ACG 2001
Accounting I, 3 credit hours, 45 lec. (Fall, Spring, Summer)
Accounting information system; double entry system, income and adjustments; accounting cycle completion; merchandise and special journals; internal control and voucher system; short-term liquid assets; inventory methods; liabilities and payroll; acquire, depreciate, and dispose of assets; capital or expenditures; asset depletion and amortization; code of professional ethics. Prerequisites: although not required, MTB 1103 is highly recommended.

ACG 2011
Accounting II, 3 credit hours, 45 lec. (Fall, Spring, Summer)
Accounting for corporations; long-term liabilities, using future values and present values; statement of cash flows; financial statement analysis, and international accounting. Prerequisite: ACG 2001.

ACG 2071
Managerial Accounting, 3 credit hours, 45 lec. (Fall, Spring, Summer)
The basic principles of accounting techniques for the preparation of internal reports related to the management of the firm and the interpretation of financial data useful in the decision-making process within the economic framework of the firm. Prerequisites: ACG 2011 or ACG 2021.

ACG 2450
Computer Applications for Accounting, 3 credit hours, 45 lec. (Offered as needed)
An introductory course in computerized integrated accounting procedures found in the microcomputer environment. Includes application of software designed for general ledger, accounts payable and receivable, financial statement analysis, purchasing and sales order processing, fixed assets, payroll, inventory and departmental accounting. Prerequisite: ACG 2001.

ACO 1806*
Payroll Accounting, 3 credit hours, 45 lec. (Offered as needed)
Introduction to the theory, laws and procedures related to payroll activities of a business. Topics include payroll and personnel records, federal payroll laws, payroll operations, computerized payroll systems, and preparation of payroll registers, earnings records, and payroll tax forms. Prerequisite: ACG 2001.

AMH 1041
American Civilization, 3 credit hours, 45 lec. (Offered as needed)
Unified history of social and intellectual issues. A study of major American concerns and issues, the proposals, their formative ideas, the resolution attained in an emerging pattern of American character and heritage. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

AMH 2010
American History I, 3 credit hours, 45 lec. (Fall, Spring, Summer)
American History to 1865; describes the social, political, and economic development of the American people against the geographical background of the New World. Particular emphasis on American intellectual and political thought leading to the emergence of basic American character, ideas and attitudes. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

AMH 2061
Southern Cultural History, 3 credit hours, 45 lec. (Offered as needed)
Southern Cultural History – describing the social, political, and economic development of the South. Particular emphasis on Southern community, music, folk art, folklore and other elements associated with the American South from the Civil War to the present.

AMH 2070
Florida History, 3 credit hours, 45 lec., (Offered as needed)
A survey of Florida history from the colonial period through the 20th century.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

Δ Technology-Across-the Curriculum Course
AMH 2071
Survey of Early History of Florida, 3 credit hours, 45 lec.
(Offered as needed)
A survey of Florida history from pre-Columbian populations through the Territorial Period.

AML 2010
American Literature I, 3 credit hours, 45 lec.
(Offered as needed)
A course in American Literature from the Colonial period to the Civil War. This course may be used for Humanities credit. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: ENC 1101.

AML 2020
American Literature II, 3 credit hours, 45 lec.
(Offered as needed)
A course in American Literature from Civil War to present. This course may be used for Humanities credit. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: ENC 1101.

ANT 2000 ❖
Introduction to Anthropology, 3 credit hours, 45 lec.
(Offered as needed)
Introduction to the fundamental principles, methods, and theories in Anthropology. Includes a brief introduction to the subdisciplines of Anthropology: Cultural Anthropology, Physical Anthropology, Archaeology, and Linguistics. A cross-cultural perspective will be paramount in the study of Anthropology.

ANT 2159C
Florida Southeast US Archaeology, 3 credit hours, 15 lec., 60 lab.
(Offered as needed)
Introduction to special topics in anthropology and archaeology. Example: field experience in archaeology, brief introduction to prehistoric native American cultures in Florida and the southeastern United States and field experience excavating a pre-historic site in Okaloosa County.

ANT 2930
Special Topics in Anthro/Archaeology, 3 credit hours, 45 lec.
(Offered as needed)
Introduction to special topics in anthropology and archaeology. Example: Survey and introduction to pre-historic and early historic Native American cultures in Florida and the Southeast U.S. Prerequisite: permission of instructor.

ARC 1301C
Design 1.2, 6 credit hours, 30 lec., 120 lab.
(Offered Spring, Summer, Fall)
The primary foci of this course are the development of two and three-dimensional graphic and spatial manipulation abilities. This course will cover topics such as drawing, perspective sketching, and graphics using a variety of media to include: pencil, ink, colored pencils, markers, and model building to be used in architectural presentations. This course is designed as part of an articulation agreement with Florida A&M University; students interested in transferring to another upper division school should consult with an advisor. Prerequisite: ETD 1100.

ARC 2201
Theory of Architecture, 3 credit hours, 45 lec.
(Offered as needed)
An introduction to architectural theory, selected contemporary architectural theories and movements, their evolution and historical basis. This course is designed as part of an articulation agreement with Florida A&M University; students interested in transferring to another upper division school should consult with an advisor. Prerequisite: ETD 1100.

ARC 2303A
Design 2.1, 6 credit hours, 30 lec., 120 lab.
(Offered as needed)
Application of two-and-three-dimensional design principles learned in first-year design, in preparation for whole-building design in third year. Small building projects adding programmatic responsibilities to the design agenda. Emphasis on programmatic issues internal to the building such as function, circulation structure, resolution of form, space and place making. This course is designed as part of an articulation agreement with Florida A&M University; students interested in transferring to another upper division school should consult with an advisor. Prerequisite: ARC 2201.

❖ This college credit course qualifies as having an international and/or diversity focus for Teacher Education Programs common prerequisites.
ARC 2304
Design 2.2, 6 credit hours, 30 lec., 120 lab.
(Offers as needed)
Application of two- and three-dimensional design principles learned in first-year design, in preparation for whole building design in third year.
Small building projects adding programmatic responsibilities to the design agenda. Emphasis on programmatic issues internal to the building such as function, circulation structure, resolution of form, space and place making, and human behavior.
Prerequisite: ARC 2303A.

ARC 2472
Introduction to the Technology of Architecture,
4 credit hours, 60 lec.
(Offered as needed)
This course is the beginning of the technology sequence in the areas of structures, environment technology, and materials and methods of construction. It introduces themes such as the response of buildings to the natural environment, the strength, stiffness, and durability in building materials, and the quantitative method of analysis and design of building assemblies and support systems. It explores the relationship between building technology and the social, aesthetic, environmental and economic aspects of the settings in which buildings are located, and how these factors relate to the process of architectural design. This course is designed as part of an articulation agreement with Florida A & M University; students interested in transferring to another upper division school should consult with an advisor.

ARC 2501
Architectural Structures I,
3 credit hours, 45 lec.
(Offered as needed)
The emphasis of the course is on the development of the principles of statics and the application of these principles to the analysis and design of structural systems, primarily column, beam, slab systems, and the truss systems. The course builds on the basic ideas of structural form and material properties developed in Introduction to the Technology of Architecture. Prerequisite: any college level physics or calculus course, and concurrent enrollment in ARC 2472. This course is designed as part of an articulation agreement with Florida A & M University; students interested in transferring to another upper division school should consult with an advisor.

ARC 2701
Survey of History of Architecture, Part I, 3 credit hours, 45 lec.
(Offered as needed)
A critical exploration of the history and theory of architecture from prehistory through the end of the 13th Century. Examination of the making and intent of significant buildings and sites tracing the developments that have given meaning to the built environment and brought order to the tectonics of architecture. This course is designed as part of an articulation agreement with Florida A & M University; students interested in transferring to another upper division school should consult with an advisor.

ARH 1000
Humanities Art,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
This course offers a study in the basic concepts of art, including function, style and structure with emphasis on the interaction of medium and meaning and problems of art criticism. This class does not fulfill the art history requirements for art majors, but compliments the major’s course of study as an elective. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

ARH 2051†
Art History: Renaissance-18th Century Neo-Classicism,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
Survey of significant contributions in art from Renaissance through Contemporary. Art will be considered in terms of stylistic qualities as well as iconography and historical context. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

ARH 2060†
Architecture History,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
Survey of significant contributions in architecture from prehistoric to modern times. Architecture will be considered in terms of stylistic qualities, structural type, and intended usage. Topics will be addressed according to historical content, social, aesthetic, environmental, and economic factors. Prerequisites: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

† Courses listed with this symbol contain an oral communication component and may be used to satisfy the Speaking-Across-the-Curriculum requirement.
❖ This college credit course qualifies as having an international and/or diversity focus for Teacher Education Programs common prerequisites.
ART 2402†
Art History: Modern Art,
3 credit hours, 45 lec.,
(Summer and as needed)
Surveys and analyzes the major artistic periods and movements from 18th century Neo-Classicism to present. Required for all Art majors. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

ART 2930
Art History – Special Topics,
3 credit hours, 45 lec.
(Fall, Spring Summer)
A defined special topics course which is pursued under supervision of a faculty member and recorded through usual departmental procedures. Designed to permit a student to pursue non-scheduled academic and laboratory work which may be of a specialized nature and not available through the college schedule.

ART 1201C
Two-Dimensional Design,
3 credit hours, 15 lec., 60 lab.
(Fall, Spring)
An introductory course, both theoretical and applied, dealing with the principles of organization and the elements of design in a two-dimensional format. This is a foundation course for all of the graphic arts: painting, printmaking, and the two-dimensional crafts. See page 41 regarding audit enrollment.

ART 1203C
Three-Dimensional Design,
3 credit hours, 15 lec., 60 lab.
(Fall, Spring)
An introductory course, both theoretical and applied, dealing with principles of organization and the elements of design in a 3-dimensional format. Various materials, tools, and surfaces are used to explore 3-D form. This is a foundation course. See page 41 regarding audit enrollment.

ART 1300C
Drawing I,
3 credit hours, 15 lec., 60 lab.,
(Fall, Spring)
Basic drawing course covering different drawing media, line, form, shape, value and spatial relationships. Drawing problems involving a variety of subject matter will be explored.

ART 1301C
Drawing II,
3 credit hours, 15 lec., 60 lab.
(Fall, Spring)
Continued study of drawing techniques explored in Drawing I. Provides experience with more complex drawing problems. Emphasis is on self-expression, value, color theory, and composition. A variety of subject matter and drawing media will be explored. Prerequisite: ART 1300C. See page 41 regarding audit enrollment.

ART 1600C ∆
Computer Art I,
3 credit hours, 30 lec., 30 lab.
(Offered as needed)
A beginning course to develop basic technical and conceptual skills with a focus on an industry-standard vector-based drawing program. Students will create logos and illustrations typical of graphic design challenges.

ART 1701C
Sculpture I,
3 credit hours, 15 lec., 60 lab.
(Fall, Spring)
An introductory course in the technical and aesthetic consideration of sculptural forms. Includes a wide range of materials and expressions, representing past and present sculptural methods. Prerequisite: ART 1203C. See page 41 regarding audit enrollment.

ART 1702C
Sculpture II,
3 credit hours, 15 lec., 60 lab.
(Fall, Spring)
Allows continued experience in more complex three-dimensional techniques; emphasis on individual projects and conceptual approach. Prerequisite: ART 1701C. See page 41 regarding audit enrollment.

ART 1750C
Pottery I,
3 credit hours, 15 lec., 60 lab.
(Fall, Spring, Summer)
The students shall be exposed to the production of pottery utilizing all known hand building techniques. Also includes introduction to potter’s wheel and basic wheel fundamentals. First half of course is hand building; second half is devoted to development of skills on the potter’s wheel. Students also learn how to glaze pottery and make glass. See page 41 regarding audit enrollment.

ART 1751C
Pottery II,
3 credit hours, 15 lec., 60 lab.
(Fall, Spring, Summer)
Continues hand building of Pottery I, but major emphasis is placed upon development skills utilizing the potter’s wheel. Additional glazing experimentation is also emphasized. Prerequisite: ART 1750C. See page 41 regarding audit enrollment.

ART 1905
Independent Study – Art,
1 credit hour
(Fall, Spring, Summer)
A defined independent study which is pursued under supervision of a faculty member and recorded through usual departmental procedures. Designed to permit a student to pursue non-scheduled academic and laboratory work which maybe of a specialized nature and not available through the college schedule. Departmental approval is required. Placement test may be required.

NOTE: If this course is used to satisfy Writing-Across-the-Curriculum requirements for transfer courses to OWC, a 4,000 word paper with a minimum grade of “C” is required. This course may be taken up to four (4) times for credit.

ART 2330C
Figure Drawing I,
3 credit hours, 15 lec., 60 lab.
(Fall, Spring)
The development of technical skills and self-expression through drawing. The course begins with anatomy studies, progresses to conceptualization of human form. See page 41 regarding audit enrollment.

