. Special emphasis will be placed on safety and manufacturer's overhaul procedures.

DIM 0141 John Deere Diesel Engine Overhaul

This course is designed to teach entry-level job skills in the overhaul and repair of John Deere diesel engines and their components. Topics include service manual utilization, engine disassembly, use of precision measuring instruments, engine systems theory, engine assembly and run-in procedures. Special emphasis will be placed on safety and manufacturer's overhaul procedures.

DIM 0143 Caterpillar Diesel Engine Overhaul

This course is designed to teach entry-level job skills in the overhaul and repair of Caterpillar diesel engines and their components. Topics include service manual utilization, engine disassembly, precision measuring instrument use, engine assembly and run-in procedures, and engine system theory. Special emphasis will be placed on safety and manufacturer's overhaul procedures.

DIM 0151 Maintenance and Troubleshooting of Diesel Engines I

This course is designed to teach entry-level job skills on the performance of proper maintenance, tune-up and troubleshooting procedures on auxiliary marine diesel engines. Emphasis will be placed on fuel injection and lubricating systems, adjusting valves, removing and testing fuel injectors, solving engine problems and test running an engine on Westerbeke/Perkins engines.

DIM 0152 Maintenance and Troubleshooting of Diesel Engines II

Prerequisite: DIM 0151 or consent of instructor. This course is a continuation of DIM 0151 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 included are 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 0153 Maintenance and Troubleshooting of Diesel Engines III

Prerequisite: DIM 0152 or consent of instructor. This course is a continuation of DIM 0152 and is designed to teach entry-level job skills on the performance of proper maintenance, tune-up, and troubleshooting procedures on diesel engines. Emphasis will be placed on fuel injection and lubricating systems, adjusting valves, removing and testing fuel injectors, solving engine problems, and test running and engine. Emphasis is on Cummins, John Deere and Mitsubishi diesel engines. Special emphasis will be placed on proper safety procedures.

EER 0531 FCC General Radiotelephone License Exam Preparation

This course is designed to teach job entry and advanced skills required to pass the Federal Communications Commission General Radio-Telephone License examination. Topics include receivers, transmitters, antennas, tests and measurements as well as the applicable FCC rules and operating procedures.

EER 0532 Radio Operation Procedures

This entry-level job course is designed to teach skills in the operation of two-way radio communications equipment and electronic navigation equipment. Operator rules of the Federal Communications Commission are included.

EER 0541 Electronic Communication Systems

Prerequisite: EER 0541. This course is designed to teach entry-level job skills. Topics include the layout and design of communications transceiver systems, the theory of operation of electronic navigation systems and the operation of fiber-optics systems.

EER 0571 Troubleshooting Procedures for Communications Equipment

Prerequisite: EER 0541. This course is designed to teach entry-level job skills in electronic troubleshooting. The use of test equipment including multimeter, signal generators, oscilloscope and transmitter tuning equipment is emphasized along with the application of troubleshooting procedures.

EEV 0811 DC Circuits

Prerequisite: ETI 0803. The course topics include basic atomic structure, electrical properties, units and sources, Ohm's law, lab instruments, series, parallel and combination DC circuits, magnetic units, inductance, capacitance and DC transient circuits. Laboratory experiences reinforce course topics.

EEV 0812 AC Circuits

Prerequisite: EEV 0811. Corequisite: EEV 0813. This course is designed to teach entry-level job skills and to present a study of AC electricity and typical AC circuits. Topics include AC versus DC, generating AC, waveforms and oscilloscope measures, reactance, AC resistive, reactive and resonant circuits, transformers, polyphase circuits, basic AC generators and motors. Laboratory experiences reinforce the course topics.

EEV 0813 Solid-State Devices

Prerequisite: EEV 0811. Corequisite: EEV 0812. This course is designed to teach entry-level job skills and to familiarize the student 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 experience is used to reinforce the course topics.

EEV 0814 Analog Circuits

Prerequisite: EEV 0813. Corequisite: ETI 0843. This course is designed to teach entry-level job skills and to familiarize the student 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 the 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 the student with digital techniques. Course top-

ics include number systems and codes, combinational and sequential circuits, Boolean algebra, encoders, displays and troubleshooting. Laboratory experiences reinforce the course topics.

EEV 0816 Microprocessor Fundamentals

Prerequisite: EEV 0815 or consent of instructor. This course is designed to teach entry-level job skills and to familiarize the student with microprocessors. Topics include machine and assembly level programming and interfacing techniques using the 6800 MPU. Other popular processors will also be discussed. Laboratory experience is used to reinforce course topics.

EEV 0823 Printed Circuit Fabrication and Soldering

Prerequisite: EEV 0816. This course is designed to teach entry-level job skills and to introduce students to the proper use of typical tools, materials and techniques of electronic hardware fabrication. Topics include GPS and NASA soldering standards, printed-circuit board production and chassis assembly.

ETD 0100 Drafting I-General Engineering Drawing

This is the first course in an entry-level job preparatory drafting sequence. The course consists of a study of the fundamental principles and practices involved in the preparation of engineering drawings. Emphasis is placed on the tools and techniques of drafting including lettering, dimensioning and multiview representation.

ETD 0320 Drafting V-Computer Aided Drafting

This course is the fifth in the drafting sequence and covers the specific area of Computer Aided Drafting. The course introduces the student to the fundamentals of computer aided drafting and design and provides the student with entry-level training in the use of CADD in a variety of technical drafting areas.

ETD 0530 Drafting II-Architectural Drafting

The course is the second course in the drafting sequence and covers the specific area of architectural drafting. The course provides the student with instruction in plan preparation, detail drawing and the preparation of elevations.

ETD 0537 Drafting IV-Mechanical and Electrical Drafting

This course is the fourth course in the drafting sequence and covers the specific area of mechanical and electrical drafting. The emphasis in the course is on the preparation of assembly and detail drawings of mechanical parts and also on the preparation of electrical drawings.

ETD 0540 Drafting III-Civil Drafting

This course is the third course in the drafting sequence and covers the specific area of civil drafting. Emphasis in the course is on the preparation of site plans, topographic and boundary drawings, plan and profile drawings and land development drawings.

ETI 0803 Mechanical Systems and Tools

Corequisite: EEV 0811. This course is designed to teach entry-level job skills and to enhance the participants' knowledge of tools and machines. The course topics include a study of basic machines, gear trains, complex machines, hydraulic machines, heat engines, common hand and power tools, and safe tool use.

ETI 0813 Basic Industrial Control

Prerequisite: ETI 0861. This course is designed to teach entry-level job skills and to 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 Control Systems

Prerequisite: ETI 0813. This course is designed to teach entry-level job skills and 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 micro-processor control interfacing. Laboratory experiences reinforce the topics.

ETI 0843 Motors, Generators and Transformers

Prerequisite: EEV 0812. 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 Test Equipment Maintenance

This course is designed to teach entry-level job skills and to familiarize the student with the operation, calibration and repair of typical electronic measurement instruments. Also presented is an efficient approach to the diagnosis of electronic system malfunctions. Laboratory experience reinforces the course topics.

EVS 0133 Water Treatment Plant Operation C

This course is designed to prepare the student 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 the student to pass the State of Florida exam for water treatment operator level "B."

EVS 0153 Water Treatment Plant Supervisor—Level A

Prerequisites: EVS 0133 and EVS 0143. This course is designed to prepare the student to pass the State of Florida exam for water treatment facility supervisor level "A."

EVS 0333 Wastewater Treatment Plant Operation C

This course is designed to prepare the student 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 the student to pass the State of Florida exam for wastewater treatment operator level "B."

EVS 0353 Wastewater Treatment Plant Supervisor—Level A

Prerequisite: EVS 0333 and EVS 0343. This course is designed to prepare the student to pass the State of Florida exam for wastewater treatment facility supervisor level "A."

FFP 0005 Fire Fighting

This course is designed to prepare a student for certification and initial employment as a fire fighter in the state of Florida. Successful course completion will qualify a student to take the minimum standard written, oral and practical examination as administered by the Bureau of Fire Standards and Training. Note: This course is restricted to individuals sponsored with intent of employment by area fire departments.

FOS 0201 Sanitation and Safety

The student will explore the scientific rationale for sanitation and safety practices which are mandated for use in food service facilities. The student will identify causative agents of food-borne illnesses and how to prevent these agents from contaminating food and food facilities/equipment. Emphasis is also placed on methods of accident and fire prevention.

FSM 0314 Food Management, Production and Services (Supervised Food Service Worker)

This course is designed to prepare persons for employment in the food service area. The student will work, under supervision, in the preparation and serving food in institutions such as hospitals, homes for the aged, nursing homes, children's homes and day care centers. Follows hygienic practices in preparing food for cooking, during the cooking process, serving and storing; follows safety regulations in use of all types of equipment and the handling of hot foods; uses the basic skills required in preparation of standard large quantity recipes for vegetables, salad and dressings, milk cookery, egg cookery, soups, meat, fish and poultry, quick breads, sandwiches and desserts; serves food at table or on trays according to situation. The student will organize work in relation to work space and within time limitations.

FSM 0521 Food Service Apprenticeship

The student will acquire knowledge and skills needed by a professional cook in the food service industry, including restaurant cookery, stocks, soups and sauces, vegetable preparation and cookery, and other skills specified in the apprenticeship standards. Enrollment is limited to students who meet the standards prescribed by the National Apprenticeship Training Program of the Educational Institute, American Culinary Federation. The duration of the training program is three years. The program is comprised of three courses.

FSS 0002 Introduction to Culinary Arts

The students will examine the hospitality industry and career opportunities. The students will become acquainted with the organization and functions of the kitchen. The student will perform basic functions of food service math, convert recipes and learn culinary terms.

FSS 0100 Menu Design and Food Merchandising

Prerequisite: FSS 0202. Corequisite: FSS 0221. The student 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 as well as emphasize positive public relations techniques.