ART 2331C
Figure Drawing II,
3 credit hours, 15 lec., 60 lab.
(Fall, Spring)
This class is a continuation of Figure Drawing I. Emphasis is on composition and self-expression in relation to the human figure. Exploration of media and content will be encouraged. Prerequisite: ART 2330C. See page 41 regarding audit enrollment.

❖ This college credit course qualifies as having an international and/or diversity focus for Teacher Education Programs common prerequisites.
ART 2400C  
Introduction to Printmaking I,  
3 credit hours, 15 lec., 60 lab.  
(Fall, Spring)  
Introduction to various printmaking techniques possibly including block printing, calligraphy, monotype, etching, and serigraphy. Content varies according to instructor. Two-dimensional design is recommended. Invites to all students. See page 41 regarding audit enrollment.

ART 2401C  
Printmaking II,  
3 credit hours, 15 lec., 60 lab.  
(Offered as needed)  
This class is a continuation of printmaking techniques including block printing, calligraphy, monotype, etching and serigraphy. Emphasis is on composition, exploration of printing methods and individual expression. Content varies according to instructor. Intro to Printmaking required. Prerequisite: ART 2400C. See page 41 regarding audit enrollment.

ART 2500C  
Painting I,  
3 credit hours, 15 lec., 60 lab.  
(Fall, Spring)  
Course will include design elements, composition and spatial relationships. Emphasis is on color theory, color mixing, and execution thereof within a variety of subject matter. See page 41 regarding audit enrollment.

ART 2501C  
Painting II,  
3 credit hours, 15 lec., 60 lab.  
(Fall, Spring)  
This course is a continuation of Painting I ART2500C with emphasis on further exploration of student’s personal style and original techniques. Further experimentation in abstraction and emotional aspects of form and color are explored and expressed. Prerequisites: ART 2500C. See page 41 regarding audit enrollment.

ART 2540C  
Water Color I,  
3 credit hours, 15 lec., 60 lab.  
(Fall, Spring)  
An introduction to watermedia techniques applied to various subject matter through demonstrations and various lab experiences. Open to all students. See page 41 regarding audit enrollment.

ART 2541C  
Water Color II,  
3 credit hours, 15 lec., 60 lab.  
(Fall, Spring)  
Allows continued experience in more complex water color technique and subject matter. Emphasis is on composition and individual expression. Prerequisite: ART 2540C. See page 41 regarding audit enrollment.

ART 2601C* Δ  
Computer Art I,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
An advanced graphic design course building upon the skills covered in Computer Art I; the course includes increased challenges relating to conceptual skills and multi-software integration relating to typical print-based design problems. Access to a 35 mm camera is required. Prerequisite: ART 1600C.

ART 2602C* Δ  
Digital Imaging I,  
4 credit hours, 30 lec., 60 lab.  
(Offered as needed)  
A digital illustration production course with a strong emphasis on concept development and image making skills. Students will create complex imagery based on manipulations of photographs or traditional drawings and paintings with an industry-standard image editing/manipulation software. Access to a 35 mm camera is required.

ART 2603C* Δ  
Digital Imaging II,  
4 credit hours, 30 lec., 60 lab.  
(Offered as needed)  
A continuing course which expands upon the technical and conceptual foundation laid in Digital Imaging I. Students will explore advanced software techniques and greater challenges of personal or commercial expression in digital media. Prerequisite: ART 2602C.

ART 2834C  
Gallery Practices,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
The principles of Art Gallery practices and operations. Both theoretical and practical experiences will be obtained through lectures, field trips and class projects.

ART 2930  
Art – Special Topics,  
3 credit hours, 45 lec.  
(Fall, Spring Summer)  
A defined special topics course which is pursued under supervision of a faculty member and recorded through usual departmental procedures. Designed to permit a student to pursue non-scheduled academic and laboratory work which may be of a specialized nature and not available through the college schedule.

ART 2955  
Portfolio Development,  
3 credit hours, 15 lec., 60 lab.  
(Offered as needed)  
Development of a working portfolio through studio project aimed at fulfilling the general requirements the average company, university, art school or advertising agency looks for in a portfolio presentation. Prerequisite: ART 1201C, ART 1300C.

AST 1002  
Astronomy,  
4 credit hours, 60 lec.  
(Fall, Spring, Summer)  
A one-term course of lectures and demonstrations designed to meet the general education requirements in physical science of non-science majors, for students who need a preparatory course prior to taking physics, and for students in related scientific fields that need a scientific elective. The course includes topics in elementary physics, naked-eye astronomy, the moon, sun, solar system, stars, and galaxies. A working knowledge of arithmetic and simple algebra is required.

BCN 1230  
Building Construction Materials and Processes, 3 credit hours, 45 lec.  
(Offered as needed)  
Course designed to introduce the student to terminology, methods, procedures, materials, and processes used in the construction industry.

BCN 1272*  
Blueprint Reading for Commercial Construction, 3 credit hours, 45 lec.  
(Offered as needed)  
A course to familiarize non-drafting students with techniques of blueprint reading and the fundamentals of construction methods that make blueprint reading meaningful.

BCN 1520*  
Electrical Systems in Construction, 3 credit hours, 45 lec.  
(Offered as needed)  
A course to familiarize students with electrical terminology, practices, methods, code requirements and safety and health in construction.
BCN 1567*
Plumbing and Gas Construction Practices, 3 credit hours, 45 lec.
(Offered as needed)
A course to familiarize students with Plumbing and Gas code requirements, terminology, methods, practices, processes and safety and health used in building construction.

BCN 2231
Building Construction Materials and Processes II, 3 credit hours, 45 lec.
(Offered as needed)
Course designed to introduce the student to terminology, methods, procedures, materials, and processes used in the construction industry. The focus of the course will cover Divisions 9 through 16 of the construction industry.

BCN 2560*
Mechanical Systems in Construction, 3 credit hours, 45 lec.
(Offered as needed)
A course to familiarize students with mechanical trades terminology, methods, practices, code requirements processes, and safety and health criteria in mechanical construction.

BCN 2721*
Construction Management/Planning, 3 credit hours, 45 lec.
(Offered as needed)
The course covers project development and organization from pre-construction site investigation to final completion. The course will include the management of project estimates, plans, schedules, operations and safety. The student will become knowledgeable about documents used in the construction industry for bid, contracts, zoning, permits, bonds, loans specifications and drawings. Cost engineering, procurement, value engineering and quality assurance will be covered. Cost management through job cost analysis and purchase order systems will also be covered.

BCT 1706*
Construction Documentation, 3 credit hours, 45 lec.
(Offered as needed)
A course to familiarize a student with documents used in the Construction Industry to advertise for bids, contracts, change orders, extras, specification, insurance and bid bonds.

BCT 1763*
Construction Safety and Health, 3 credit hours, 45 lec.
(Offered as needed)
A basic course in construction safety and health covering such topics as: theories of accident causation; workplace hazards; hazard analysis and prevention; accident reporting; OSHA construction standard and safety practices; environmental safety; violence in the workplace; ergonomics; ethics and safety; workers’ compensation; and stress on the job.

BCT 2600*
Construction Estimating, 3 credit hours, 45 lec.
(Offered as needed)
A course in estimating as it relates to the construction industry covering references, estimating methods, take-off organization and presentation; material take-off, cost estimating in heavy construction, mathematical formulas for estimating, quantity take-off from plan review, and computer estimating overview. Prerequisites: BCN 1230 and BCN 1272.

BCT 2611*
Structural Systems in Construction, 3 credit hours, 45 lec.
(Offered as needed)
A course to familiarize students with structural terminology, practices, methods, code requirements and safety and health criteria in construction.

BOT 1010C
Botany, 4 credit hours, 45 lec., 45 lab. (Spring)
A course designed to give the student an introduction to knowledge about botany with emphasis on the flowering plants, and to show our dependence on plants to sustain not only human life but all other living organisms.

BRC 1001*
Introduction to Banking, 3 credit hours, 45 lec.
(Offered as needed)
Designed to give students a broad understanding of the nature of banking and its relationship to the U.S. economy.

BSC 1005 Δ
General Biology, 4 credit hours, 60 lec. 
(Fall, Spring, Summer)
The principles of biology are included. Human Biology is emphasized. Man’s effect on the environment is considered wherever appropriate. 
(NO LABORATORY — Not for majors in Biology).
BSC 1085C
Anatomy & Physiology I, 4 credit hours, 45 lec., 30 lab.
(Fall, Spring, Summer)
A study of the human organism to include cells, tissues, skeleton, muscular system and nervous system.

BSC 1086C
Anatomy & Physiology II, 4 credit hours, 45 lec., 30 lab.
(Fall, Spring, Summer)
A study of the human organism to include the cardiovascular system, the fluid electrolyte balance, and the respiratory, excretory, endocrine, reproductive, gastrointestinal and immune systems.

BSC 1250C
Introductory Tropical Biology, 4 credit hours, 45 lec., 30 lab.
(Offered as needed)
An introduction to the Estuarine and Marine biota of tropical regions to include saltmarsh, mangrove, sandy, and coral shorelines. Emphasis will be placed on energy transfer and zonation. Prerequisite: one college level science course.

BSC 1905
Independent Study – Biology, 1 credit hour, 15 lec.
(Fall, Spring, Summer)
A course designed to (1) allow a student to complete part of a course taken elsewhere and thereby complete general education requirements, (2) to go deeper into special areas of interest. This course may be taken up to four (4) times for credit.

BSC 2946
Directed Work Study – Biology, 1 credit hour, 45 lab.
(Offered as needed)
Practical experience with use and maintenance of lab equipment and materials. Participation in support activities and organizational routines of lab courses. Course fees may be waived. May be taken four (4) times for credit. Departmental approval following interview is required.

BUL 2242
Business Law I, 3 credit hours, 45 lec.
(Fall, Spring, Summer)

BB 1000*
Introduction to Criminology, 3 credit hours, 45 lec.
(Spring)
A study of the nature and causes of crime and delinquency; the development of delinquent and criminal behavior; specific behavioral problems of addicts, compulsive and habitual offenders and juvenile offenders. This course may be used in transfer to UWF and may be accepted at other upper division schools. Students should consult the department for program planning.

CCJ 1020
Introduction to Criminal Justice, 3 credit hours, 45 lec.
(Fall, Spring, Summer)
An introduction to the philosophical and historical background of law enforcement and the administration of criminal justice. Organization and jurisdiction of local, state, and federal law enforcement agencies. Court and Criminal procedures. Career opportunities in Criminal Justice field.

CCJ 1192*
Crisis Intervention, 3 credit hours, 45 lec.
(Offered as needed)
A study of the nature and causes of human stress in crisis situations involving criminal justice practitioners to include law enforcement, judicial and correctional personnel: definitions, recognition and assessment, general calming techniques, intervention: safety, abnormal behavior and suicide, role playing, causes of psychological and physiological stress agents inherent in the duties of criminal justice practitioners and countermeasures to anxiety and stress reduction.

CCJ 1500*
Juvenile Delinquency, 3 credit hours, 45 lec.
(Offered as needed)
A study of the nature and cause of juvenile delinquency, the development of the delinquent and criminal behavior, specific criminal justice subsystem (law enforcement, judicial, corrections) problems dealing with juvenile delinquents from initial contact through final disposition and treatment. This course may be used in transfer to UWF and may be accepted at other upper division schools. Students should consult the department for program planning.

CCJ 1611*
Child Abuse and Neglect, 3 credit hours, 45 lec.
(Offered as needed)
This course was designed to provide the student with an enhanced awareness of child abuse symptoms and patterns, including information and case studies on specific abuse and social problems.

CCJ 1646*
Organized Crime, 3 credit hours, 45 lec.
(Offered as needed)
A course designed to provide the student with an overview of organized crime structures. To understand organized crime with regard to its history, origins and socio-economic impact on our society. This course provides insight into the various international and national organized crime families.

CCJ 1650*
Introduction to Narcotics Investigation, 3 credit hours, 45 lec.
(Offered as needed)
This introductory course in narcotics investigation and identification is designed to provide the student with an overview of narcotics and the role of the investigative agencies, drug traffic flow patterns, major classes of drugs and the drug profit traffic. Instruction will cover techniques of investigative observation, patrol and case development, physical identification of drugs, symptoms of abuse, methods of abuse and appropriate Florida Statutes. This is also a Criminal Justice Standards and Training Commission advanced course.

CCJ 1671*
Women in Criminal Justice, 3 credit hours, 45 lec.
(Offered as needed)
This course is designed to provide students with a wide perspective of female roles in the criminal justice system.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

Δ Technology-Across-the-Curriculum Course
CCJ 1935*  
Criminal Justice Seminar,  
3 credit hours, 45 lec.  
(Offered as needed)  
Exploration, development and discussion of contemporary problems in the Criminal Justice System.