FSS 0121 Food and Beverage Purchasing

Prerequisites: FSS 0200 and FSS 0202. Corequisite: FSS 0221. The students will develop the knowledge and skills necessary for purchasing of food and beverages in quantity. Emphasis is placed on standardizing, grading, estimating, selecting, receiving and storing product. Practical application will be made in the purchasing and selecting of food and beverages used by the Institute of the South for Hospitality and Culinary Arts.

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.

FSS 0221 Food Production II

The student will acquire the knowledge, principles and skills necessary for quantity food preparation and service used by cafeterias, restaurants and institutions. The course emphasizes equipment use and care, standardized recipes, portion control, work plans and schedules.

FSS 0241 A La Carte Preparation

Prerequisites: FSS 0202 and FSS 0221. The student will participate in the preparation of food items as they are ordered by the customer. Students will also prepare classical French as well as other international cuisines.

FSS 0246 Baking

This course provides the student with occupational preparation in the area of composition and properties of baking ingredients. The student will utilize the proper equipment, tools and standardized recipes to prepare yeast breads, rolls, pastries and cakes in the food service laboratory. The instructor will evaluate the products prepared by using established food service standards.

FSS 0247 Pastries and Desserts

Prerequisite: FSS 0246. This course will illustrate the fundamentals of pastry science, terminology, equipment, technology, ingredients, weights, measures, formula conversions, storage and costing. Product preparations will include cakes, icings, fillings, puff pastries, classical pastries and petit fours.

FSS 0248 Garde Manger

Prerequisites: FSS 0202 and FSS 0221. The student will acquire knowledge and demonstrate skills in the production of characteristic cold buffet show pieces. The class will achieve dexterity in the proper use of tools and techniques to create a variety of center piece displays.

FSS 0250 Food and Beverage Service

This course involves the application of techniques and procedures that are required to operate and manage service functions, such as coffee shops, dining rooms, luncheons, banquets or buffets.

FSS 0288 Pantry and Fast Foods

This course provides students the opportunity to develop and practice skills for knife usage, basic salad and dressing preparation, sandwich preparation and portion control. The student will also be introduced to fast food service functions including grilling, deep fat frying, breakfast production, beverage preparation and control.

FSS 0800 Baking for Apprenticeship

Prerequisite: registered apprentice or candidate. Corequisite: FSS 0948 (if needed). This course provides basic principles of baking to complement practical experience on the apprenticeship site. The apprentice studies scaling, recipe conversion, ingredient characteristics and handling techniques. Apprentices will examine yeast breads, quick breads, pastries, cakes and soft desserts.

FSS 0801 Garde Manger for Apprentices

Prerequisites: FSS 0808, FSS 0246 and FSS 0202. The student will prepare a variety of complex cold buffet items. The student will practice a design and layout of food displays. He/she will prepare various center pieces.

FSS 0802 Nutrition for Culinary Arts

This course examines nutrition as it relates to daily food production in restaurants and hotels. Students study daily allowances, maximum nutritive value, and how to purchase, store and prepare these foods.

FSS 0803 Sanitation for Apprentices

The student will develop an understanding of basic sanitation principles and safety and be able to apply them in the food service operation. The student will reinforce personal hygiene habits and food handling practices.

FSS 0804 Food and Beverage Control for Apprentices

Prerequisites: FSS 0202 and FSS 0806. This course presents the basic principles and procedures of effective food and beverage cost control, including food and beverage purchasing, receiving, and issuing, calculation of standards, production and planning special control.

FSS 0805 Pastries and Advanced Desserts

Prerequisites: FSS 0800 and FSS 0811. The student produces pastries, including puff pastes, choux paste short paste, tortes and petit fours. Skills are developed in decorating techniques.

FSS 0806 Purchasing for Apprentices

Prerequisites: FSS 0811 and FSS 0812. The student will examine product availability and food service distribution of food products. The student will examine procedures for ordering, receiving, issuing and inventory. The student will write purchase specifications.

FSS 0807 Beverage Management

Prerequisites: FSS 0810 and FSS 0812. The student will examine the production and varieties of spirits, liquors, wines, beers, sodas other soft beverages, punches, teas and coffees. The student will practice the service and control of beverages. The student will examine the service and control of beverages.

FSS 0808 Pantry for Culinary Apprentices

The students will examine cold food production. Students will prepare salads and dressings, sandwiches, breakfasts, canapes and hors d'oeuvres, and light buffet food.

FSS 0809 Supervision for Apprentices

Prerequisite: FSS 0811. The student will study, develop and demonstrate skills necessary to perform in management functions of food service facility. Students will explore hiring, evaluating and training techniques, and evaluate methods of dealing with stress and conflict.

FSS 0810 Menu Design for Apprentices

The student will examine factors affecting menu planning. The student will study layout methods. The student will write menus and design menu layouts. The students will study menu marketing technique.

FSS 0811 Food Production I for Apprentices

Prerequisites: FSS 0808 and FSS 0800. The student will acquire knowledge and skill with the preparation of food. Included are techniques of preparation, use of resources, recipes and equipment, and evaluating product.

FSS 0812 Dining Room Service for Apprentices

Prerequisites: FSS 0811 and FSS 0809. The student will acquire knowledge of various types of service appropriate to coffee shops, dining rooms, luncheons, banquets and buffets. The course will demonstrate the relationship of menu, equipment, supplies, merchandising, and personnel to creating good patron acceptance.

FSS 0813 A La Carte Production for Apprentices

Prerequisite: FSS 0811. The students will participate in the preparation of a la carte food items. Students will prepare classical French as well as other international cuisines.

FSS 0814 Introduction to Culinary Arts

The students will examine the hospitality industry and career opportunities. The student will become acquainted with the organization and functions of the kitchen. The student will perform basic functions of food service math. The student will convert recipes and learn culinary terms.

FSS 0942 Food Service Internship I

Prerequisites: FSS 0202 and FSS 0221. The student will participate in work related experience in the food service industry. The student intern will demonstrate occupational preparation skills and work habits as prescribed from course theories and labs.

FSS 0943 Food Service Internship II

Prerequisite: FSS 0942. The student will participate in a supervised internship at an advanced level. This internship will be designed to provide the student with an opportunity to enhance their technical skills in a specific food service area.

GRA 0500 Theory of Printing Processes

This course is designed to teach entry-level job skills. It is a lecture course designed to give an introduction to major processes of the printing industry. All methods of typesetting including photo typesetting, hand and other machine methods of typesetting, mechanical art preparation, printers math and proofreading are included in the course.

GRA 0503 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 in the course.

GRA 0537 Cold Type Typesetting and Pasteup

This course is designed to teach entry-level job skills. It provides for 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 0571 Camera Operation and Film Processing

This course is designed to teach entry-level job skills. It 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.

GRA 0601 Negative Stripping and Platemaking

This course is designed to teach entry-level job skills. It is a course designed to provide for skill development in the technique of stripping up offset negatives and positives for proper press position, separating for color, and expose and develop offset press plates.

GRA 0635 Offset Press Operation

This course is designed to teach entry-level job skills. It is a course designed to provide for skill development in the technique of setting up, operating, and maintaining duplicators and offset presses in the 10x15, 11x17, 15x18 and 14x20 inch ranges.

HCP 0100 Nursing Assisting

Prerequisites: 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 nursing assistant. Course content includes classroom activities, simulated laboratory experiences and hands-on experience in a designated clinical agency.

HCP 0311 Home Health Aide

Prerequisites: completion of 10th grade, 18 years of age, health clearance and completion of basic course in cardiopulmonary resuscitation. This course is designed for job entry-level 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 0400 Patient Care Assistant

Prerequisites: completion of 10th grade, 18 years of age, health clearance and completion of basic course in cardiopulmonary resuscitation. Content includes knowledge and skills relating to various patient 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 the patient care assistant as an assistant to, and under direction of, the registered nurse is emphasized. Successful completion provides certification as a certified nurse assistant in accord with Chapter 82-163 Florida Statutes and certification as a home health care aide according to Public Law 10D-68-014.

HEV 0111 Child Care Aide

This course is designed to train students to become aides in child day care centers. The curriculum includes and expands upon the HRS 20-hour State Child Care Worker Training Course, employability skills, professionalism, clerical duties plus supervised center experiences.

HEV 0114 Child Care Center Operations

This course is designed to prepare a student for employment within the child care industry, either as a family child care home operator, a child care center worker, or as a substitute in a child care center. The focus of the curriculum is entrepreneurial and includes all HRS required child care training modules.

HEV 0230 Trousers/Block Pattern

This course provides students an opportunity to learn basic skills and competencies related to constructing and fitting a pair of trousers, using a block pattern. Students will actually construct and fit a garment. These basic competencies must be mastered before students can be successful in more complex tailoring applications.

HEV 0231 Introduction To Drafted Patterns/Trousers

Prerequisite: HEV 0230. This course applies all the competencies from HEV 0230, with emphasis on the skills needed to draft the actual trouser pattern to fit an individual figure. Students must have good mathematical skills as well as precise measurement ability in order to draft the trouser pattern and construct the trousers from that individual pattern.

HEV 0232 Tailored Coat/Block Pattern

Prerequisite: HEV 0231. This course provides for the practical application of the specific tailoring skills necessary to fit and construct a coat, using a block pattern. Students must gain the requisite competencies at this level prior to entering into more complex clothing construction and pattern drafting.

HEV 0233 Sack Coat/Drafted Pattern

Prerequisite: HEV 0232. This course applies all the tailoring competencies from HEV 0232, with emphasis on the skills needed to draft the actual coat pattern to fit an individual figure. A sample coat will be made from muslin in order to gain practical experience in fitting the pattern and constructing the garment.

HEV 0234 Tailored Suit/Final Project

Prerequisite: HEV 0233. This course is a culmination of the tailoring skills learned in previous classes. As a final program project, students will construct a suit. The construction will progress through all phases and be evaluated separately at each interval. Vest construction is optional.

HEV 0236 Alterations/Busheling I

Prerequisite: HEV 0231. This course will cover basic clothing alteration and repair. Students will utilize previously acquired skills and techniques of tailoring in learning to make alterations and repairs to finished garments.

HEV 0237 Alterations/Busheling II

Prerequisite: HEV 0233 and HEV 0236. This course will include more complex alterations as well as how to repair and recut garments. The student will build on previously acquired skills and techniques of tailoring.

HEV 0840 Internship I/Custom Garment Making (Tailoring)

Prerequisite: HEV 0231. This course, a supervised on-the-job training course, requires students to work a minimum of 300 hours for at least 15 weeks in an approved tailoring facility. This co-operative educational experience will provide students the opportunity to practically apply knowledge gained in prerequisite courses. The instructor will make on-site visitations to monitor student progress and performance. There will be a two-hour seminar, on campus, at the beginning and end of the internship, with

six additional two-hour seminars spaced equally throughout the 15 weeks. The balance of the time will be spent in observation, instruction, supervised involvement, work inspection and evaluation.

HEV 0841 Internship II/Custom Garment Making (Tailoring)

Prerequisites: HEV 0233 and HEV 0840. This course is a continuation of HEV 0233, providing on-the-job training and practical experience in an approved tailoring facility.

HEV 0940 Child Care Aide Internship

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, with supervision, those instructional and child care techniques that they have learned about in class.

HFT 0150 Travel Agency Operations

Students will gain entry-level skills for working in travel agency operations. Such skills will include developing tours, ticketing, tour counseling and accounting. Students will have hands-on experience with an IBM PC simulated system as they learn how to make reservations for flights, hotels, tours and cruises. In addition, instruction will be provided in world geography.

HFT 0180 Supervision and Personnel Management

The student 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.

HFT 0454 Food and Beverage Control

Prerequisite: FSS 0121. This course presents the basic principles and procedures of effective food and beverage cost control. It includes purchase controls, receiving, issuing, setting standards and production control.

HUN 0201 Human Nutrition

The student 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.

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.

IDS 0010 Basic Skills I

Corequisite: the first of a non-college job entry 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, the student will be provided with individualized instructional plan 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 job entry 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 the Downtown Campus. Following pretesting and assessment, the student will be provided with an individualized instructional plan 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 job entry 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 the Downtown Campus. Following pretesting and assessment, the student will be provided with an individualized instructional plan to upgrade mathematics and reading skills.

IEA 0543 Roof Framing I

This course is designed to teach entry-level job skills in carpentry. Topics covered include basic styles of roofs and construction and framing of a gable room.

IEA 0544 Roof Framing II

Prerequisite: IEA 0543 or consent of instructor. This entry-level job course is a continuation of Roof Framing I. Topics covered include layout and construction of a combination roof.

IEA 0555 Interior Finish

This course is designed to teach entry-level job skills in carpentry. Topics covered include the fundamentals of wall covering, door hanging, windows, stairs and cabinets.

IED 0950 Basic Skills for Apprentices

This course provides basic review and refresher training in English grammar, written and oral communications, mathematics and algebra, applied physics along with basic training in blueprint and shop sketching. As Phase I of the apprenticeship program, it will be required for all participants prior to receiving trade specific training.

IEL 0300 Electrical Pre-Apprentice

This course is designed for the student desiring to enter a registered electrical apprenticeship program at the next application opening. The individual will learn the basics of

the electrical trade and will follow the curriculum as outlined for first year electrical apprentices.

IEL 0315 Construction Electricity

This course is designed primarily for apprenticeship instruction, and its content will include the proper procedure for installation of wiring systems and lighting fixtures in buildings, including laying conduit, installation of switch panels, pulling wire, splicing, testing circuits, line construction, and performing other duties and jobs required of an electrician.

IEL 0317 Electric Wiring

This course is designed primarily for apprenticeship instruction and its contents will include the proper procedure to install wiring systems and lighting fixtures in buildings, including laying conduit, installation of switch panels, pulling wire, splicing, testing circuits, line construction, and performing other duties and jobs required of an electrician.

LAE 0310 Basic Recruit Training for Police Officers

Prerequisite: M.A.P.S. entrance exam to FCCJ, physical examination, polygraph, drug screening, background investigation, Cooper Test, oral interview, sponsored by a Law Enforcement Agency. This basic course is designed specifically to provide job entry training to give each student the basic knowledge and understanding required to satisfactorily perform the duties and responsibilities of the police patrol person. Specific areas of instruction include constitutional and criminal law, criminal investigation, police community relations, traffic control, juvenile procedures, civil disorders, first aid, defensive tactics and firearms training.

MAY 0315 Brick and Blocklaying

This course is designed primarily for apprenticeship instruction and its contents will include training in laying brick, terra cotta, hollow tile, stone, and similar building blocks in the construction of walls, partitions, arches, fireplaces, chimneys, smokestacks and other structures.

MEA 0005 Medical Assisting I

Prerequisite: TABE. The first of two sequential courses, this course is designed specifically for job entry training and planned to orient the individual 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 job entry training and planned to orient the individual to a multitude of basic skills for employment in the physician's office, ambulatory care centers, clinic 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 0095 Cashiering

This course is designed specifically for job entry training and includes instruction in the proper finger method of recording amounts on a cash register; properly departmentalize sales; handle taxable items; process actual merchandise orders, handle cash and balance cash drawers.

MOM 0001 Introduction to Motorcycle Mechanics

This course is designed to teach entry-level job skills in the repair of motorcycles. Topics include fuel systems, air exhaust systems, tools, gauges and instruments. Special emphasis will be placed on safety.

MOM 0101 Motorcycle Engine Systems

This course is designed to teach entry-level job skills on the different types of motorcycle engines. Topics discussed include two stroke, four stroke, multicycle head, removal and installation, repairs, clutches, transmission and drive assemblies. Special emphasis will be placed on safety.

MOM 0401 Motorcycle Chassis

This course is designed to teach entry-level job skills on the various parts of the motorcycle chassis. Topics include frames, forks, shocks, wheels, chains and sprockets, and brakes. Special emphasis will be placed on safety.

MOM 0601 Electrical Cooling and Lubricating Systems

This course is designed to teach entry-level job skills on the electrical, cooling and lubricating systems of a motorcycle. Topics include starters, batteries, regulators, timing, points, oil mix, air cooling and water pumps. Special emphasis will be placed on safety.

MTE 0054 Four-Stroke Marine Engines

This course is designed to teach entry-level job skills and to familiarize the student with the construction, operation and maintenance of the four-stroke marine engine. Topics include use of test equipment, electrical systems, and maintenance, repair and testing of the engines.

MTE 0131 Marine Ignition 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 testing and repair of magneto, battery and C/D ignition systems, as well as the battery charging system.

MTE 0132 Two-Stroke Marine Engines

This course is designed to teach entry-level job skills and to familiarize the student with the construction, operation and maintenance of the two-stroke marine engine. Topics include use of test equipment, electrical systems, and maintenance, inspection and testing of the engines.

MTE 0165 Maintaining and Repairing Fuel Systems in Diesel Engines

Prerequisite: DIM 0001 or consent of instructor. This course is designed to teach entry-level job skills on the performance of maintaining and repairing fuel systems in diesel engines. Emphasis will be placed on Caterpillar, Detroit and Cummins fuel systems. Special emphasis will be placed on safety and manufacturer's specifications during repair and maintenance procedures.

MTE 0181 Marine Fuel and Cooling Systems

This course is designed to teach entry-level job skills in maintenance and repair techniques for the fuel and cooling systems on marine engines. Topics include maintenance and repair of carbureted systems, fuel injection systems and cooling systems for both inboard and outboard systems.

MTE 0221 Marine Engine Gearing

This course is designed to teach entry-level job skills in the maintenance, repair, and testing of upper and lower gearing on marine engines. Topics include how to repair and adjust power tilt and trim units, and how to prop and rig small boats.

MTE 0223 Intermediate and Stern Drive Units

This course is designed to teach entry-level job skills in lubrication systems and gearing systems. Topics include various lubrication systems for both inboard and outboard drive units, along with maintenance and repair of intermediate housings and stern drive upper gear cases.

MTE 0350 Shipfitter Apprenticeship

This course is designed to provide the necessary skills to obtain classification as a shipfitter (third class). Topics will include, but are not limited to basic skills training, safety procedures, metallurgy as related to the trade, use of associated hand and power tools and shop equipment, basic geometry, use of blueprints, basic welding skills, layout techniques, hull fittings, testing techniques and steel fabrication methods.

MTE 0501 Welding and Trailer Repair

This course is designed to teach entry-level job skills. Topics included are introduction to basic arc welding, oxy-acetylene cutting, sandblasting, shop equipment necessary to facilitate actual trailer repair and safety.

MTE 0521 Piping Materials — Fittings and Valves

This course is designed to teach entry-level job skills. Topics included are introduction to course requirements, shop equipment, safety, and metal characteristics, shapes, construction, and application. Recognition of valves and gauges by type, size, limitations, proper application and uses is also covered.

MTE 0654 Pipefitters/Hand Tools, Power Tools and Shop Equipment

This course is designed to teach entry-level job skills in recognition of safety and use of power tools and shop equipment.

MTE 0655 Measuring Pipe and Layout Methods I

This course is designed to teach entry-level job skills. Topics are pipe sizing, measuring offsets, determining fitting allowances, laying out offsets taking accurate measurements for material requirements.

MTE 0656 Pipe Pattern Layout and Oxy-Acetylene Cutting

This course is designed to teach entry-level job skills. Topics included are lay out of mitred joints, y-fittings, mitred elbows, and the selection and use of oxy-acetylene cutting equipment.

MTE 0657 Blueprint Reading and Pipe Installation for Pipefitters

This course is designed to teach entry-level job skills. Topics included are parts of a blueprint, symbols, handling and care of types. Scaling prints, recognition, selection by size and type, proper allowances and installation of fittings, joint fitup and proper selection of tools are also covered. Safety is stressed throughout.

MTE 0661 Sil Brazing and Tack Welding For Pipefitters

This course is designed to teach entry-level job skills. Topics included are joint preparation and fit up, selection of proper solder by type and proper equipment selection and set up, welding safety, welding machine set up and rod selection, basic shielded metal arc welding, practice welding and heat effects on metals. Military specifications will be taught.