CCJ 1941*  
Internship – Criminal Justice,  
3 credit hours, 225 hours  
(Offered as needed)  
On-the-job training in the programs in which the student is enrolled. The student is under the supervision at work of a qualified supervisor appointed by the respective agency. The supervisor will rate the student's performance, knowledge, comprehension, dependability, initiative, cooperativeness and total performance. A project proposal or approved project will be submitted by the student 2 weeks prior to the close of the semester. This course may be repeated twice for a total of 6 semester hours.

CCJ 2680*  
Domestic Intervention,  
3 credit hours, 45 lec.  
(Offered as needed)  
This course is a part of the Criminal Justice Standards and Training Commission Approved Advanced Training Program. This course is designed to provide the officer with an enhanced awareness of domestic intervention symptoms and techniques, including information and case studies on specific domestic and social problems. Prerequisites: Basic Recruit Training Course.

CCJ 2681*  
Introduction to Domestic Intervention, 1 credit hour, 15 lec.  
(Offered as needed)  
This is an introductory course dealing with domestic issues, including violence. It is designed to provide the student with an enhanced awareness of domestic intervention symptoms and techniques, including information and case studies in specific domestic and social problems.

CCJ 2905*  
Independent Study – Criminal Justice,  
1 credit hour, 45 leb.  
(Fall, Spring)  
Directed study and individual projects to meet the student's interests in a specialized area of Criminal Justice for which present course availability is limited.

CDA 2500*  
Network Technology,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
This course is designed to introduce students to the terminology and concepts of the network industry, including data communications and network services, OSI model, topology, network media, connectivity devices and security. This is preparation for the CompTIA Network+ certification and the first course in the MCSE/MCSA certification program.

CDA 2523*  
Windows Client Operating System,  
3 credit hours, 30 lec. 30 lab.  
(Fall, Spring, Summer)  
This course addresses the implementation and desktop support needs of the MS client software, including installation, configuration and management of hardware and file systems, user profiles, remove users, and monitoring of resources and performance. Prerequisite: CDA 2500 or equivalent. This course prepares the student for the MCP exam, a core requirement for Windows MCSE or MCSA.

CDA 2529*  
Novell Administration II,  
3 credit hours, 30 lec. 30 lab.  
(Offered as needed)  
To provide advanced concepts of Network Administration, using Novell Network Operating System software. Prerequisite: CDA 2524 with a grade of “C” or better.

CET 1600C*  
Networking Fundamentals,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
This course introduces the student to the basics of internetworking technology. This is also the first of four courses designed to prepare a student to take the Cisco Certified Network Associate Exam. The student will study Networks and Layers, Networking Devices, IP Addressing, ARP, and RARP, Media and Design, Topology, Structured Cabling, Electricity, and Electronics and Network Management.

CET 1610C*  
Router Theory,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
Basic Router terminology and configurations are studied in this course. The student will study Router Components, Router Configuration, IOS, TCP/IP, IP Addressing, and Router Protocols. This is one of the four courses designed to prepare a student to take the Cisco Certified Network Associate Exam (CCNA). Prerequisite: CET 1600C.

CET 1630C*  
Network Cabling – Copper Media,  
3 credit hours, 30 lec. 30 lab.  
(Offered as needed)  
This course is designed for computer repair and network technicians. It will provide the students with the knowledge and skills necessary to become entry-level technicians in the data cabling industry. The emphasis of the course is on tool use, construction techniques, industry standards, troubleshooting and repair of CAT 5 copper media. This course prepares students for introductory, vendor-neutral data cabling certification BICSI/ETAI exams.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

∆ Technology-Across-the-Curriculum Course
CET 1632C* Δ
Network Cabling – Fiber Optic Media*, 3 credit hours, 30 lec., 30 lab. (Offered as needed)
This course is designed for computer repair and network technicians. It will provide the students with the knowledge and skills necessary to become entry-level technicians in the data cabling industry. The emphasis of the course is on tool use, construction techniques, industry standards, troubleshooting, and repair of fiber optic media. This course prepares students for introductory, vendor-neutral data cabling certification BICSI/ETAI exams.

CET 1660* Δ
Introduction to Network Security, 3 credit hours, 45 lab. (Offered Fall, Spring, Summer)
This course is designed to introduce students to the terminology and concepts associated with network security, including communication security, infrastructure security, cryptography, access control, authentication, external attack, as well as operational and organizational security. The course is also intended to assist with preparation for the CompTIA Security+ certification.

CET 2171C* Δ
PC Hardware A+, 3 credit hours, 30 lec., 30 lab. (Offered as needed)
This course is designed to prepare the student to take the A+ Certification exam, by teaching the student basic technical skills needed to understand the function and operation of the major elements of personal computer systems, and how to localize and correct common hardware and software problems. Prerequisite: CET 2173C or equivalent.

CET 2173C* Δ
Microcomputer Servicing, 4 credit hours, 30 lec., 60 lab. (Offered as needed)
This course introduces the microcomputer service technician. It covers the basic techniques and procedures necessary for the repair of desktop and laptop computers and network equipment. The student will perform diagnostic tests, repair components, and install memory, hard drives, and other hardware. Prerequisite: CET 1600C and CET 1610C.

CET 2178C* Δ
PC Operating Systems A+, 3 credit hours, 30 lec., 30 lab. (Offered as needed)
This course is designed to prepare the student to take the A+ Certification exam by making the student proficient in personal computer operating systems, including DOS, Win 95/98, and Win NT. Major topics include disk, file, and memory management, system configurations, menu driven processing, graphical user interfaces, boot files, disk caching, virtual memory, device drivers, TSRs, and basics system errors. Prerequisite: CET 2171C or equivalent.

CET 2497* Δ
Windows Network Infrastructure, 3 credit hours, 30 lec. 30 lab. (Offered as needed)
This course addresses the implementation, management, and maintenance of server networking technologies. Tasks include implementing routing, managing DHCP, CNS, and WINS, securing IP traffic with IPSec and certificates, and implementing a network access infrastructure with connections for remote access clients. Prerequisite: CDA 2525 or equivalent. This course prepares the student for the MCP exam, a core requirement for Windows MCSE or MCSA.

CET 2615C* Δ
Advanced Router Theory, 3 credit hours, 30 lec., 30 lab. (Offered as needed)
This course introduces the student to fundamentals of LAN configurations. This is also the third of four courses designed to prepare a student to take the Cisco Certified Network Associate Exam. The student will study LAN Switching, VLANS, OSPF, EIGRP, VTP, classless routing and Access Lists. Prerequisite: CET 1600C and CET 1610C.

CET 2685C* Δ
Cisco Network Design, 3 credit hours, 30 lec., 30 lab. (Offered as needed)
Introduction to network security and overall security processes. This hands-on, skill-based course focuses on the design and implementation of security solutions to reduce the vulnerability of the network, using VPNs, network routers and a firewall. This course helps prepare the student for the and Cisco SECUR and CSPFA exams in preparation for the Cisco Firewall Specialist certification. Prerequisites: CET 1600C, CET 1610C, CET 2615C, and CET 2620C or CCNA certification.

CET 2625C* Δ
Fundamentals of Network Security, 3 credit hours, 30 lec., 30 lab. (Offered as needed)
Introduction to network security and overall security processes. This hands-on, skill-based course focuses on the design and implementation of security solutions to reduce the vulnerability of the network, using VPNs, network routers and a firewall. This course helps prepare the student for the CompTIA Security + certification, and Cisco SECUR and CSPFA exams in preparation for the Cisco Firewall Specialist certification. Prerequisites: CET 1600C, CET 1610C, CET 2615C, and CET 2620C or CCNA certification.

CET 2620C* Δ
Project Based Routing Design and Administration, 3 credit hours, 30 lec., 30 lab. (Offered as needed)
This course introduces the student to advanced router configurations and network design. This is also the last of four courses designed to prepare a student to take the Cisco Certified Network Associate Exam. The student will study WAN technology and design, PPP, ISDN, Frame Relay, and network management. Prerequisites: CET 1600C, CET 1610C, CET 2615C.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.
Δ Technology-Across-the-Curriculum Course
CET 2905/2905A* ∆
Independent Study Computer Engineering, 1 credit hour, 30 lab.
(Offered as needed)
This is a directed study course to provide computer engineering students with individual projects designed to meet specific needs in areas of computer engineering technology for which present course availability is limited. Prerequisite: Instructor or departmental chair approval.

CGS 1100 ∆
Microcomputer Applications
3 credit hours, 45 lec.
(Offered Fall, Spring, Summer)
The discussion and practical applications of Windows operating systems, word processing, spreadsheets, database management, presentation software, and various communications topics.

CGS 1172* ∆
Web-based Programming I,
3 credit hours, 45 lec.
(Offered as needed)
This course is designed to extend the student’s understanding of web-based programming techniques, and give them practical experience in the use of a range of technologies for creating e-commerce applications. Prerequisite: CGS 2820.

CGS 1550* ∆
Introduction to World Wide Web,
3 credit hours, 45 lec.
(Offered as needed)
A hands-on course using computer software (Word processor, spreadsheet and database) to facilitate the activities involved in the business environment. Prerequisite: CGS 1100 or competency exam.

CGS 1570 ∆
Computer Applications for Business,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
A hands-on course using computer software (Word processor, spreadsheet and database) to facilitate the activities involved in the business environment. Prerequisite: CGS 1100 or competency exam.

CGS 1760* ∆
Fundamentals of UNIX,
3 credit hours, 45 lec.
(Offered as needed)
This course is designed to introduce the UNIX operating system to new users. The student will learn fundamental features of the operating system, including file system navigation, file permissions, editors, command shells, and basic network use. Provides a foundation for more advanced courses in administration and certification.

CGS 1843 ∆
Intro to Electronic Commerce,
3 credit hours, 45 lec.
(Offered as needed)
This course is designed to provide students with an overview of the dynamics of electronic commerce and how it links information technology to business objectives. Course may not transfer to all State University System institutions.

CGS 2173* ∆
Web-based Programming II,
3 credit hours, 45 lec.
(Offered as needed)
This course is designed to extend the student’s understanding of web-based programming techniques, and give them practical experience in the use of a range of technologies for creating e-commerce applications including instruction in the key design principles and implementation techniques for software agents in e-commerce applications. Prerequisite: CGS 1172.

CGS 2541* ∆
Database Concepts,
3 credit hours, 45 lec.
(Offered as needed)
This course will provide an introduction to data modeling and the design and implementation of relational databases and extend the students’ understanding of the principles and techniques used in the design and implementation of modern database systems. Prerequisite: CGS 1100.

CGS 2576* ∆
Introduction to Microsoft Word,
1 credit hour, 15 lec.
(Offered as needed)
An introduction to Microsoft Word software by emphasizing the functions of the program.

CGS 2763* ∆
UNIX Administration,
3 credit hours, 45 lec.
(Offered as needed)
This course is designed for network administrators in a UNIX operating environment. UNIX operating system concepts, architecture and administration will be explored using Linux. Includes shell programming, database management, rapid application development, and programming tools such as PERL and C++. Prerequisite: CDA 2500 and CGS 1760.

CGS 2820* ∆
Web Authoring with HTML,
3 credit hours, 45 lec.
(Offered as needed)
This course introduces programming in techniques associated with web-based languages. The student will learn to create innovative and useful windows programs. Topics to be discussed include variables, string handling, loops and arrays, formatting techniques, labels, buttons, menus, loading and saving, error handling, graphics, and linking applications.

CGS 2840* ∆
Internet E-Commerce Technologies,
3 credit hours, 45 lec.
(Offered as needed)
This course will extend student’s understanding of web-based technologies and enable them to design and implement e-commerce applications, including an understanding of the design of modern distributed database systems, the supporting network technology and the construction of web-based applications.

CGS 2844* ∆
E-Commerce Security,
3 credit hours, 45 lec.
(Offered as needed)
This course is designed to provide the student with an understanding of e-commerce security, and give them practical experience in the use of a range of technologies for securing e-commerce transactions. Prerequisite: CGS 1843.

CGS 2930 ∆
E-Commerce Seminar,
3 credit hours, 45 lec.
(Offered as needed)
Students will apply their understanding of the strategies, tactics, and concepts of electronic commerce. The course stresses the real-world practice of e-commerce through the development of a comprehensive e-commerce business project. Course may not transfer to all State University System institutions. Prerequisites: CGS 1172, CGS 1843.

CHD 1223* ∆
Guidance for Young Children,
3 credit hours, 45 lec.
(Spring and as needed)
A study of principles, methods, guidance and discipline techniques used to promote positive social development in young children; influence of environment and developmental level of child on social behavior.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.
∆ Technology-Across-the-Curriculum Course
CHD 1230*  
Child Growth and Development II,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
Study of the physical, emotional, social, and intellectual growth and development of the school age child (6 through 12 years) up to preadolescence. Includes dynamics of behavior, child guidance and needs of exceptional children.

CHD 1312*  
Infant and Toddler,  
3 credit hours, 45 lec.  
(Fall and as needed)  
This course provides the student with information pertinent to the care of infants and toddlers. Special attention is given to selection of developmentally appropriate curriculum. Course work satisfies the Child Development Associate competency standards for infant/toddler.

CHD 1430*  
Observing and Recording Child Behavior,  
3 credit hours, 30 lec., 30 lab.  
(Fall, Spring, Summer)  
Designed to increase objectivity and proficiency in observing and interpreting children’s behavior; in addition, to increase awareness of normative patterns of children from birth through five years of age.

CHD 1531*  
Parenting Education,  
3 credit hours, 45 lec.  
(Offered as needed)  
This course is comprehensive in scope, emphasizing skills and concepts of parenting which include: adjustment to parental roles; parent-child communication, care, growth, and development of children; cultivating strong families; special concerns; alternative family structures; educational institutions working effectively with parents; and agencies and legislation affecting children and parents.

CHD 1534*  
Home Visitor Programs I,  
2 credit hours, 30 lec.  
(Offered as needed)  
This course provides the student with information and strategies to successfully implement a home visitor program for families with children ages prenatal to three years.

CHD 1535*  
Home Visitor Programs II,  
1 credit hour, 15 lec.  
(Offered as needed)  
This course provides the student with information and strategies to successfully implement a home visitor program for families with children ages three to kindergarten entry.

CHD 1800*  
Early Childhood Program Administration,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
This course provides the student with management and administrative skills related to child care services. Instruction includes: director responsibilities; staff selection, supervision, and evaluation; planning for budget, nutritional services, facility maintenance, health, and safety; and marketing techniques.

CHD 1941*  
Internship, Child Development,  
3 credit hours, 90 lab.  
(Fall, Spring, Summer)  
On-the-job training in Applied Associate of Science degree or College Credit Certificate programs in which the student is enrolled. The student is under the supervision, at work, of a qualified supervisor appointed by the respective agency, who works with the OWC instructor regarding student’s OJT objectives based on student’s goals and prior training. The supervisor will rate the student’s performance, knowledge, comprehension, dependability, initiative, cooperativeness based on OJT performance. OWC instructor will evaluate student OJT experience in consultation with agency supervisor regarding OJT performance and project paper on approved project submitted two weeks prior to close of semester. This course may be repeated four times for a total of 12 semester hours. Prerequisites: CHD 2322, CHD 2432A, DEP 2100.

CHD 2322*  
Programs for Young Children,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
Study of principles and practices of programs for young children; current research in early childhood education, role of the teacher, and selection and use of equipment and materials for groups of young children.

CHD 2332A*  
Curriculum for Young Children II,  
3 credit hours, 15 lec., 60 lab.  
(Fall and as needed)  
Study of and development of effective skills and techniques used in program planning and use of creative media for young children. Prerequisite: CHD 2432A.

CHD 2334A*  
Curriculum for Young Children III,  
3 credit hours, 15 lec., 60 lab.  
(Spring and as needed)  
Study of the principles, methods, and materials used to assist young children acquire basic skills to use language effectively and competently; evaluation and development of appropriate teaching materials to use with young children. Prerequisite: CHD 2323A.

CHD 2337A*  
Curriculum for Young Children IV,  
3 credit hours, 15 lec., 60 lab.  
(Summer and as needed)  
Study of the basic concepts, methods, and materials of mathematics and science appropriate to the education of young children. Identification of the role of staff members in the center for the education of young children. Assignment with young children in community agencies. Prerequisite: CHD 2334A.

CHD 2432A*  
Curriculum for Young Children I,  
3 credit hours, 30 lec., 30 lab.  
(Fall, Summer, Spring)  
Study of the techniques of using language arts, science, art, social studies, music, mathematics, and physical activities with young children. Participation in Child Development Education Center.

CHD 2433*  
Child Development Seminar,  
3 credit hours, 45 lec.  
(Offered as needed)  
This course focuses on current trends and issues in the field of early childhood education. The topic will vary based on current trends and issues.

CHM 1025  
Chemical Science,  
4 credit hours, 60 lec.  
(Fall, Spring, Summer)  
Fundamental principles and theories of matter and energy. Atomic theory, periodicity, properties, structure, kinetic molecular theory, bonding, solutions, scientific method, carbon compounds. This course serves as an introduction to chemistry for non-science majors, satisfying the General Education requirement for the A.A. degree; and as a preparatory course for students intending to enter college chemistry.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.
CHM 1025L
Chemical Science Lab, 1 credit hours, 30 lab. (Fall, Spring, Summer)
A laboratory experience to augment the principles covered in chemical science to include fundamental principles and theories of the dual nature of physical existence, matter and energy; atomic theory; periodicity of elements; dependence of properties on structure; kinetic molecular theory; the nature of chemical bonding.

CHM 1032C
General Chemistry for Life Sciences, 4 credit hours, 45 lec., 30 Lab (Fall, Spring, Summer)
This course is a one-semester introduction to chemistry especially appropriate for those pursuing a degree for a career in an allied health science field, although open to all students. Topics include atomic theory, bonding, nomenclature, gases, acids and bases, stoichiometry, and solutions, with an additional emphasis on reaction rates, equilibria, organic and biochemistry, and organic and biomolecules and their roles and functions in living organisms. Prerequisite: MAT 1033A or appropriate placement test.

CHM 1032L
General Chemistry for Life Sciences Lab, 1 credit hours, 30 lab. (Fall, Spring, Summer)
This laboratory course is designed to teach basic chemistry laboratory skills and reinforce topics covered in CHM 1032 and CHM 1020. Among the experiments the student will perform are: basic safety practices in a laboratory setting; learn how to perform density measurements; find the energy content in calories in certain foods; study reaction rates and equilibria; learn properties of gasses and how to predict them with the ideal gas law; perform simple separations of mixtures. Prerequisite: MAT 1033A or appropriate placement test.

CHM 1045C
College Chemistry I Lab, 1 credit hour, 30 lab. (Offered as needed)
A laboratory course designed for CHM 1045, with emphasis on the development of laboratory skills in chemistry. Experiments performed by the student in CHM 1045L will complement and supplement the concepts presented in CHM 1045. University transfer credit. Prerequisite: CHM 1045.

CHM 1046C
College Chemistry II, 4 credit hours, 45 lec., 45 lab. (Fall, Spring, Summer)
Continuation of CHM 1045C. Includes kinetics, chemical equilibrium, acids and bases, thermo-dynamics, non-metals and their compounds, electrochemistry, redox, the atmosphere, hydrocarbons, biochemistry, nuclear chemistry, coordination compounds, and qualitative analysis. Prerequisite: CHM 1045C.

CHM 2210C
Organic Chemistry I, 4 credit hours, 45 lec., 45 lab. (Fall)
This course will present the correlation between structure and physical and chemical properties of organic compounds. The principle types of mechanisms involved in organic reactions will be discussed on aliphatic and aromatic hydrocarbons, alky halides, alcohols and ethers. Laboratory exercises illustrate these topics. Prerequisite: CHM 1046C.

CHM 2211C
Organic Chemistry II, 4 credit hours, 30 lec., 30 lab. (Spring)
In continuation of Organic Chemistry I (CHM 2210) the relationships between functional groups and properties of organic compounds will be discussed. Infrared, NMR, and mass spectroscopy will be used for identification of organic compounds and for structure analysis. The transition state theory is applied to interpret the nucleophilic addition reactions the carbon-nitrogen condensation reactions, the interconversions of carbonyl compounds and the nulceophilic acyl substitution of carboxylic acids and their derivatives. Biochemical topics, i.e. lipids, carbohydrates, amino acids and proteins are included. Prerequisite: CHM 2210C.

MAC 1102 or MAC 1105 required. High School Chemistry or Physics, CHM 1020 or PHY 1020 advised.

CHM 1045L
College Chemistry I Lab, 1 credit hour, 30 lab. (Offered as needed)
A laboratory course designed for CHM 1045, with emphasis on the development of laboratory skills in chemistry. Experiments performed by the student in CHM 1045L will complement and supplement the concepts presented in CHM 1045. University transfer credit. Prerequisite: CHM 1045.

CHM 1046C
College Chemistry II, 4 credit hours, 45 lec., 45 lab. (Fall, Spring, Summer)
Continuation of CHM 1045C. Includes kinetics, chemical equilibrium, acids and bases, thermo-dynamics, non-metals and their compounds, electrochemistry, redox, the atmosphere, hydrocarbons, biochemistry, nuclear chemistry, coordination compounds, and qualitative analysis. Prerequisite: CHM 1045C.

CHM 2210C
Organic Chemistry I, 4 credit hours, 45 lec., 45 lab. (Fall)
This course will present the correlation between structure and physical and chemical properties of organic compounds. The principle types of mechanisms involved in organic reactions will be discussed on aliphatic and aromatic hydrocarbons, alky halides, alcohols and ethers. Laboratory exercises illustrate these topics. Prerequisite: CHM 1046C.

CHM 2211C
Organic Chemistry II, 4 credit hours, 30 lec., 30 lab. (Spring)
In continuation of Organic Chemistry I (CHM 2210) the relationships between functional groups and properties of organic compounds will be discussed. Infrared, NMR, and mass spectroscopy will be used for identification of organic compounds and for structure analysis. The transition state theory is applied to interpret the nucleophilic addition reactions the carbon-nitrogen condensation reactions, the interconversions of carbonyl compounds and the nulceophilic acyl substitution of carboxylic acids and their derivatives. Biochemical topics, i.e. lipids, carbohydrates, amino acids and proteins are included. Prerequisite: CHM 2210C.

MAC 1102 or MAC 1105 required. High School Chemistry or Physics, CHM 1020 or PHY 1020 advised.

CIS 1000 ∆
Introduction to Computer Science, 3 credit hours, 45 lec. (Fall, Spring, Summer)
A broad survey of computing and computer science topics appropriate for computer science, computer engineering, and information systems students. Includes an introduction to structured programming. Math placement at the college algebra level strongly advised.

CIS 1940* ∆
Internship in Computer Studies, 3 credit hours, 90 lab. (Fall, Spring, Summer)
On-the-job training in the Associate of Science and Associate of Applied Science degree programs in which the student is enrolled. The student is under the direction of a full-time faculty member and under the supervision at work of a qualified supervisor. The faculty member in concert with the student and the student’s supervisor will design a plan of study. The faculty member will periodically meet with the student and the supervisor to evaluate and if necessary modify the plan as deemed appropriate. The supervisor will rate the student’s performance, knowledge, comprehension, dependability, initiative, cooperativeness, and total performance. A project paper or approved project will be submitted by the student three weeks prior to the close of the term. May be taken four times for a total of 12 credit hours. Prerequisite: Permission of the instructor.

CJC 1350*
Discipline and Special Confinement Techniques, 3 credit hours, 45 lec. (Offered as needed)
The student is introduced to the essentials of discipline and special confinement techniques necessary for the corrections profession. The topics to be introduced include physical operation, physical force, recognizing abnormal behavior, verbal and non-verbal communications.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.
∆ Technology-Across-the-Curriculum Course
CJC 2000*  
Introduction to Corrections,  
3 credit hours, 45 lec. (Fall)  
Theories of punishment and incarceration; the organization of correction programs and institutions, principles of probation and parole, role of parole and probation officers, legal implications, problems of rehabilitation. This course may be used in transfer to UWF and may be accepted at other upper division schools. Students should consult the department for program planning.

CJC 2162*  
Introduction to Probation & Parole,  
3 credit hours, 45 lec.  
(Offered as needed)  
This course reviews the theories and practices of probation and parole within a community setting. The study of probation and parole as it is used as a behavior modification process is considered. This course may be used in transfer to UWF and may be accepted at other upper division schools. Students should consult the department for program planning.

CJD 1250*  
Interviews and Interrogations,  
3 credit hours, 45 lec.  
(Offered as needed)  
An advanced course designed to cover the techniques, methods, principles, and issues of interviewing and interrogations. Course meets Florida Police Standards Salary Incentive Requirements.

CJD 1602*  
Drug Awareness,  
3 credit hours, 45 lec.  
(Offered as needed)  
This course is a part of the Criminal Justice Standards and Training Commission approved Advanced Training Program. It is designed to familiarize students with common drug abuse terms, classes of drugs, pharmacological information relating to commonly used and abused chemicals and their effects, an overview on use patterns and characteristics of drug abusers, how to troubleshoot and deal with problems that develop among abusers and effective presentation skills.

CJD 1604*  
Injury and Death Investigation,  
3 credit hours, 45 lec.,  
(Offered as needed)  
This course is designed to qualify service law enforcement and correctional officers and support personnel in the area of injury and death investigations, to include: medical-legal aspects, evidence from wounds, physical evidence and laboratory analysis, crime scene investigations and other technical aspects of injury and death.