MTE 0662 Pipe Fabrication

This course is designed to teach entry-level job skills. Topics included are calculating materials, tools and equipment to lay out a piping system, cut, thread, and fit pipe, and tubing to specifications. Actual field conditions are simulated as close as possible.

MTE 0663 Measuring Pipe and Layout Methods II

Prerequisite: MTE 0655 or consent from the instructor. This course is a continuation of MTE 0655 and is designed to teach entry-level job skills. Topics included are calculating materials, tools and equipment to lay out a piping system, calculate bends and bend pipe using hydraulic bending machine, prepare pipe for flanges, align flanges, and fit to targets. Actual field conditions will be simulated as close as possible.

OFT 0311 Word Processing

This course is designed to teach entry-level job skills. The course provides learning opportunities in the concepts and applications of word processing. This will include the creation and revision of documents, stored text, use of special features, tables and special functions. To ensure marketing employment skills this course will cover business English, business mathematics, calculating machines, filing, typewriting and employability skills.

OFT 0611 Business Software Applications

This microcomputer course is designed to develop high-tech information concepts and computer operation skills for entry level employment. The attendees need no prior experience with personal computing to attend. The

complete course consists of five modules disk operating system and microcomputer hardware, word processing applications, electronic spreadsheet applications, data base applications, employability skills training and business mathematics.

OFT 0642 Data Entry Operations

This course is to prepare students for employment as terminal operators, data entry operators, data typists, clerk typists or clerks.

ORH 0041 Basic Floral Design

The purpose of this course is to develop the fundamental competencies necessary for employment in the floral design and marketing industry. Topics include basic design construction in round, horizontal, symmetrical and asymmetrical designs; proper care and handling procedures for cut flowers and foliage, flower and foliage identification and basic principles of design. Each student will be issued a set of basic tools at the first class meeting (covered by the supply fee) and will be expected to bring these tools to each class. All flowers and basic supplies (foam, wire, tape, etc.) will be furnished. Students are also required to have a current tetanus shot.

ORH 0043 Intermediate Floral Design

Prerequisite: ORH 0041. The purpose of this course is to further develop basic skills learned in ORH 0041. The course places emphasis on funeral designs. Students will learn how to conduct funeral consultations and how to construct funeral baskets, wreaths, standing sprays hearts, crosses, casket covers and other special funeral designs. Hospital arrangements, seasonal arrangements, baby novelties, fruit baskets, gourmet and gift baskets will also be covered in this course and the laboratory experiences will provide hands-on experience to the student. Wholesale and retail pricing policies are introduced in this class and the student will have ample opportunity to learn the art of profitable pricing for the floral industry.

ORH 0045 Wedding Floral Designs

Prerequisites: ORH 0041. In this course the student will learn proper techniques of coordinating a complete wedding. Skills include designing bouquets, corsages, church reception flowers, wedding set up, party planning and pricing policies.

ORH 0061 Silk, Dried and Holiday Designs

This course is designed to teach the student how to prepare a variety of silk, dried and fresh arrangements for the holiday season. In addition, students will learn how to purchase, sell and market silk and dried designs for both retail and commercial customers.

ORH 0062 European and Advanced Design Techniques

Prerequisites: ORH 0041 and ORH 0043. Corequisite: ORH 0620. This course will expose floral design students to advanced design techniques such as basing, terracing, grouping, pillowing, banding, framing and parallelism. Students will study European, oriental and vegetative

design styles. In addition student will study display techniques, commercial design work and design show competitions.

ORH 0520 Identification, Care and Handling of Flowering and Foliage Plants

This entry-level course is designed to introduce the student to the most common commercially produced flowering and foliage plants. The student will study basic plant morphology and physiology, plant identification, and the care of foliage and flowering plants in shops and homes. Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the tools and materials appropriate to course content and in accordance with practices in the field.

ORH 0620 Basic Flower Shop Operations

This entry-level course is designed to teach the student every day skills in flower shop operations: buying, budgeting, keeping records, credit, billing, delivery, using a computer, managing employees, customer relations, planning for the holidays, advertising and wire service reporting. Actual hands on experience will be provided in the operation of a small floral retail operation here on campus.

ORH 0622 Advanced Flower Shop Operations

Prerequisite: ORH 0620. This entry-level course is designed to provide the opportunity to students to acquire knowledge and skills necessary to manage a retail flower shop. The student will acquire knowledge on how to layout the workroom, cooler, sales and display areas. The student will display skills in selection of merchandise and products, shop management, and inventory control. The student will also learn about personnel, administration and controlling payroll and other expenses. Actual "hands-on" experience will be provided as students take turns managing the operations of a small retail operation here on campus.

ORH 0941 Floral Design Internship I

Prerequisite: ORH 0041, CTE 0856, ORH 0620 and ORH 0520. Corequisite: ORH 0043. Students will work in a retail florist shop 19 hours per week. The instructor will work with the shop manager or owner to monitor student progress toward predetermined goals. Students will attend a two-hour seminar on campus every other week.

ORH 0942 Floral Design Internship II

Prerequisite: ORH 0941. Corequisite: ORH 0622 and SLS 0380. This course is a continuation of ORH 0941. Students will work in a retail florist shop and the instructor will work with the shop manager or owner to monitor student progress toward predetermined goals. Students will attend a two-hour seminar on campus for six weeks.

PDE 0317 Jacksonville Drywall Decorators and Painters Apprenticeship

This course covers the technical aspects of painting, paper hanging and drywall finishing. The painting section covers methods of application of types of paint, surface preparation, and material makeup and tinting. The paper hanging section covers materials and surface prepara-

tions. The drywall section covers tools and methods of application.

PMT 0106 Welding Basic

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 gauge through 3/16 inch mild steel, 16 gage stainless steel, and copper piping and fittings. Related information includes equipment operation and weld quality.

PMT 0124 Welding Advanced

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 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 0141 Flux Cored Arc Welding Gas Tungsten Arc Welding (Basic)

Prerequisite: PMT 0134. This course is designed to teach entry-level job skills in the welding field. Topics include flux cored arc welding and arc welding safety. Related topics include equipment operation and weld quality. It also provides training to develop the manual skills necessary to make high quality gas tungsten arc welds in all positions on 16 and 11 gage mild steel, 16 gauge stainless steel and 11 gage aluminum, using both direct and alternating current.

PMT 0166 Shielded Metal Arc Welding Pipe (Uphill)

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 Welding (TIG) 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 Industrial 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 for 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 gauges, combination set and thread micrometers. Benchwork includes to be trained by mastering bench tools and portable tools for benchwork on the job.

PMT 0213 Lathe Series

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 Vertical Milling

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. Covered are 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 0217 Shaper Series

This course is designed to teach entry-level job skills. Topics include the theory of machining concepts and calculating setups and operational processing in the shaper trade (English-metric). The shaper concepts cover safety, setting work in the vise, setting of the length and position of the shaper stroke, machining of a flat surface, machining work square and parallel, the alignment of work in a vise, the alignment of the toolhead, shaping a vertical surface and machining an angular surface. Special emphasis is given to shop safety precautions.

PMT 0218 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. The

student 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 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/Engine Disassembly/Principles of Power

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 Identifying and Repairing Cracks

This course is designed to teach entry-level job skills in the identification and repair of cracks in automotive parts.

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 covered 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 four major machines commonly used in the automotive machine shop which are crankshaft straightener, crankshaft grinder, drill press and engine lathe.

PPF 0300 Plumbing Pre-Apprentice

This course is designed for the student desiring to enter a registered plumbing apprenticeship program at the next application opening. The individual will learn the basics of the plumbing trade and will follow the curriculum as outlined for first year plumbing apprentices.

PPF 0315 Plumbing and Pipefitting

This course is designed primarily for apprenticeship instruction and its contents include training in the assembly and installation of air, gas, water and waste disposal systems, including the cutting, reaming, and threading of pipe, caulking and wiping joints, and the installation of gas, water and sanitary fixtures and equipment with their supports, hangers or foundations.

PRN 0410 Practical Nursing I

The Practical Nursing program is designed as job entry training to prepare a beginning practitioner of practical nursing. This first course consists of activities designed to familiarize the student with the 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 the student in providing care for patients 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 0420 Practical Nursing II

Prerequisite: PRN 0410. This job entry 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 patient. 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 the student's level of learning.

PRN 0430 Practical Nursing III

This job entry 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 patient. 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 the student's level of learning.

REE 0040 Real Estate Principles and Practices I

This course provides students with the fundamentals of real estate and license law under the 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 salespersons. Successful completion of this course and the end of course examination meets the Florida Real Estate Commission requirements.

REE 0041 Real Estate Principles and Practices II

Prerequisite: REE 0040 or Florida Real Estate Sales License. This course is designed to prepare students for the Florida Real Estate Broker's Examination. These students must be licensed Florida real estate salespersons who have been properly qualified by the Florida Real Estate Commission before being permitted to register for the course.

RMI 0641 Insurance Marketing

The Insurance Marketing course is designed to help prepare life 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 and health insurance will be given at the end of each course.

SEO 0210 Private Security Guard

This course is designed specifically as supplementary training and covers a variety of areas considered to be directly related to security work. Areas such as firearms, first aid, arrest techniques, and search and seizure are discussed.

SER 0001 Familiarization with Small Engines

This course is designed to teach entry-level job skills. Topics include familiarization with the small engine field, employer relations, special tool applications, precision measuring and practical applications of some electrical test/measuring equipment.

SER 0101 Construction of Small Engines

Prerequisite: SER 0001 or consent of instructor. 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 Systems - Small Engines

Prerequisite: SER 0001. 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

Prerequisite: SER 0001 or consent of instructor. 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. Includes lecture and classroom experience.

SER 0306 Drive Systems

Prerequisites: SER 0001 and SER 0151 or consent of instructor. 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. Includes lecture and classroom experiences.

SER 0551 Troubleshooting Lawn and Garden Equipment

This course is designed to teach entry-level job skills. Topics in this advanced course include instruction on ignition and electrical systems for lawn and garden gasoline engine powered equipment, and the diagnostic and performance testing procedures available. This course includes both lecture and shop experiences.