CJD 1610*  
Criminal Investigative Techniques,  
3 credit hours, 34 lec.  
(Offered as needed)  
This course in Criminal Investigative Techniques for Law Enforcement Officers is an Advanced Course primarily designed for Florida law enforcement officers and has been approved by the Florida Criminal Justice standards and Training Commission. With permission of the instructor, it may be offered to other students enrolled in the CJ Program. It is designed to provide the student with instruction in Florida investigative concepts and techniques, use of evidence and related matters.

CJD 1615*  
Police Radar Operator,  
3 credit hours, 45 lec.  
(Offered as needed)  
This course is sanctioned by the Florida Police Standards and Training Commission and meets requirements of Chapter 943.14(10)(a), Florida Statutes. It is designed to equip law enforcement officers with the basic knowledge and skills needed for proper operation of radar speed measurement devices.

CJD 1617A*  
Basic Laser Certification,  
3 credit hours, 30 lec., 15 lab.  
(Offered as needed)  
This course is designed to qualify students and especially in-service law enforcement officers in the use, principles, and overviews of using a Laser Speed Measurement Device. It will include instruction on the relationships of speed offenses and motor vehicle crashes, the principles of laser based speed measurements, as well as courtroom testimony, case law, and a classroom practicum. Prerequisite: Certified Law Enforcement Officer.

CJD 1618*  
Radar to Laser Operations,  
1 credit hour, 15 lec., 15 lab.  
(Offered as needed)  
This is a course for radar certified law enforcement officers in the use, principles, and overviews of a Laser Speed Measurement Device. It will include instruction on the relationship of speed offenses and motor vehicle crashes, the principles of laser based speed measurements, as well as courtroom testimony, case law, and class-room practice. Prerequisite: CJD 1615, Police Radar Operator or equivalent.

CJD 1621*  
Officer Survival Techniques,  
2 credit hours, 30 lec.  
(Offered as needed)  
This course is part of the Criminal Justice Standards and Training Commission specialized Training Program. It is designed to prepare law enforcement officers for police operations involving street survival techniques and procedures to include (but not limited to) firearms training, hostage situations, raids, individual survival techniques, special survival exercises.

CJD 1625*  
Special Tactical Problems for Law Enforcement, 3 credit hours, 45 lec.  
(Offered as needed)  
This course is part of the Criminal Justice Standards and Training Commission Advanced Training Program. It is designed to prepare law enforcement officers for police operations which involve special tactical situations and will include; importance of physical well-being in the Criminal Justice setting, an overview of Florida local disaster procedures, civil disorder patterns, special task force unit operations, special crime areas and practical exercises.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.
CJD 1700*
Criminal Justice Legal I, 3 credit hours, 45 lec.
(Offered as needed)
Criminal Justice Legal I provides an introductory overview of the Criminal Justice System and a history of law. The foundation and basic components of law are studied with specific focus upon officer application. Court procedure and testimony are examined. Objectives are addressed as specified by the Criminal Justice Standards Training Commission.

CJD 1701*
Criminal Justice Legal II, 3 credit hours, 45 lec.
(Offered as needed)
Constitutional Law and its application to the public and officers are examined. Law – including evidence procedures, arrest laws, search and seizure, and various statutory laws that are common to Police and Correctional officers – are studied. Emphasis is given to elements of various crimes. Various civil law applications are covered. Civil and criminal liability of officers is studied. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 1702*
Criminal Justice Communications, 3 credit hours, 45 lec.
(Offered as needed)
The report-writing process – from the interview, statement taking, and note-taking, through the final report product – is covered with practical exercises included. The differences between interviewing and interrogation are explored. Interpersonal skills in communication are covered along with radio and telephone procedures. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 1703*
Criminal Justice Interpersonal Skills I, 3 credit hours, 45 lec.
(Offered as needed)
Community relations techniques and courtesy are addressed with emphasis given to crime prevention. The needs of various groups within society are addressed including: juveniles, the elderly, ethnic and cultural groups, the mentally ill and retarded, the physically handicapped, and substance abusers. Intervention techniques for various situations including: suicide, domestic violence, and other crises are studied, with practical exercises. Stress recognition and reduction are included. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 1704*
Criminal Justice Defensive Tactics, 4 credit hours, 45 lec., 30 lab.
(Offered as needed)
Instruction includes the techniques used for an officer's personal safety and those necessary to subdue, search, and then transport resisting individuals. The use of restraining devices, impact weapons, and pressure points are covered. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 1705A*
Criminal Justice Weapons, 3 credit hours, 30 lec., 30 lab.
(Offered as needed)
Criminal Justice Weapons includes instruction in the use of officer firearms including handguns and shotguns. Safety procedures and ammunition use are covered in lecture. Instruction includes the use of chemical agents, with practical exercises included. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 1721*
Law Enforcement Patrol, 3 credit hours, 45 lec.
(Offered as needed)
Law Enforcement Patrol addresses the skills and techniques that are needed by officers daily to do patrol tactics and respond to various types of calls. Methods of approach to various high-risk situations are explored, with practical exercises included. Unusual occurrence events, including fire-fighting and crowd control are addressed. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 1722*
Law Enforcement Traffic, 3 credit hours, 5 lec.
(Offered as needed)
Law Enforcement Traffic studies traffic enforcement and control, with the inclusion of DUI offenses and enforcement. Traffic accident investigation, scene management, and reporting procedures are studied. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 1723*
Law Enforcement Vehicle Operation, 2 credit hours, 20 lec., 40 lab.
(Offered as needed)
The components of the police driving environment are explored, and practical exercises on the driving range are conducted. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 1724*
Law Enforcement Investigations, 4 credit hours, 60 lec.
(Offered as needed)
Law Enforcement Investigations addresses investigation of various crimes, including property crimes, persons crimes, narcotics offenses, vice, organized crime, terrorist activity, bombing incidents, and death investigations. Techniques are developed from the initial observation methods through the processing of the crime scene and case preparation. Florida’s computer network is studied as an information source. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 1740*
Criminal Justice Interpersonal Skills II, 3 credit hours, 45 lec.
(Offered as needed)
The interpersonal skills needed by officers to understand the incarcerated society are explored, with emphasis upon supervision methods. Inmate adjustment and the various segments of the society are studied. The course includes the study of homosexuality, female inmates, deception and manipulation by inmates, and institutional criminalities. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 1741*
Correctional Emergency Preparedness, 2 credit hours, 30 lec.
(Offered as needed)
Skills needed for riot and disturbance control and fire-fighting are studied and practiced. Lecture includes methods of riot prevention, handling of unusual occurrences, what to do if taken hostage, and emergency procedures. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 1742*
Correctional Operations, 4 credit hours, 60 lec.
(Offered as needed)
The operation of correctional facilities is studied – including the intake of new inmates, all aspects of their daily care, institutional procedures, and techniques utilized by officers to do daily tasks. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.
CJD 1930*
Human Diversity Workshop,
2 credit hours, 30 lec.
(Offered as needed)
This course is designed to enhance the participants awareness of their own cultural rules and predispositions and how these cultural influences come into play in common interactions with others. This awareness is used to develop the participants’ understanding of issues related to human diversity: gender, race, ethnicity, etc. The program also presents basic skills and knowledge related to interacting with diverse individuals and groups.

CJD 1956*
Post Pursuit Tactics,
3 credit hours, 30 lec., 15 lab.
(Offered as needed)
Course is designed to instruct public safety professionals how to combat post pursuit stress syndrome and to effectively channel stress in a positive manner at the termination of a high speed pursuit. Prerequisite: Must be a certified law enforcement officer.

CJD 1957*
Post Pursuit Trainer Techniques,
1 credit hour, 15 lec.
(Offered as needed)
Course is designed to instruct public safety professionals how to teach methods to combat post-pursuit stress syndrome and to effective channel stress in a positive manner at the termination of a high speed pursuit. Prerequisite: Must be a certified law enforcement officer.

CJD 2254*
First Responder for Law Enforcement, 3 credit hours, 45 lec.
(Offered as needed)
This course is designed primarily to qualify in-service law enforcement and correctional officers in the area of first responder to medical emergencies to include: introduction to first responder training, overview of the human body, diagnostic signs of patient examination, airway care & pulmonary resuscitation, cardiopulmonary resuscitation, shock, bleeding, primary patient care and injuries. Objectives are addressed as specified by the Criminal Justice Standards & Training Commission.

CJD 2310*
Criminal Justice Supervision, 5 credit hours, 80 lec.
(Offered as needed)
A career development course for full time police officers designed to train the line supervisor.

CJD 2320*
Criminal Justice Management, 5 credit hours, 80 lec.
(Offered as needed)
An advanced course designed to train criminal justice supervisors in the techniques and procedures necessary for middle managers.

CJD 2470*
Emergency Preparedness for Correctional, 3 credit hours, 45 lec.
(Offered as needed)
This course is designed to qualify in-service correctional officers and correctional support personnel in the area of emergency preparedness, to include: emergency plans, specifics on disturbances and disorder planning, hostage plans and situations, factors affecting emergency planning and management and leadership.

CJD 2603*
Sex Crimes, 3 credit hours, 45 lec.
(Offered as needed)
This course is designed to provide the student with the knowledge and expertise to effectively deal with various sex offenders. It deals with the magnitude of the problem, investigation and physical evidence. It also addresses victim considerations and legal aspects through court presentation. Prerequisite: Certified Law Enforcement or Corrections Officer.

CJD 2605*
Traffic Homicide Investigation, 5 credit hours, 60 lec., 20 lab.
(Offered as needed)
Course content covers traffic homicide investigation skills to include reconstruction, meets Florida Justice Standards and training certification requirements for career development.

CJD 2626*
Hostage Negotiations for Criminal Justice, 3 credit hours, 45 lec.
(Offered as needed)
This course is designed to qualify in-service law enforcement and correctional officers and support personnel in the area of hostage negotiations, to include; introduction to the problem, types of hostage negotiations principles, communications principles, intelligence gathering, abnormal behavior and participant performance exercises.

CJD 2630*
Firearms Instructor, 2 credit hours, 15 lec./30 lab
(Offered as needed)
This course is designed to provide the student with knowledge and expertise to instruct untrained students in the proper use of firearms, range safety, and weapon maintenance. The student shall also be instructed in legal aspects and range management.

CJD 2632*
Field Training Officer Techniques, 3 credit hours, 45 lec.
(Offered as needed)
Designed to introduce the criminal justice student (law enforcement and corrections) to all aspects of field training and evaluation programs to include adult learning and instruction, evaluation, role responsibilities and characteristics of the Field Training Officer (F.T.O.) communications techniques, counseling techniques, legal and ethical issues and human motivation. This is course number 51 in the series approved by the Florida Criminal Justice Standards and Training Commission Advanced Courses.

CJD 2670*
Confidential Informants, 3 credit hours, 45 lec.
(Offered as needed)
This course is designed for in-service law enforcement, correctional officers and support personnel to qualify them in the area of development of confidential informants and other sources of information, to include; definition and management of an informant program, legal aspects of dealing with informants, and the development of other sources of investigative information.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.
CJD 2681*
Court Case Preparation and Court Presentation, 3 credit hours, 45 lec.
(Offered as needed)
Fundamentals of criminal case preparation and court presentation for the law enforcement and/or correctional officer to include case files, pre-trial discovery, depositions, plea bargaining, court testimony, moot court, post adjudication responsibilities, case studies and a practical exercise. This course is number 20 in the series approved by the Florida Criminal Justice Standards and Training Commission Advanced Courses.

CJD 2691*
Stress Awareness and Resolution, 3 credit hours, 45 lec.
(Offered as needed)
A course designed to provide the student with an overview and awareness of stress and its resolution, to include: identification of various types of stress, the results of stress, psychological methods of controlling stress, case study analysis, and spouse awareness and involvement. This is course number 50 in the series approved by the Florida Criminal Justice Standards and Training Commission Advanced Courses.

CJE 1300*
Police Organization and Administration, 3 credit hours, 45 lec. (Offered as needed)
Principles of organization and administration in law enforcement; fundamentals of police planning: budget analysis, recruitment, training, and assignments; disciplinary problems and methods of control; cooperation with other agencies; public relations; records and inspection. This course may be used in transfer to UWF and may be accepted at other upper division schools. Students should consult the department for program planning.

CJE 1440*
Crime Prevention, 3 credit hours, 45 lec. (Offered as needed)
A course in crime prevention as it exists today in America. Study includes residential, personal and commercial crime prevention and it includes crime prevention resources, crime analysis and current legal implications. Designed primarily for in-service law enforcement officers but will not be limited to such personnel.

CJE 2660* Δ
Computer Applications in Criminal Justice, 3 credit hours, 45 lec.
(Offered as needed)
Computer Applications in Criminal Justice introduces the participant to the use of the computer in Criminal Justice applications. The participant will be introduced to prepackaged software and the process used to modify the package to criminal justice usage. This will include an electronic filing system designed to store, review and update data which can be manipulated into printed reports for daily and periodic usage.