SHM 0315 Sheet Metal

This course is designed primarily for apprenticeship instruction and its contents include training in fabricating, assembling, altering, repairing, and installing sheet metal articles and equipment.

SLS 0313 Vocational-Technical Career Explorations

This course introduces the student to various vocational skills areas. It allows the student the opportunity 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

This course is designed to assist students with an understanding of the world of work and to provide them with the skills necessary to conduct a job search and obtain employment. The course will cover such topics as sources for the job applications, resume writing, interviewing skills and interpersonal relations for keeping the job.

SLS 0380 Entrepreneurship for Consumer and Human Service Occupations

Prerequisite: satisfactory score on TABE/IMTS placement test. This course is designed for students who are interested in small business ownership and management in areas related to consumer and human services. In this course, students will learn the techniques of starting a new business venture. Topics covered are essentials for planning, financing, location, layout, merchandising, microcomputers in small business, taxes, insurance and small business, and the law.

STS 0309 Office Occupations I

Corequisite: IDS 0010. This course is the first of three sequential courses designed for entry-level job training in the field of office occupations and includes typewriting, business English, filing and office machines.

STS 0310 Office Occupations II

Prerequisite: STS 0309 or consent of the instructor. Corequisite: IDS 0011. This course is the second in a series of three courses designed for entry-level job skills in the area of office occupations and includes typewriting, business English, record keeping and shorthand.

STS 0311 Office Occupations III

Prerequisite: STS 0310 or consent of the instructor. Corequisite: IDS 0012. This is the last course in a series of three designed for entry-level job skills in office occupations and includes typewriting, business English, record keeping, machine transcription and business mathematics.

STS 0810 Surgical Technology I

This course is the first of two sequential courses designed specifically for job entry training. It is a combination of classroom studies and clinical experience in the operating room, recovery room and delivery room which prepares students to assist surgeons, anesthesiologists and nurses with patient 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

This course is a continuation of some of the skills presented in the first Surgical Technology course. It is a combination of classroom studies and clinical experience in the operating room, recovery room and delivery room which prepares students to assist surgeons, anesthesiologists and nurses with patient care and related services. It is designed specifically for job entry training. Upon successful completion of the program, graduates are qualified to take a national certifying examination to become a Certified Surgical Technologist (CST). 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.

TYG 0110 Basic Typewriting

This course in typewriting for business use is designed specifically as occupational preparatory training to assist persons to acquire mastery of the keyboard and to develop the ability to type personal and business letters accurately and in good form.

VPI 0100 Basic Reading Skills

This course is designed to provide vocational preparatory instruction. The student will be provided with an individualized program to upgrade his/her reading skills. The amount of hours spent by the student in a particular area will depend on the scores achieved on the Test of Adult Basic Education.

VPI 0200 Basic Mathematical Skills

This course is designed to provide vocational preparatory instruction. The student will be provided with an individualized program to upgrade mathematical skills in arithmetic reasoning and fundamentals. The amount of hours spent in a particular area will depend on the scores achieved on the Test of Adult Basic Education.

VPI 0300 Basic Language Skills

This course is designed to provide vocational preparatory instruction. The student will be provided with an individualized program to upgrade their language skills. The amount of hours spent by the student in a particular area will depend on the scores achieved on the Test of Adult Basic Education (TABE).

Special Series Courses

-0920-0921 Seminars

This course is a means of offering 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.

-0948 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. The student will receive a combination of classroom and on-the-job instruction in his/her occupational area.

Adult Basic Education, GED, High School Diploma and English as a Second Language

Adult Studies Course Descriptions

ABE 0100 Adult Basic Education

This course provides instruction in the elementary skills of reading, writing, arithmetic, spelling, social studies, health and science for adults who desire a foundation of study at the secondary level.

AHS 0101 English I High School Cr. 1

This course provides instruction in English language skills including reading, writing, speaking and listening in the content areas of literature.

AHS 0102 English II High School Cr. 1

This course provides instruction in English language skills and in the study of world literature. The content includes, but is not limited to, instruction in reading and vocabulary necessary for comprehension of printed materials. Literature study emphasizes analysis of selections found in the world literature. The study of language includes grammar, mechanics, usage and other conventions of standard written English. The study of mass media includes an analysis of propaganda and persuasion techniques. Speech instruction includes analysis of effective techniques in oral presentations. The course includes composition instruction.

AHS 0103 English III High School Cr. 1

This course provides instruction in American literature and in English language skills. It provides a programmed approach to mid-level high school grammar and usage, effective sentence structure, capitalization and punctuation. It is designed to give practice in writing multi-paragraph papers of various types, including documented papers. Reference and summarizing skills are also covered. Listening, speaking and writing assignments will be related, when appropriate, to the study of American literature. Literature study includes the analysis of various examples of American literacy works in various genres. Vocabulary study focuses upon verbal analogies and other patterns commonly found in standardized tests.

AHS 0104 English IV High School Cr. 1

This course provides high-level instruction in English language skills. The content includes instruction in vocabulary and reading necessary for student's comprehension of printed materials. Literature study includes representative examples from British literature. Writing experiences are structured to provide practice in real life writing situations likely to be encountered beyond secondary school. Opportunities are given to students for extending their speaking and listening skills.

AHS 0105 Business English I High School Cr. 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 0121 World Literature High School Cr. 1

This course studies selected works of western and eastern literature from ancient times to the present. The content includes literature selections which are representative of particular cultures as well as indicative of world literary movements. Selections include fiction, nonfiction and poetry. The course provides opportunities for writing both formal and informal papers based upon the literature.

AHS 0122 American Literature High School Cr. 1

The purpose of this course is to study selected American literary works of various genres in relationship to the development of the distinctive qualities of the national literature. The content includes instruction aimed at understanding the political, cultural, social and historical forces and movements in America as reflected in its literature. Content also includes the tenets and characteristics of puritan, transcendental, romantic, realistic, naturalistic, modern and contemporary movements. In addition, this course contains writing assignments based upon literature, emphasizing the development of insight, taste and critical judgement.

AHS 0123 British Literature High School Cr. 1

The purpose of this course is to study British literary works of various genres in relationship to the historical and cultural forces which influenced them, and to develop understanding of the various literary movements in British literature. The content includes representative works of poetry, drama, fiction, nonfiction, novels, biographies and literary criticism. Selections are from the following literary periods: Anglo-Saxon, medieval, Elizabethan, reformation, neo-classical, romantic, victorian, modern and contemporary. The course provides students with opportunities for interpreting the literature through oral and written analysis.

AHS 0150 Functional Basic Skills in Communications High School Cr. 1

This course provides instruction for students to develop competencies in the practical communications skills of reading and writing, as measured by the High School Competency Test (HSCT). The student will learn how to fill out applications, prepare a resume, write business and social letters, prepare a bibliography, write and comprehend ads in newspapers, and other important types of writing needed for success in school, on the job and in social life.

AHS 0151 Writing I High School Cr. 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 Cr. 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 re-writing, drafting and improved editing.

AHS 0153 Remedial/Compensatory Writing Skills **High School Cr. 1/2**

This course will provide preparatory and remedial writing skills assistance to students who have not passed the High School Competency Test (HSCT). This course will be counted as an elective.

AHS 0201 General Science **High School Cr. 1**

This course provides students with experiences and activities to acquaint the student with the concepts of physical, life and earth/space sciences.

AHS 0202 Earth/Space Science **High School Cr. 1**

This course provides opportunities for the student to develop concepts basic to the earth, its materials, processes, history and environment in space.

AHS 0203 Environmental Science **High School Cr. 1**

This course provides the student 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 Cr. 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 Cr. 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 Cr. 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 Cr. 1**

This course is designed to acquaint the individual 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 0254 General Science (With Lab) **High School Cr. 1**

This course provides students with experiences and activities to acquaint the student with the concepts of physical, life and earth/space sciences.

AHS 0255 Biology I **High School Cr. 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 experiences as well as providing activities that will acquaint students with scientific procedures and equipment.

AHS 0256 Earth/Space Science (With Lab) **High School Cr. 1**

This course provides opportunities for the student 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 Cr. 1**

This course provides the student 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 Cr. 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 interrelationship with the oceans. A required lab component is included to provide students with hands-on experiences in marine concepts.

AHS 0300 Remedial/Compensatory Mathematics Skills III **High School Cr. 1**

This course will provide preparatory and remedial mathematics skills assistance to students who have not passed the High School Competency Test, (HSCT). This course will be counted as an elective.

AHS 0303 Consumer Mathematics **High School Cr. 1**

This course is designed to cover the wide range of consumer problems such as banking, insurance, bonds, stocks, home ownership and installment buying. This course also incorporates problems involving proprietorship, payrolls, sales, discounts, simple interest, compound interest and financial statements in its content.

AHS 0305 Explorations in Mathematics I **High School Cr. 1**

This course is designed to ensure competency in computation with integers, fractions, decimals, percents, measurement and geometric concepts.

AHS 0306 Explorations in Mathematics II **High School Cr. 1**

This course is designed to teach the student to apply computational skills to real-world problems.

AHS 0320 Pre-Algebra **High School Cr. 1**

This course is designed primarily for those who wish to have an orientation to an understanding of the basic concepts and terminology of the new mathematics program being taught in the elementary and junior high schools in Florida.

AHS 0321 Algebra I **High School Cr. 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 Cr. 1**

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 Cr. 1**

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 0401 American History **High School Cr. 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 Cr. 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 Cr. 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 Cr. 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. The student will be introduced to the major characteristics of the mixed market economic system. The major emphasis is to provide the 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 0500 Remedial/Compensatory Reading Skills **High School Cr. 1/2**

This course will provide preparatory and remedial reading skills assistance to students who have not passed the High School Competency Test (HSCT). This course will be counted as an elective.

AHS 0501 Reading I **High School Cr. 1**

This is a diagnostic, prescriptive course in reading designed to begin at the student's level in rate and comprehension. Sound-symbol relationships, words in context, structural analysis, sight words, and dictionary pronunciation and meaning are stressed in building vocabulary. Detecting sequence, following directions, and recognizing topics and main ideas are studied in building reading comprehension.