CJE 1440*
Crime Prevention, 3 credit hours, 45 lec.
(Offered as needed)
A course in crime prevention as it exists today in America. Study includes residential, personal and commercial crime prevention and it includes crime prevention resources, crime analysis and current legal implications. Designed primarily for in-service law enforcement officers but will not be limited to such personnel.

CJL 1100
Criminal Law, 3 credit hours, 45 lec. (Offered as needed)
Fundamentals of Criminal Law to include historical background and development, jurisdiction, the criminal act and responsibility. Classification and analysis of Florida Statutes.

CJL 1400
Criminal Procedure, 3 credit hours, 45 lec. (Fall, Spring, Summer)

CJT 2100*
Law Enforcement Photography, 3 credit hours, 45 lec. (Offered as needed)
A basic course in police photography techniques to include photographic principles, illumination, composition, identification, fingerprint, crime scene, traffic accident, courtroom technician darkroom and film processing, enlarging, printing and field application. By permission of instructor. Prerequisite: CJT 2100 or CJT 1120.

CJT 2340*
Police Operations, 3 credit hours, 45 lec. (Fall, Spring)
Responsibilities, powers and duties of the uniformed patrolman; patrol techniques and procedures; field interrogation and notetaking; mechanics of arrest and search; handling of the mentally ill; transportation of prisoners; crime scene procedures; elements of property protection; fundamentals of community relations; mob and riot control; dealing with domestic violence; gangs and drug crime; civil liability of officers and departments.

CJT 2350*
Writing and Reviewing Reports, 3 credit hours, 45 lec. (Offered as needed)
Designed to give students a broad understanding of writing and reviewing criminal justice reports. Specifically designed for correctional and law enforcement officers.
COP 2010
Personal Adjustment,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
Psychology of adjustment, application of psychological theory for problem solving and better mental health. An examination of psychological defense mechanisms and adaptive behavior.

CLP 2140
Abnormal Psychology,
3 credit hours, 45 lec.
(Offered as needed)
A study of the different problems in psychopathology, including anxiety, depression, social deviance, psychosis, schizophrenia, both child and adult, mental retardation and general brain dysfunction, with emphasis on descriptive etiology, known causes, and treatments. Prerequisite: PSY 2012.

COP 1006 Δ
Introduction to Programming
Concepts and Logic,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
General survey of programming/problem solving techniques. Algorithm development will employ the use of a modern programming language.

COP 2010 Δ
Visual Basic Programming,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
This course introduces programming in Visual Basic. The student will learn to create innovative and dynamic data structures. Prerequisite: CIS 1000 or COP 1006 or equivalent.

COP 2220 Δ
Programming in C,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
An introduction to C programming language using microcomputers. Prerequisite: CIS 1000 or COP 1006 or equivalent.

COP 2224 Δ
Programming in C++,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
An introduction to C++ programming using microcomputers. Prerequisite: COP 2220 or equivalent.

COP 2800 Δ
Introduction to JAVA Programming,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
An introduction to programming using the Java language. Students will develop and apply individual programs. Prerequisite: CIS 1000 or COP 1006 or equivalent.

COP 2805 Δ
Advanced JAVA Programming,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
An advanced level programming course using advanced Java techniques. Prerequisite: COP 2800 or equivalent.

CRW 2001
Creative Writing I,
3 credit hours, 45 lec.
(Offered as needed)
Instruction and practice in writing various forms of poetry, short story, drama, and/or other modes and in submitting for publication.

CRW 2002
Creative Writing II,
3 credit hours, 45 lec.
(Offered as needed)
This course offers extensive practice writing poetry. Students will develop a body of original creative work under the supervision of the instructor and will submit works for publication. Prerequisites: None, but CRW 2001 and CRW 2002 recommended.

CRW 2300
Introduction to Poetry Writing,
3 credit hours, 45 lec.
(Offered as needed)
This course offers extensive practice writing poetry. Students will develop a body of original creative work under the supervision of the instructor and will submit works for publication. Prerequisites: None, but CRW 2001 and CRW 2002 recommended.

CRW 2600
Writing Scripts for Film and
Television, 3 credit hours, 45 lec.,
(Offered as needed)
This course offers an introduction to the theory and practice of writing scripts for television and film. Students will develop a body of original work with a goal toward publication.

CTS 1171*
Desktop Support,
3 credit hours, 45 lec.,
(Offered Fall, Summer, Spring)
This course introduces the helpdesk skills to troubleshoot hardware or software operation and application problems for end users on the desktop or client-side, based on the Windows operating system. It is designed to help prepare the student to take the two core exams 70-271 and 70-272 required for certification as a Microsoft Certified Desktop Support Technician (MCDST). Students should have user-level competency with Windows and MS Office. Prerequisites: None, although CTS2101, CDA2523 and CGS1100, CGS1570 would be useful.

CTS 1550*
Microsoft PowerPoint,
1 credit hour, 15 lec.
(Offered as needed)
An introduction to the use of Microsoft’s PowerPoint 4.0 for the creation of graphic presentations.

CTS 2101*
Introduction to Windows,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
An introduction to operating systems in general with emphasis on Windows.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

Δ Technology-Across-the-Curriculum Course
CTS 2300*  △
Designing Active Directory and Network Infrastructure,
3 credit hours, 45 lec.,
(Offered as needed)
This course focuses on the design process of an active directory infrastructure and a network infrastructure that supports active directory, including name resolution strategy, network connectivity design, Group Policy, and forest and domain infrastructure. Prerequisites: CDA 2500, CDA 2523, CDA 2525, CET 2497, and CTS 2302 or equivalent. This course prepares the student for the MCP exam, a core requirement for Windows MCSE.

CTS 2302*  △
Windows Active Directory,
3 credit hours, 45 lec.
(Offered as needed)
This course focuses on a windows server directory service environment, including forest and domain structure, DNS, site topology replication, organizational unit structure delegation of administration, Group Policy, and user/group computer account strategies. Prerequisites: CDA 2500, CDA 2523, CDA 2525, and CET 2497 or equivalent. This course prepares the student for the MCP exam, a core requirement for Windows MCSE.

CTS 2310*  △
Designing Security for Windows Network,
3 credit hours, 45 lec.
(Offered as needed)
Build the design skills necessary to plan the security infrastructure for a Windows network. Learn to analyze business requirements, identify security risks, plan an authentication strategy, control access to resources, develop a data encryption scheme, and provide secure connections. This course prepares the student for the MCP Exam, a core requirement for Windows MCSE. Prerequisites: CDA 2500, CDA 2523, CDA 2525, CET 2497, and CTS 2302.

CTS 2320*  △
Planning and Maintaining Windows Network Infrastructure,
3 credit hours, 45 lec.
(Offered as needed)
This course addresses the planning and maintenance of server network infrastructure. Tasks include planning the physical and logical network, planning and troubleshooting a routing strategy, planning and optimizing DHCP, DNS, and WINS strategies, and planning IPSec network access. Prerequisites: CDA 2500, CDA 2523, CDA 2525, and CET 2497 or equivalent. This course prepares the student for the MCP exam, a core requirement for Windows MCSE.

CTS 2811*  △
Administering SQL Server Database,
3 credit hours, 45 lec.
(Offered as needed)
This course provides students with the skills required to install, configure, administer and troubleshoot the client-server database management system of Microsoft SQL Server. This is preparation for the MCP exam, an elective requirement for Windows MCSE. Prerequisites: CDA 2500, CDA 2523, CDA 2525.

DAA 1100
Modern Dance,
2 credit hours, 15 lec., 30 lab.
(Offered as needed)
This beginning dance class serves as an introduction to the art of contemporary dance. It includes instruction and practice in basic modern dance techniques, improvisation, dance forms and brief historical overview. This course may be taken up to (4) times for credit.

DAA 1101
Intermediate Modern Dance,
2 credit hours, 15 lec., 30 lab.
(Offered as needed)
This course includes a continued analysis of the modern dance at an intermediate level. Instruction and practice in specific contemporary dance techniques and performance qualities will be stressed. This course may be taken up to (4) times for credit.

DAA 1200
Beginning Ballet,
2 credit hours, 15 lec., 30 lab.
(Offered as needed)
This beginning ballet course covers the study of classical ballet beyond the beginner level in jazz. Students at the intermediate level in jazz will find this course beneficial for the improvement of jazz dance performance techniques. This course may be taken up to (4) times for credit.

DAA 1201
Intermediate Ballet,
2 credit hours, 15 lec., 30 lab.
(Offered as needed)
Intermediate Ballet is designed to train the student in the tradition of the art of classical ballet beyond the basics. Continued development of the body as an expressive instrument for ballet movement will be stressed as students reach the proficiency level necessary to perform the more complicated steps of an intermediate class. This course may be taken up to four times for credit.

DAA 1500A
Beginning Jazz, 1 credit hour, 30 lab.
(Offered as needed)
This course includes instruction in tap dance technique and the introduction of time steps commonly used in musical theater auditions. It may be taken up to (4) times for credit.

DAA 1501
Intermediate Jazz Dance,
1 credit hour, 30 lab.
(Offered as needed)
Those students ready to move at the intermediate level in jazz will find this course beneficial for the improvement of jazz dance performance techniques. This course may be taken up to (4) times for credit.

DAA 1520
Beginning Tap,
1 credit hour, 30 lab.
(Offered as needed)
This course includes instruction in tap dance technique and the introduction of time steps commonly used in musical theater auditions. It may be taken up to (4) times for credit.

DAA 1580
Musical Theatre Dance I
This beginning course covers the study of musical theatre dance techniques and styles as related to a specific performance experience, usually Creative Dramatics. Students must participate in designated rehearsals and performances. Prerequisite: Level of competency determined by audition. This course may be taken up to (4) times for credit.

DAA 1680
Dance Workshop,
1 credit hour, 30 lab.
(Offered as needed)
This course includes instruction and participation in dance as required by specific productions, i.e., Theatre/Show Choir. This course may be taken up to (4) times for credit.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

△ Technology-Across-the-Curriculum Course
DAA 1681
Dance Ensemble,
1 credit hour, 30 lab.
(Offered as needed)
The student shall participate in the preparation and performance of original dance compositions to include Dance Line and Show Choir performances. Prerequisite: Level of competency determined by audition. This course may be taken up to (4) four times for credit.

DAA 1750
Dance Conditioning,
1 credit hour, 30 lab.
(Offered as needed)
Dance Conditioning is an excellent course which to begin your dance training. It is designed to improve fundamentals for the beginning/intermediate student through daily practice in floor work, yoga, and Pilates exercises. This movement class will get you ready to meet the challenges of other dance classes by toning, strengthening and preparing the body to move. This course may be taken up to four (4) times for credit.

DAA 1905
Directed Individual Study – Dance,
1 credit hour, 30 lab.
(Offered as needed)
This course is a defined independent study in dance pursued under the supervision of a faculty dance instructor and recorded through departmental procedures. It is designed to permit a student to pursue non-scheduled dance activity work which may be of a specialized nature and not available through classes or courses available in a college schedule. Prerequisite: Departmental approval is required. This course may be taken up to (2) two times for credit.

DAA 2202
Advanced Ballet,
2 credit hours, 15 lec./30 lab.
(Offered as needed)
Students enrolling in Advanced Ballet must have reached a high level of physical strength, mastery of skills, and technical knowledge in order to be eligible for placement in this section. Nuances of ballet performance and classical repertoire will be stressed. Prerequisite: DAA 1201 and/or appropriate level of competency approved by the instructor. This course may be taken up to (4) four times for credit.

DAA 2220
Pointe, 1 credit hour, 30 lab.
(Offered as needed)
The student must already have mastered intermediate/advanced ballet terminology and movement vocabulary in order to be prepared for the physical demands of dancing on pointe. Prerequisite: DAA 1201 and/or appropriate level of competency approved by the instructor. This course may be taken up to (4) four times for credit.

DAA 2581
Musical Theatre Dance II,
1 credit hour, 30 lab.
(Offered as needed)
The continued study of Musical Theatre dance techniques and styles as related to a specific performance experience, usually Summer Ensemble Workshop. Students must participate in rehearsals and performances. Prerequisite: Level of competency determined by audition. This course may be taken up to four (4) times for credit.

DAA 2610
Dance Composition,
2 credit hours, 15 lec./30 lab.
(Offered as needed)
An introduction and practice in the application of compositional tools encourages the student to explore and compose dance. By studying the body’s movement in time and space the student will improve technical skills, develop improvisation and choreographic skills and enhance overall dance performance. Previous dance experience is helpful. This course may be taken up to four (4) times for credit.

DAA 2682
Dance Workshop II,
1 credit hour, 30 lab.
(Offered as needed)
This course includes continued instruction and participation in dance as required by specific productions, i.e., Theatre/Show Choir. Prerequisite: A demonstration of competency determined by audition. This course may be taken up to four times for credit.