AHS 0502 Reading II **High School Cr. 1**

This is a diagnostic, prescriptive course designed to develop the student's vocabulary and comprehension. Efforts are concentrated on developing reading skills essential for generalized high school materials. Group and individual instruction and a variety of machines and materials are available to achieve a grade level of 10.5 in reading.

AHS 0601 Health I, Life Management Skills **High School Cr. 1/2**

This course is a study of the human body. It also provides the student with the opportunities to develop and enhance critical life management skills necessary to make sound decisions and take positive actions for healthy living.

AHS 0701 Employability Skills **High School Cr. 1/2**

This course provides those students entering the world of work with the basic knowledge needed to help secure a job, improve personal development and increase the opportunity for job success.

AHS 0702 General Business **High School Cr. 1**

This course provides the students with a basic understanding of general business practices as they relate and have application to their everyday business affairs.

AHS 0703 Bookkeeping **High School Cr. 1**

A course designed to provide meaningful business problems to the beginner level, to equip students with basic vocabulary skills, to provide students with an understanding of business forms and to help them develop proper work habits and attitudes.

AHS 0711 Typewriting, Personal **High School Cr. 1/2**

This course is designed to assist students in acquiring mastery of the keyboard for job entry training and for personal use. Basic typing skills and applications include centering, tabulating, personal and business communications, themes, outlines, report manuscripts and inventory measurements.

AHS 0712 Clerk-Typist **High School Cr. 1**

This is a course designed to give students an understanding of important clerical functions performed in

offices and to develop a comprehension of the application of these functions to related office procedures. Units covered will include basic skills for office jobs, processing data, mailing and shipping services, business filing, records management, receptionist duties, and telephone and telegraph services.

AHS 0715 Shorthand, Personal High School Cr. 1/2

This course provides opportunities for learning to write with speed in as short a period of time as possible. It aims primarily to meet the needs of individuals having note taking responsibilities, including reporting and record keeping in community organizations, and other personal use activities.

AHS 0731 Child Development, Guidance and Care High School Cr. 1

A study of the child from prenatal through pre-school age with emphasis on physical, social, emotional and mental development. Cultural and environmental influences on the child will also be incorporated into this course.

AHS 0741 Clothing and Textiles High School Cr. 1/2

This course is planned for the person who has had little or no experience in recently developed techniques in clothing construction and includes a study of pattern selection including body measurements and simple alterations, fabric selection and preparation with emphasis placed on "easy-to-sew" patterns and fabrics. The student will learn about the selection, use, and care of modern sewing and pressing equipment. The course culminates in the completion of a simple garment, and selection of suitable accessories. In addition the course prepares students to understand the social psychological and physiological aspects of clothing and textiles as well as the effect of consumer choices on the individual and family.

AHS 0745 Fundamentals of Interior Design Services High School Cr. 1

This course includes a study of the ways in which attractive and livable interiors can be planned in relation to individual and family housing situations and incomes, choosing and combining line, color, design and various materials, and wall, window and floor treatments as they relate to other phases of decoration. Practical information concerning choice of furnishings and equipment will be included. This course may include construction of slipcovers, draperies, curtains and bedspreads.

AHS 0761 Drafting, Mechanical High School Cr. 1

This course provides instruction in drafting as a form of graphic communication to express ideas and convey information by means of geometric shapes, lines and dimensions. The content includes, but is not limited to, the visualization of objects in three dimensions, preparation of working drawings, reading drawings and prints, using drafting tools and materials, and providing substantial practice in drafting techniques.

AHS 0771 Basic Automotive Body Repair and Refinishing IV High School Cr. 1

This course is designed to prepare students for employment as automobile body workers. It covers instructions in the different procedures for measuring and pulling and for preparing surfaces for refinishing.

AHS 0801 Drawing and Painting I High School Cr. 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 Cr. 1

This course provides an in-depth theatrical experience in planning and execution of production functions including scene construction and painting, props, costuming, acting, lighting and other full technical responsibilities.

AHS 0822 Drama II High School Cr. 1

This course provides intermediate development in the study and practice of theater 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 0841 Chorus I High School Cr. 1

This course includes both individual and group singing, with emphasis on group vocal experience that may be useful to the individual who participates in community musical activities.

AHS 0911 Advanced Reading High School Cr. 1/2

This is a diagnostic, prescriptive, advanced reading course designed to increase reading speed and further improve reading skills and comprehension.

AHS 0915 Creative Writing High School Cr. 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.

AHS 0941 World Geography High School Cr. 1

A general course in geography 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 Cr. 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 Cr. 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 Cr. 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 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 0945 Humanities Since 1500 High School Cr. 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 not be 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 Cr. 1/2

The purpose of this course is to acquaint the student 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 Cr. 1

This course deals with the structure and function of government at the local, state, and national levels. Content includes the U.S. Constitution, U.S. government and the free enterprise system.

AHS 0951 French I High School Cr. 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 Cr. 1

This course, a continuation of AHS 0951, 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 Cr. 1

This course provides students with elements of grammar, with conversation and composition, and reading of Spanish texts.

AHS 0954 Spanish II High School Cr. 1

This course is a continuation of AHS 0953, 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 Cr. 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 0957 Conversational Italian I High School Cr. 1

This course provides conversational abilities in the areas of travel, vocational subjects and self-enrichment to the students who do not desire a formal knowledge of grammar or literature as taught in the regular programs. The emphasis is on oral communication and useful everyday expressions.

AHS 0961 Health II, Personal Health High School Cr. 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 Cr. 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 not be 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 Cr. 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 meaning or purpose of life, to discover the mystery of the transition from adolescence to adulthood and to feel a deep connection to the wholeness of life.

AHS 0971 Introduction to the Computer High School Cr. 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 Cr. 1/2

The purpose of computer applications is to introduce students to the care and uses of microcomputers 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 0973 Word Processing and Communication Concepts

High School Cr. 1

This course is designed to provide instruction that will enable the student to perform basic word processing and applications skills on text-editing automated equipment. It covers the creation and revision of documents, stored text and the use of special features.

GAA 0200 General Education

Instruction in general education subjects, including elementary and secondary levels. This offering is designed to accommodate the needs of a class which consists in part of individuals who are on the high school level.

GED 0100 High School Review

The General Education Development (GED) tests are designed to provide an opportunity to earn a high school equivalency diploma. Academic areas covered are writing skills (which include composing an essay), social studies, science, interpreting literature and the arts, and mathematics.

GED 0300 GED Testing Skills Seminar

This course provides critical, to the point information about the high school equivalency examination. The goal is to familiarize students with the general format of the test and with the types of questions that will be asked. During the course of the seminar, students will be given the GED test philosophy, statistics regarding the exam, guidelines for successful test taking in general and an opportunity to discuss any questions they may have about the examination. The course includes a test structured similarly to the GED test.

GED 0301 Mathematics Skills

This course will provide preparatory and remedial mathematics skill assistance to students who have not passed the High School Competency Test (HSCT).

GED 0302 Communication Skills

This course will provide preparatory and remedial communication skill assistance to high school students who have not passed the State Student Assessment Test, Part II (SSAT II).

SLD 0100 English for Speakers of Other Languages

This series of courses provides English instruction to speakers of other languages. The primary goal is the student's acquisition of communication skills to enable them to function successfully within our society. The content may include, but not be limited to, the development of listening, speaking, reading, writing and cross-cultural communication skills. Specific content in any one class will depend upon the students' needs and levels of proficiency. There are six skill levels of this course offered.

Lifelong Learning Courses

The Adult Studies' Lifelong Learning program at Florida Community College at Jacksonville provides courses and activities that address the individual development of adult learners and respond to community educational needs in Duval County.

The Lifelong Learning Program serves as a catalyst for exploring relevant issues, explaining timely ideas, improving academic competencies and providing opportunities for lifelong learners to reach their full potential.

All of these courses are not offered every term, so interested persons should check the Continuing Education class schedule a few days before the beginning of each term.

Classes are scheduled in various locations throughout the area including the four FCCJ campuses, community schools and other off-campus centers.

Registration is on a first-come basis.

LLL 0100 Stress Management

Assume an active role in reducing stress in your life by gaining an understanding and appreciation for its physical and psychological effects. Learn about stress-related disorders, their causes and controls and numerous stress management techniques you can use in your life. An extensive bibliography of suggested readings will be provided.

LLL 0101 Our Environment

This course is a seven-part video series focusing on issues relevant to Jacksonville's surroundings. The program titles include "Our Historical and Physical Development — Striving for Balance," "The St. Johns River: A Multipurpose Resource," "The St. Johns River: Its Changing Nature," "Our Air," "Hazardous Waste," "Our Personal Environment" and "Moving Jacksonville Into The Future." Curriculum guides are also provided.

LLL 0102 Opening Doors for the Widowed

This course is designed to help the widowed cope with the emptiness of widowhood and reaffirm life. Class discussion and lecture information focus on legal matters, adjustment to grief and other emotions, choosing a vocation or avocation, returning to school or job training and building a new social network. Although any widowed person is eligible to enroll, those widowed within the past few years will find it most helpful. Instructors are widows or those who have been widowed.

LLL 0200 Personal Life History Writing

This course is designed for older adults. The students will learn to write their personal life histories through three components including reminiscence, instruction and preparation of material. The students will be guided through remembering their past, cataloging these memories into a filing system, using old photographs, writing the first paragraph, writing one experience, writing expanded stories, compiling a table of contents and index, layout of material, printing preparation, duplication and distribution.

LLL 0201 Education for Parenthood

A series of classes for expectant mothers and fathers to study maternity care, parental adjustment, baby needs, and physical preparation for pregnancy, labor and postpartum periods. Expectant mothers must have their doctor's permission to enroll and must be in the last three months of pregnancy.

LLL 0202 Early Pregnancy Preparation Class

This course is designed for mother-to-be in the early months of pregnancy. The course will cover exercises, physical fitness, nutrition and baby care.