DAA 2683
Performance Dance,
1 credit hour, 30 lab. (Repertory and/or Original Choreography)
This course includes the continuation of study and participation in all rehearsals of selected works of dance repertory and/or original choreography culminating in public performance. Prerequisite: Demonstration of competency determined by audition. This course may be taken up to four (4) times for credit.

DAA 2930
Dance – Special Topics,
3 credit hours, 45 lec.
(Fall, Spring Summer)
This is a defined special topics course pursued under the supervision of a faculty member and recorded through usual departmental procedures. It is designed to permit a student to pursue non-scheduled academic and laboratory work that may be of a specialized nature and not available through the college schedule.

DEP 2004
Human Growth and Development,
3 credit hours, 45 lec.
(Fall, Summer, Spring)
A research oriented course in human development, covering the life span of the human being from conception to death. Special emphasis placed upon the interrelationships of the stages of development of the normal person.

DEP 2100
Child Growth and Development I,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
Growth and development of the child from conception through age five, including the physical, social, emotional and mental development of the young child, influence of environment, principles and theories of development.

ECO 2013
Economics I, 3 credit hours, 45 lec.
(Fall, or as needed)
Microeconomics. Basic concepts and principles, national income accounting; fiscal and monetary policy and application, growth economics. Basic math skills required.

ECO 2023
Economics II, 3 credit hours, 45 lec.
(Spring, or as needed)

EDF 1005
Introduction to Education,
3 credit hours, 45 lec.
(Fall, Spring)
A study of the history, philosophy and social context of education. The course will help the student think critically about the process of education and his/her role as an educator. Student will observe and participate in the educational settings of local schools. (Plus 30 hours field experience.)
EDG 2701 Teaching Diverse Populations, 3 credit hours, 45 lec. (Fall, Spring)
This course will provide the student with the opportunity to explore personal values and attitudes toward cultural diversity. Designed for the prospective educator, the theoretical component will examine the issues of teaching in culturally diverse classrooms. Field experience and examination of educational materials will enhance the student’s understanding of multiculturalism. (Plus 30 hours field experience) Prerequisite: EDF 1005.

EDP 2002 Educational Psychology, 3 credit hours, 45 lec. (Fall, Spring, Summer)
Significant aspects of the growth and development of children and youth, including physical, social, and intellectual developments as they affect behavior patterns. Psychology as applied in improving the learning process.

EGS 1100C Engineering Graphics, 3 credit hours, 30 lec., 30 lab. (Offered as needed)
Use of instruments, lettering practice; geometric construction; multiview projection and conventions, auxiliary views, section views, axonometric and oblique projections, rotation, patterns and development, and methods of reproduction. Prerequisite: ETD 1100 or equivalent; prerequisite only applies to Architectural Drafting and Design students.

EGS 1130C Descriptive Geometry, 3 credit hours, 30 lec., 30 lab. (Offered as needed)
Basic principles of orthographic projection, auxiliary views and rotation as they apply to points, lines and planes in space; addition of coplanar and non-co-planar vectors; intersections and developments; and selected abstract, exponometric and oblique projection, and practical problems. Prerequisite: EGS 1100C or equivalent.

EME 2040 Introduction to Educational Technology, 3 credit hours, 45 lec. (Fall, Spring Summer)
This course will develop competencies necessary to integrate technology into classroom instruction. Students will survey a variety of instructional technology materials, software, and systems, as well as learn to use these in the classroom environment.

ENC 1101 English Composition I, 3 credit hours, 45 lec. (Fall, Spring, Summer)
Instruction and intensive practice in expository and argumentative writing including a documented paper. The student will practice all CLAST essay and language skills as part of the essay process. Writing-Across-the-Curriculum course requiring a minimum of 6,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on a standardized placement test measuring communications/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

ENC 1102 English Composition II, 3 credit hours, 45 lec. (Fall, Spring, Summer)
Interpretative and critical reading of fiction (novel, novella, short story), drama, and poetry. Practice in the writing of analytic discourse. Practice in writing the research paper. The student will practice all CLAST essay and language skills as part of the essay process. Writing-Across-the-Curriculum course requiring a minimum of 6,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: Completion ENC 1101 or an equivalent course with a grade of “C” or better.

ENC 1112 CLAST Review: English Language Skills, 1 credit hour, 15 lec. (Offered as needed)
A short course designed to prepare students to take or retake the CLAST English Language Skills sub-test. The course is conducted as a self-study utilizing the tutorial services in the Academic Success Center.

ENC 1113 CLAST Review: Essay Skills, 1 credit hour, 15 lec. (Offered as needed)
A short course specifically designed to prepare students to write fifty-minute timed essays that conform to CLAST standards. The course is conducted as a self-study under the supervision of the CLAST Coordinator.

ENC 2210 Technical Report Writing, 3 credit hours, 45 lec. (Offered as needed)
This course covers the fundamentals of technical report writing, mechanics, and style. Various types of reports are prepared, and criteria for evaluating the adequacy of the various components of these reports are utilized. The course also includes reading and analysis of technical literature as well as oral reporting. Prerequisite: passing score on placement test.

ENG 1001 Research Papers, 1 credit hour, 16 lab. (Fall, Spring, Summer)
A learn-by-doing course in the methods of conducting library research and writing a documented paper. Students will work in the library on self-selected subjects under the supervision and guidance of the instructor in a tutorial relationship. For successful completion, each student will write a documented paper in accordance with a standard system.

NOTE: If this course is used to satisfy Writing-Across-the-Curriculum requirements for transfer course to OWC, a 6,000 word paper with a minimum grade of “C” is required. Student may use this course to satisfy deficiency in 6,000 word Gordon Rule writing requirement, but it may not be used in lieu of traditional Gordon Rule courses, such as ENC 1101.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

◊ This college credit course qualifies as having an international and/or diversity focus for Teacher Education Programs common prerequisites.

† Technology-Across-the-Curriculum Course
ENL 2012A
English Literature I,
3 credit hours, 45 lec.
(Offered as needed)
A study of English literature from the Old English period, Beowulf, through the late Eighteenth century, the Age of Enlightenment, focusing on major works and their authors with an emphasis upon the literature as a significant reflection of and contribution to the political, cultural, social, religious, and economic milieu of each age. This course may be used as a Humanities credit. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: ENC 1101.

ENL 2022
English Literature II,
3 credit hours, 45 lec.
(Offered as needed)
A study of English literature from the Romantics through the Twentieth century focusing on major works and their authors with an emphasis upon the literature as a significant reflection of and contribution to the political, cultural, social, religious, and economic milieu of each age. This course may be used as a Humanities credit. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: ENC 1101.

ESC 1000
Earth Science,
4 credit hours, 60 lec.
(Fall, Spring, Summer)
Survey of processes, materials and structure of the solid earth, oceanography, meteorology, and the relation of the earth to other planets. Intended for physical science general education requirement. Practical exercises in mineral and rock identification.

ESC 1000L
Earth Science Lab,
1 credit hour, 30 lab.
(Fall, Spring, Summer)
Laboratory experiences pertaining to the physical environment: observation, measurement, data analysis, mapping, map interpretation, properties of earth materials. This is an optional course serving students who transfer to universities which require a laboratory course to satisfy the General Education requirement in Physical Science.

ETD 1100*
Introduction to Technical Drawing,
3 credit hours, 30 lec., 30 lab.
(Offered as needed)
A course in the fundamental principles of the graphic language (the language of industry) and is developed for students without previous mechanical drawing experience. Topics include: use and care of instruments, lettering, geometric construction, multiview projection, sketching techniques, inking, and methods of reproduction.

ETD 1111*
Drafting I,
6 credit hours, 15 lec., 150 lab.
(Offered as needed)
The first of a sequence of courses in drafting which includes basic use of instruments, freehand lettering, geometric construction, orthographic projection, sections and conventions, conventional revolutions, dimensioning, inking, mechanical lettering, and methods of reproduction. Prerequisite: ETD 1100 and ETD 1710 or equivalent.

ETD 1221*
Drafting II,
6 credit hours, 15 lec., 150 lab.
(Offered as needed)
A course that continues and completes the student’s study of the fundamentals intrinsic to all types of drafting. Topics covered include isometric, dimetric, trimetric, oblique, and perspective projection, auxiliary views, related mathematics, precision dimensioning and inking practices. Prerequisite: ETD 1111 or equivalent.

ETD 1310C* ∆
AutoCAD I,
3 credit hours, 30 lec., 30 lab.
(Offered as needed)
A basic course in the use of AutoCAD Software to include: Introduction to AutoCAD, drawing commands, display and inquiry commands, modify commands, dimensioning and annotation, data exchange and output files. Prerequisite: ETD 1310C* or equivalent.

ETD 1313C* ∆
AutoCAD LT II,
3 credit hours, 30 lec., 30 lab.
(Offered as needed)
The second course in a series designed to develop skill and proficiency in the use of AutoCAD LT software to include: additional drawing commands, editing commands, modify commands, advanced display and inquiry commands, advanced dimensioning and annotation, advanced layering, block, attributes and X-Ref, paper space, UCS, data exchange and output files. Prerequisite: ETD 1312C or equivalent.

ETD 1350C* ∆
AutoCAD 3-D Modeling I,
3 credit hours, 30 lec., 30 lab.
(Offered as needed)
A basic course in mechanical design using basic computer geometry techniques. Topics will include: orthographic projections, space relationships of points, lines, planes and revolution of objects. Additional coverage will include principles of surface generation, intersections, wire modeling, and solid modeling techniques. Prerequisite: ETD 1311C or equivalent.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.
∆ Technology-Across-the-Curriculum Course
ETD 1322*Δ
Introduction to Pro/ENGINEER, 3 credit hours, 30 lec., 30 Lab.  
(Offered as needed)
A basic course on the use of Pro/ENGINEER software to include:  
Introduction to Pro/ENGINEER, basic drawing components/parts,  
Pro/DETAIL functionality, 3D virtual models, conceptual layout, extrusions,  
sweeps, pick-n-place, creating manufacturing features on assemblies  
which will include drilling, cutting, and facing operations and creating basic  
drawings of assemblies which will include exploded views and intelligent  
BOM callouts.

ETD 1614*
Electromechanical Drafting, 3 credit hours, 30 lec., 30 lab.  
(Offered as needed)
A course in the fundamentals of electronics drafting covering such topics  
as: using electronic symbols, schematic diagrams, connection diagrams,  
block and logic diagrams, WW board drawings, chassis drawings, and pictorial  
drawings. Prerequisite: ETD 1111 or equivalent.

ETD 1700*
Drafting III, 6 credit hours, 15 lec., 150 lab.  
(Offered as needed)
A course in the fundamentals of Mechanical and Machine Drafting.  
Topics covered include: Geometric dimensioning and true positional toler-  
ancing; threads, nuts, bolts, screws, gears, cams and springs, drafting stan-  
dards, and preparation of working drawings. Prerequisite: ETD 1311C,  
and ETD 2218 or equivalent.

ETD 1710*
Fundamentals of Dimensioning and Tolerancing, 4 credit hours, 60 lec.  
(Offered as needed)
A course designed to help students develop the basic fundamentals of  
dimensioning and tolerancing. Topics include: dimensioning systems such  
as; metric, decimal, fractional-inch, foot and inch, tolerancing methods,  
limits and tolerances, tolerancing accumulation, dimensioning practices,  
and standards fits. Prerequisite: for Drafting and Design student course  
should be taken with ETD 1100.

ETD 1801C*
Technical Illustration, 3 credit hours, 15 lec., 45 lab.  
(Offered as needed)
The purpose of this course is to help students develop the skills, knowledge,  
and attitudes necessary to be job entry-level qualified as technical illustrators. Prerequisites: ETD 1221 or  
EGS 1130C, and ETD 1311C.

ETD 1811C Δ
Corel Draw I, 3 credit hours, 30 lec., 30 lab.  
(Offered as needed)
Class will focus on organization of two-dimensional space in regard to  
the plane. Study and hands-on projects both in artistic media and on  
computer will include the following: Comprehensive usage of this vector-based  
drawing program to create professional artwork – from single logos to intricate technical illustrations.  
Topics such as perspective and the creation of depth on the dimen-  
sional surface will be included as well. Students will investigate the use of  
computer graphics disciplines emphasizing illustration and the principles of  
color and design. Students will also be expected to complete five individual  
projects related to the coursework. The presentation of these projects to  
the class will include both written and visual materials. Students will generate  
a portfolio of computer art and are encouraged to broaden perspectives  
and to think creatively. Class will serve as introduction to use of Corel Draw.

ETD 1842C*
Computer Rendering I, 3 credit hours, 30 lec., 30 lab.  
(Offered as needed)
A basic course in rendering techniques using accurender software. Topics  
include: The walkabout window, AutoCAD views, move in the Ray Trace View, viewing the model,  
Rendering the model, assigning materials, lighting your model and printing. Prerequisite: ETD 1350C.