LLL 0203 Education for Parenthood Refresher

This is a four-week course designed for expectant couples who have previously taken the Education for Parenthood course during an earlier pregnancy. It provides a review of the relaxation and breathing techniques to be used during labor and delivery, and coaching duties and responsibilities. Information will also be provided on developments in childbirth education.

LLL 0204 Creative Activities in the Nursing Home

This course is designed with the needs of nursing home residents in mind. It includes a variety of creative activities which help keep hands, bodies and minds alert and active. It will provide instruction in one or more of the following areas, creative writing, drawing, painting, crafts, food preparation, needle skills, health, reality orientation, remotivation and use of leisure time.

LLL 0205 Preparation for Cesarean Childbirth

A series of classes designed to meet the needs of couples anticipating a Cesarean delivery and to promote family-centered Cesarean care. Course material will include discussion of emotional needs, nutrition, anatomy and physiology of pregnancy and the Cesarean birth techniques to use for the birth and after the delivery, and adjustments during the postpartum period.

LLL 0206 Basic Cardiac Life Support

This course is designed to teach one how to apply cardiopulmonary resuscitation. Basic cardiac life support is the new name given cardiopulmonary resuscitation. It is that particular phase of emergency cardiac care that either, externally supports circulation and respiration, or prevents a circulatory or respiratory arrest or insufficiency through prompt intervention. Any trained person may apply B.C.L.S. An Emergency Medical Services System (EMS) is a community-wide coordinated means of responding to sudden illness or injury. This course will teach one how to activate our own community EMS system as well as what one may expect of the system. Each student will receive certification from the American Heart Association for successful completion of this course.

LLL 0207 Cardiac Rehabilitation Self Care

This course is designed to educate the individual who has suffered an acute myocardial infarction, post-operative coronary artery bypass, surgery or who has been determined a high coronary risk. It also provides education to family members and helps improve the quality of life for those involved with the program.

LLL 0208 Physical Management and Stress Alleviation

A therapeutic course designed for use in adult institutions. Its purpose is to instruct students in methods of physical maintenance and stress reduction or alleviations. The course will include instruction in body awareness, fine and gross motor activities; ways of dealing with stressful situations and practical usage of the various methods taught.

LLL 0209 Taking Care of Your Body

A course which explores matters pertinent to physical and personal well-being. Topics will include consumer health, exercise, nutrition, stress reduction, heart disease, diabetes, cancer, contraception, menopause, rape, diet, medicine chests, health careers and cardiopulmonary resuscitation.

LLL 0210 Weight Management

This course is designed to make the student aware of the reasons for overweight and to present methods to resolve overweight problems through a nutritionally sound diet. This course will help the student to develop better eating habits and a more positive self-concept. It will help to develop workable solutions to the student's individual problems. Individual attention will be given to each student in planning menus specified for particular needs, as well as providing nutritionally sound methods of food preparation.

LLL 0211 How to Stop Smoking in Five Days

This course is designed to demonstrate how an inveterate smoker can overcome the habit and stop smoking cigarettes by following a self-imposed five-day plan.

LLL 0212 A Growing Problem: Drug Use and Abuse

This course is designed to raise the community's awareness and understanding of the problem of drug abuse. This will be accomplished by providing information concerning the magnitude of the problem of drug abuse, the legal aspects of the problem, and signs and symptoms of the drug abuse, as well as the problem of drug abuse in women, youth and senior citizens. Information relative to prevention and treatment of the problem will be included in this course.

LLL 0213 Dynamics of Alcoholism

This course is designed to introduce the student to the problems of alcohol dependency. Topics will include the medical, psychological and social implications of alcoholism. Prevention and treatment issues will be covered. Alcohol dependence among women, the elderly, blacks and adolescents will be examined. The impact of alcoholism on job efficiency and relations with co-workers and others will also be considered.

LLL 0214 Total Wellness: A Holistic Approach to Good Health

This course is designed for senior adults stressing the importance of caring for one's own health and assuming the responsibility. The course emphasizes the total person; the physical, intellectual, spiritual, emotional and

social aspects of the individual are addressed and preventive techniques are demonstrated which lead to optimum well being.

LLL 0215 Mental Health First Aid

This course is to teach the student to provide immediate stop gap help to persons immediately in danger of committing suicide. The student will receive instruction on prevention of suicide, drug abuse, and other mental health disorders — includes identifying problems, recognizing and responding to a crisis.

LLL 0216 Interpersonal Relations for the Handicapped

This course is designed to teach the handicapped person appropriate social and sexual behavior for everyday living in our society. The students will receive instruction in etiquette, hygiene, social roles and relationships, authoritative relationships, and dating, ramifications and implications.

LLL 0300 Community Emergency Preparation

This course is designed to prepare individuals for rendering essential community services on a voluntary basis in time of serious emergency or disaster.

LLL 0301 Safety Education

This course is designed to cover the principles and information related to individual, home and public safety.

LLL 0302 Personal Safety

This course is designed to provide skills, knowledge, training and information in securing one's personal safety in the home as well as self defense and street safety.

LLL 0303 Crime Prevention

This course is directed toward the reduction and prevention of crime in neighborhood communities. Emphasis is placed upon each participant's particular problem and concerns relating to crime prevention. The program includes the history of crime prevention, components of the criminal justice system, and personal and home security measures such as locks, alarms, lighting, crimes against women and the elderly, and community involvement in crime prevention.

LLL 0304 Self-Defense for Women

Learn and practice self defense including conditioning exercises, safe falling and techniques for immobilizing an attacker. Training and information related to preventative measures will be covered.

LLL 0400 Women in History

This course is designed for exploration of the images, experiences, contributions and perspectives of women in various cultures from early times through the present. Women's roots will be emphasized from the pre-Greek period through the Middle Ages, the Industrial Revolution, and 19th and 20th century developments in European, African, American and some other cultures.

LLL 0401 Divorce: A New Challenge

This course is designed to help divorced people deal in a positive way with their changing roles in society.

Discussions will include topics such as the emotional impact of divorce, family relationships, single parenting, legal and financial issues, entering the work force or changing jobs, developing new personal/social relationships and making individual plans for action.

LLL 0402 Assertive Communication Training I

The course includes the theory and practice of assertive behavior, awareness of one's interpersonal rights, distinguishing among nonassertive, assertive and aggressive responses, practicing simple assertions as well as emphatic, negative feelings, and confrontive assertions and other interpersonal problems relating to living and working with others.

LLL 0403 Pre-Release Program for the Incarcerated

This pre-release program has been created to offer guidance and counseling to the incarcerated in transition from confinement to freedom. This program will provide the means for reintegrating and readjusting the offender back into the community.

LLL 0404 Survival: Coping With Separation and Divorce

This program is designed as an open entry, open exit class for those who are contemplating or are in the process of divorce. Focus is on persons who are in immediate need of help. The program will offer emotional support and an opportunity to deal with issues such as crisis, loss, loneliness, anger, guilt and finding new strengths. Options for referral services will be presented.

LLL 0405 Life Planning

This course is designed to provide the basic facts for understanding money from a simple workable budget through the potential of aggressive investments. Information will be made available by presenting everyday life occurrences including such topics as the meaning of joint ownership to a wife as well as her spouse, what gifts are taxable and when and how to choose a safe but profitable investment, large or small. Other topics to be introduced will include banking, establishing credit, taxes, installment buying, insurance, real estate, wills and trusts.

LLL 0406 Human Relations

A down to earth review of modern concepts in human relations including allocation of time, motivation, communication, race relations and emotional stability to instill positive attitudes about living and working together.

LLL 0470 Foreign Languages

The purpose of this course is to provide students with instruction that will either introduce or reinforce fundamental skills in the target language and its culture developing communication skills and cross-cultural understanding. The course content may include, but not be limited to, listening, speaking, reading and/or writing skills toward language fluency, as well as an emphasis on intercultural awareness.

LLL 0480 Health

The purpose of this course is to provide students with opportunities to examine comprehensive health issues

important to proper human development. The course content may include, but is not limited to physical, social and emotional development, family life, nutrition, safety and first aid, prevention of diseases, consumer health, substance use and abuse, and community and environmental health.

LLL 0490 Science

This course is designed to provide students with experience and activities in the concept of physical and natural sciences. The content may include, but not be limited to, scientific processes, human anatomy and physiology, Earth and its changes, astronomy, chemical changes in matter, and energy and its changes.

LLL 0500 Public Forum

The public forum will provide an opportunity for interested citizens to hear specialists speak on pending community problems and to have the opportunity of expressing themselves concerning these problems.

LLL 0501 Leadership Training

This course is designed to develop skills in group or community leadership. It covers techniques of group work and group dynamics, effective speaking and how to conduct a meeting.

LLL 0502 Parliamentary Procedure

This course is designed to benefit the presiding officer and member alike in participation in local government, communication with public officials and ensuring each individual's rights. The course provides study and practice of the principles and rules governing deliberative assemblies, using Roberts Rules of Order as a text.

LLL 0510 Art

This course will provide opportunities for students to explore and develop techniques in art. Students can expand their insights into the world of art through one or all of the various art media.

LLL 0540 Community Resources

This course is designed to provide timely information regarding the availability of community resources which might assist students in improving and enhancing their quality of life. This course may include, but is not limited to, providing tips on utilizing resource people, governmental agencies, associations, clubs, educational institutions and exemplary programs in Duval County.

LLL 0550 Computer Education

This course will provide students with the opportunity to understand the capabilities, applications and implications of computer, and microcomputer concepts. The content may include, but not be limited to, computer components, terminology, problem solving, role and implications of computers in society, the use of commercially available software and simple programming.

LLL 0560 Consumer Education

This course is designed to provide students with consumer information that will allow them to make informed purchases of products and services. The content may

include, but not be limited to, consumer rights and responsibilities, interaction of the consumer and the economy, family lifestyles, successful financial planning, uses of alternative resources, consumer credit, consumer buying, consumer legislation and the effects of advertising.

LLL 0570 Dance

This course is designed to provide the student with opportunities to explore and develop techniques in dance. The course content may include, but not be limited to, terminology, dance history, basic movements, dance forms (ethnic dance, jazz, ballet, modern dance, tap, etc.), choreography, dance injuries and their prevention, performance, direction and dance critique.

LLL 0580 Drama

This course is designed to provide a broad overview of the study and practice of dramatic arts. The course content may include, but is not limited to the history of drama, its traditions, literature, theater operations, theater productions, techniques and mechanics of acting, playwriting, direction and choreography.

LLL 0600 Fundamentals of Art for Older Adults

This course is designed for senior adults. Instruction will be provided in the fundamentals of arts, encompassing composition, harmony, rhythm, balance, emphasis, proportion, line, form, texture and color. The student may carry out projects using one or more of the following media: charcoal, Cray-pas, pencils, pen and ink, oils, acrylics, watercolors, pastels or even collage.

LLL 0601 Drawing for Older Adults

This course is designed for senior adults. It is an introduction to the basic disciplines of drawing, using charcoal, pencil, pen and ink, Cray-pas, pastels and colored pencils.

LLL 0602 Watercolor, Acrylic, Oil Painting for Older Adults

This course is designed for senior adults. The media used in this course is limited to oil, acrylic and watercolor. Instruction will be provided in techniques of watercolor, acrylic and oil painting and in color theory. It will be helpful if the student already has some experience using fundamentals of art; however, instruction will include drawing and other basics.

LLL 0603 Graphic Arts for Older Adults

This course is designed for senior adults. It is an introduction into the field of graphics involving various media and forms such as relief and serigraph. Drawing, printing, matting and framing will be included.

LLL 0604 Choral Music for Older Adults

This course is designed for senior adults. Emphasis will be on group singing and performance. Some music history and music appreciation may be included. Group experience may be useful to individuals as they participate in other community musical activities.

LLL 0605 Community Orchestra for Older Adults

This course is designed for senior adults. It provides an opportunity for older musicians to practice and performing group instrumental musical activities. It will accommodate people who want to learn to play an instrument as well as people who want to improve their existing instrumental skills. Any instrument is welcome; however, participants must provide their own. Public performances will be given periodically.

LLL 0606 Playground Supervision

This course covers the basic instruction and concepts that parents or teachers need in guiding the child's mental, social and physical development. It deals with after-school playground supervision of games, dances, materials, progression, and techniques in teaching games and rhythmic activities to pre-school and school age children.

LLL 0607 Attitudes Toward Death

Death poses questions of ultimate significance to us. Many people feel ill prepared to face their own death or the death of a loved one. Through the centuries, humans have thought about death, speculated about immortality and expressed their feelings in a wide variety of ways. The question of death has taken on new dimensions in our century — a time when life processes can be supported by machines and when traditional religious beliefs are challenged. Toward the end of the course, funeral and burial practices of our day will be examined. The course also explores ways that legal papers, insurance and funeral arrangements can be prepared more expeditiously and meaningfully.

LLL 0608 Psychology of Awareness

This course is designed for senior citizens. It includes exploration, experimentation and interaction designed to assist participants to a fuller and more satisfying experience of self, others and environment through heightened appreciation of here and now reality; training and practice in emotional self-support and conflict resolution utilizing Gestalt and Transactional Analysis approaches.

LLL 0609 Education — A Family Affair

This course is designed to assist parents of school aged children with interpretation of school requirements, standardized test scores, courses of study, academic deficiencies, help with reading, writing, spelling and mathematics for their children, and other school related problems. This course will include developing skills to help parents assist their school aged children in study methods, listening habits, peer group relationships and coping skills necessary to succeed in school.

LLL 0610 Human Sexuality

This course is comprised of a series of classes for individuals interested in the field of human sexuality education. Information and learning experiences will enable participants to clarify their own personal feelings and values regarding sexuality and become more knowledgeable of psychological, sociological and biological contributions in the field of human sexuality.

LLL 0620 Humanities

This course will provide instruction which introduces students to the study of man's cultural heritage. Students will have an opportunity to explore, examine and respond to the world from the earliest civilization up through present day societies. The content may include, but not be limited to, defining the humanities in relation to history, literature, religion, philosophy, art, music and architecture. An interdisciplinary approach may be employed to assist students in formulating their own values and understanding the influence of the humanities on their life, society and mankind.

LLL 0630 Language Arts

The purpose of this course is to provide students with instruction in communications. The course content may include, but is not limited to, developing reading, writing, speaking, listening and observing skills, critical thinking and problem solving, and the study of classic and/or contemporary literature.

LLL 0640 Media

This course is designed to provide opportunities for students to develop introductory skills in the use of various media. This course may include, but not be limited to, the identification of basic techniques to locate, organize and present information, the study of library media (research, self study and information processing), and the development of specialized skills in audiovisual production utilization techniques, operation and maintenance.

LLL 0650 Mathematics

This course is designed to provide opportunities for students to review and continue the development of basic mathematics skills. The course content may include, but not be limited to, numerators, whole numbers, decimals, fractions, percents, measurements, algebra, problem solving, knowledge and use of calculators, probability, statistics and other higher level mathematical disciplines.

LLL 0660 Music

This course provides student with opportunities to study music in its various modes and manifestations, develop an understanding of the elements of music, and build skills in its performance. The course content may include, but not be limited to, music appreciation and awareness; active participation in singing, listening and playing instruments, care and maintenance of instruments, interpretation and composing.

LLL 0680 Physical Education

This course provides opportunities for students to develop skills and acquire knowledge of physical and human development. The course content may include, but not be limited to, developing an understanding of the significance of lifestyle on one's health and fitness, skills needed for successful participation in lifelong physical activities, social competencies and exercise safety awareness. Students may participate in specific forms of physical activity to enable them to develop skills and foster an appreciation through participation.

LLL 0690 Safety and Driver Education

This course will provide information regarding safety and driver education. The course may include, but not be limited to, providing skills, knowledge, training and information in securing one's personal safety in the home as well as self-defense and street safety. Further, this course may provide education to drivers of various vehicles regarding the operation and safe use of such vehicles.

LLL 0700 Consumer Education Law

This course is designed to provide low income residents with basic facts regarding the laws of daily living in a community. It has been organized to interpret the law in a comprehensive and easily understood manner. It will deal primarily with the laws that govern the lives of low income and undereducated citizens. The course will assist these citizens to know what local help is available to them. This course is also designed to promote positive attitudes toward and involvement in utilization of the American free enterprise system as it deals with land, people, organization and government.

LLL 0701 Personal Money Management

This course is designed to assist adults in handling their day-to-day and long-term financial affairs. Course emphasis is on subjects important in personal money management. Included are budgeting techniques, combating inflation, types of bank accounts, borrowing and use of credit, types of investments, taxation, and retirement and estate planning.

LLL 0702 Home Economics for Senior Adults

This course includes topics which are designed to provide older adults with instruction that will help them cope with health and economic problems of aging. Instruction will be conducted in one or all of the following areas: needlework, basic clothing instruction, advanced clothing instruction, food preparation and nutrition.

LLL 0703 Getting It All Together on a Limited Income

This course is designed to assist persons in managing their lives and handling the stress involved in surviving on a very limited income. Practical information and discussions will cover topics such as smart shopping, budgeting, parenting, resolving conflict with neighbors, caring for your body and launching a plan of action for life improvements.

LLL 0704 Career Assessment and Guidance

An intensive 80-hour class to aid individuals with immediate need to make a decision about returning to school, work or both. Emphasis will be on developing self respect and confidence, assertive communication skills, life directions and goals so that students take responsibility for their lives and become self supporting. Résumé writing, career fields, job training, job search and interview techniques will be covered.

LLL 0705 Everything You Want To Know About Solar Energy and More

This course is designed to inform the general public of the development and uses of solar energy to provide insight for the general public to know what is available

from solar energy and have a general understanding of the subject.

LLL 0706 Education for the Aging

Courses are offered under this title which are designed to provide middle-aged and older adults with information that will help them cope with the problems of aging. Information on pre-retirement planning, the psychological aspects of aging, the role of the aged in the modern world, and courses dealing with health, housing, financial planning, and worthy use of leisure time will be explored. Implications of current social, scientific, economic and political developments on the older citizen are studied.

LLL 0710 Social Studies

This course is designed to provide opportunities for students to develop an understanding of how individuals, groups, governments and economic systems relate to each other. The course content may include, but not be limited to, the study of the future, world cultures, civilizations, religions, world and Bible history, political and social systems, and the development of American values and institutions.

LLL 0800 Teaching Your Children About Sex

A course designed to enable parents and prospective parents to deal more effectively and honestly with children's questions about their own sexuality.

LLL 0801 Continuing Education for Parenthood

A course designed to help new parents cope with the unexpected problems which arise as a result of a new baby, including child development, sibling problems, illnesses, family adjustments and baby care. No one particular course of action is recommended, but many options are presented to the couples. Open discussion and exchange of ideas is encouraged.

LLL 0802 Skills for Parents

This course will emphasize effective ways to communicate with your children. Learn how to really listen and communicate your feelings. Discover innovative ways to involve children in solving day to day family problems and learn techniques you can use to make learning exciting for your children.

LLL 0803 Single Parenting — Becoming a New Kind of Family

The course is designed to assist single parents in raising children alone. Discussions and lecture focus on common challenges of being a single parent including adjusting to a one-parent family, parent-child communication, new roles for parents and children, outlets for yourself and developing a sense of being a complete family.

LLL 0804 Understanding Your Child

Stages of growth and development, parent-child communication, discipline and helping your child learn are just some of the topics covered in this course designed to assist parents in understanding more about their children. Receive practical suggestion of ways you can help your child reach their full potential.

LLL 0805 Parents of the Handicapped

This course is designed to provide parents with information beneficial to them in rearing their handicapped child. Some of the topics to be discussed will be attitudes, behavior problems, reality therapy, legal responsibilities and rights, appropriate social activities and behavior, marriage and basic education skills.

Recreation Courses

(Self-Supporting Courses)

Florida Community College at Jacksonville offers recreational courses on request from the community. These courses are supported by fees (self-supporting) and not funded by the state. The fee structure for these courses is calculated to cover the direct instructional cost of offering the course to the community. For more information, call Open Campus at 633-8292.