ETD 1811C Δ
Corel Draw II, 3 credit hours, 30 lec., 30 lab.  
(Offered as needed)
A second course for engineers, designers, inspectors and other engineering personnel. The course consists of learning  
how to perform tolerance accumulation studies within a part or assembly to include: Coordinate  
dimension stacks and stacks involving geometric tolerancing. Prerequisite: ETD 2218 or equivalent.

ETD 2218*  
Geometric Dimensioning and Tolerancing, 4 credit hours, 60 lec.  
(Offered as needed)
An introductory course in geometric dimensioning and tolerancing using the geometric method nationally  
accepted according to ASMEY14.5M. Topics covered include: definitions and terms, symbols, datum referencing,  
locational tolerancing, form tolerancing, profile tolerancing, orientation and runout tolerancing, and math for positional tolerancing. Prerequisites:  
ETD 1710 or equivalent.

ETD 2219*
Advanced Geometric Dimensioning and Tolerancing, 4 credit hours, 60 lec.  
(Offered as needed)
An advanced course in geometric dimensioning and tolerancing using the geometric method nationally  
accepted according to ASMEY14.5M. Topics covered include: definitions and terms, symbols, datum referencing,  
locational tolerancing, form tolerancing, profile tolerancing, orientation and runout tolerancing, and math for positional tolerancing. Prerequisites:  
ETD 2218 or equivalent.

ETD 2250*
Tolerance Stacks I, 4 credit hours, 60 lec.  
(Offered as needed)
A course for engineers, designers, inspectors and other engineering personnel. This course consists of learning  
how to perform tolerance accumulation studies within a part or assembly to include: Coordinate  
dimension stacks and stacks involving geometric tolerancing. Prerequisite: ETD 2218 or equivalent.

ETD 2251*  
Tolerance Stacks II, 4 credit hours, 60 lec.  
(Offered as needed)
A second course for engineers, designers, inspectors and other engineering personnel. The course continues the learning and add more advanced concepts relative to performing tolerance accumulation studies within a part or assembly to include: Coordinate dimension stacks and stacks involving geometric tolerancing. Prerequisite: ETD 2219 and ETD 2250 or equivalent.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

Δ Technology-Across-the Curriculum Course
ETD 2328C*  
Introduction to MicroStation,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
A basic course in mechanical design using basic computer geometry techniques. Topics will include orthographic projections, space relationships of points, lines, planes and revolution of objects. Additional coverage will include principles of surface generation, intersections, wire modeling, and solid modeling techniques. Prerequisite: ETD 1100 or equivalent.

ETD 2352C*  
AutoCAD III,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
An advanced course designed to help students develop proficiency in the area of computer aided drafting and systems drafting. Topics covered include: transfer drawings, digitized drawings, explanatory drawings, multi-view projections, exploded assemblies, pictorial drawings, auxiliary views, sections, details, geometric dimensioning and tolerancing, and CADD concepts. Prerequisites: ETD 1311.

ETD 2355C*  
MicroStation II,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
A second course in mechanical design using advanced computer techniques. Contents will include: 3D concepts, wire modeling, surface generation techniques, and solid modeling techniques. Prerequisite: ETD 1350C or equivalent.

ETD 2356C*  
Mechanical Desktop I,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
A basic course inParametric Solid Design, using AutoCAD Mechanical Desktop Software. Topics include: Basic concepts of Parametric Sketching, Part Creation, Surface Creation and Editing. Basic Concepts of Combining Parts. Prerequisite: ETD 1311C or equivalent.

ETD 2356C*  
Mechanical Desktop II,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
The second course in a series designed to develop skill and proficiency in Parametric Solid Design, using AutoCAD Mechanical Desktop Software. Topics include: Creating Drawing Views, Creating Table Driver Parts, Creating Shells, and assembling parts. Prerequisite: ETD 2365C or equivalent.

ETD 2357C*  
Inventor I,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
A basic course in Parametric Solid Design using AutoDesk Inventor Software. Topics include: Basic concepts of parametric part sketching 3D part creation, Revolve, Sweep and Lofted features, shell and coil, surface creation, sheet metal and orthographic drawing production.

ETD 2365C*  
Mechanical Desktop I,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
A basic course in Parametric Solid Design, using AutoCAD Mechanical Desktop Software. Topics include: Basic concepts of Parametric Sketching, Part Creation, Surface Creation and Editing. Basic Concepts of Combining Parts. Prerequisite: ETD 1311C or equivalent.

ETD 2366C*  
Mechanical Desktop II,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
The second course in a series designed to develop skill and proficiency in Parametric Solid Design, using AutoCAD Mechanical Desktop Software. Topics include: Creating Drawing Views, Creating Table Driver Parts, Creating Shells, and assembling parts. Prerequisite: ETD 2365C or equivalent.

ETD 2377C*  
3D Studio Max I,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
Course is designed to use 3D Studio in rendering, and animation as a dynamic visualization tool for AutoCAD design images. Upon completion of this course, the user will be able to navigate through the modules of the program, model simple projects, set up scenes for rendering and animation, assign materials to objects, and define simple motion paths, input and output techniques. Prerequisite: ETD 1350C or equivalent.

ETD 2380C*  
Technical Illustration II,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
A basic course in Parametric Solid Design using AutoDesk Inventor Software. Topics include: Basic concepts of parametric part sketching 3D part creation, Revolve, Sweep and Lofted features, shell and coil, surface creation, sheet metal and orthographic drawing production.

ETD 2542*  
Structural Drafting,  
3 credit hours, 15 lec., 60 lab.  
(Offered as needed)  
A course in the fundamentals of structural drafting including: an overview of structural drafting, prestressed concrete drafting, structural steel drafting, and poured-on-site concrete drafting. Prerequisite: TAR 2121C or equivalent.

ETD 2543C*  
Structural Drafting II,  
3 credit hours, 15 lec., 60 lab.  
(Offered as needed)  
An advanced course in structural drafting covering prestressed concrete drafting, structural steel drafting, and poured-on-site concrete drafting for large commercial and industrial buildings as well as bridges, parking decks, towers, and stadiums. Prerequisite: ETD 2542 or equivalent.

ETD 2705*  
Advanced Mechanical Drafting,  
3 credit hours, 30 lec., 30 lab hours.  
(Offered as needed)  
An advanced course covering mechanical drafting, machine design, advanced dimensioning and tolerancing, and working drawings according to MIC and ASME standards. Prerequisites: ETD 1700, ETD 2218, or equivalent.

ETD 2801C*  
Technical Illustration I,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
The purpose of this course is to help students develop advanced skills, knowledge, and attitudes necessary as technical illustrators, to include oblique, and axiometric projections, perspective and exploded pictorial drawings, and related techniques. Prerequisites: ETD 1801C and ETD 1311C or equivalent.

ETD 2843C*  
3D Computer Rendering II,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
An advanced course in rendering techniques using autorender software. Topics include: Radiocity, landscape for realism, decals, backgrounds, environments, panoramas and animation. Prerequisite: ETD 1842C.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

Δ Technology-Across-the-Curriculum Course
ETD 2905*
Independent Study – Drafting,
1 credit hour
(Fall, Spring, Summer)
Practical treatment of special geometry, graphics, and design. Emphasis on individual work projects utilizing such graphical techniques as orthographic projection, perspective drawing, auxiliary views, topographic drawing, and graphing. Prerequisites: EGS 1110C and ETD 1111 or permission of instructor. This course may be taken up to four (4) times for credit.

ETD 2930*
Special Topics – A survey of Geometric Dimensioning and Tolerancing, 1 credit hour
(Offered as needed)
This is a review course in Geometric Dimensioning and Tolerancing using the Geo-Metric Method nationally accepted according to ASME Y14.5M. This course is intended for students who have prior training in Geometric Dimensioning and Tolerancing, but require a review covering new and updated information on the subject. Topics covered include: definition and terms, symbols, datum referencing, locational tolerancing, form tolerancing, profile tolerancing, orientation and runout tolerancing, and math for positional tolerancing.

ETG 1941*
Internship,
3 credit hours, 90 lab hours
(Offered as needed)
On-the-job training in the Applied Associate of Science Degree program in which the student is actively enrolled. The student works under a qualified supervision on a job related to his/her degree program. The supervisor will rate the student’s performance, knowledge, comprehension, dependability, initiative, cooperativeness, and total performance. A project paper or approved project will be submitted by the student two weeks prior to the end of the semester.

ETI 1411*
Advanced Manufacturing Processes, 3 credit hours, 45 lab.
(Offered as needed)
This course presents the numeric and computer numeric control of various machining processes and the use of computer programming in the machine shop. Included are shop safety, program preparation, milling, drilling, subroutines, coordinate systems and other related topics.

ETI 1414C*
Introduction to CNC Machines and CNC Machining Practices, 3 credit hours, 30 lec., 30 lab.
(Offered as needed)
This course is designed to provide the student with an introduction to CNC machines and CNC machining to include: Theory, Operation, Setup, Safety and Practices.

ETI 1420*
Properties of Materials and Cutting Tools, 3 credit hours, 45 lec.
(Offered as needed)
This course is designed to provide the student with an introduction to the basic properties of materials, principles and processes in the metal working and plastics field and tools and machinery involved in manufacture of metals of plastics. This course covers non-chip producing and chip producing manufacturing processes.

ETI 1710*
Occupational Safety, 3 credit hours, 45 lec.
(Offered as needed)
A basic course in occupational safety and health covering such topics as: theories of accident causation; workplace hazards; hazard analysis and prevention; accident reporting; OSHA, ergonomics; product safety; workers’ compensation; and stress on the job.

ETI 1713*
Implementing Total Safety, 3 credit hours, 45 lec.
(Offered as needed)
A course on implementing the total Safety Management (TSM) approach to workplace safety and health. Major topics include the TSM Steering Committee, TSM Facilitator, and improvement project teams (IPTs).

ETI 1715*
Environmental Safety, 3 credit hours, 45 lec.
(Offered as needed)
A course on protecting the environment from hazardous processes, products, and by-products of business and industry. The primary focus of the course is the ISO 14000 standard.

ETI 2111*
Quality Tools I, 3 credit hours, 45 lec.
(Offered as needed)
This is a comprehensive course designed to increase the students’ knowledge and skill in all aspects of quality control. The course provides a variety of the basic skills that contribute to the outgoing quality in the mechanical trades. Included are quality functions, quality personnel, shop mathematics, understanding blueprints, measuring tools, their use and other related topics.

ETI 2111*
Quality Tools II, 3 credit hours, 45 lec.
(Offered as needed)
This course is a continuation of Quality Tools I with an emphasis on inspection methods and layout techniques. Included also are quality costs, planning, probability, statistical control and other related topics.

ETI 2114*
Benchmarking, 3 credit hours, 45 lec.
(Offered as needed)
A course covering the fundamentals of benchmarking. Major topics include: rationale for benchmarking, management’s role in benchmarking, obstacles to benchmarking, selection of processes to benchmarking, and acting on benchmarking data.

ETI 2117*
Introduction to Total Quality, 3 credit hours, 45 lec.
(Offered as needed)
This course covers the fundamentals of Total Quality including the following: quality culture, customer focus, employee empowerment, team building, decision making, problem solving, conflict management, quality tools, benchmarking, continuous improvement, quality function deployment, Statistical Process Control, Just-In-Time Manufacturing, and Implementing Total Quality.

ETI 2117*
Implementing Total Quality, 3 credit hours, 45 lec.
(Offered as needed)
This course covers all 20 steps required to implement Total Quality in any type of organization. Emphasis is placed on specific requirements for implementation, the critical role of executive level leaders, and variation among organizations. Prerequisite: ETI 2117.

ETI 2131*
Statistical Process Control, 3 credit hours, 45 lec.
(Offered as needed)
A course covering the fundamentals of SPC. Major topics include: rationale for SPC, inhibitors of SPC, management’s role in SPC, the quality tools, and control charts.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.
ETI 2419C* Advanced Concepts of CNC Machines and CNC Machining Practices, 3 credit hours, 30 lec., 30 lab. (Offered as needed)
This course is designed to provide the student with advanced concepts in CNC machines and CNC machining to include: Theory, Operation, Setup, Safety, and Practices.

ETI 2940* Directed Work Study-Industrial-Technical, 1 credit hour, 45 lab. (Offered as needed)
Directed experience in instructional, laboratory and/or materials assistance in a designated industrial-technical area. This course may be taken up to four (4) times for credit. Department chair approval required.

EUH 2032 ♦ The Holocaust, 3 credit hours, 45 lec. (Offered Spring)
A survey of European anti-Semitism, the rise of institutionalized and codified racism in Nazi Germany and the resulting Holocaust. Examines the role of the state and the citizenry in genocide. Also examines the nascent anti-Semitism of the modern world and the rise of Israel as an international power.

FAD 1123 Adults in a Changing Society, 3 credit hours, 45 lec. (Fall, Spring, Summer)
A course focusing on personal development and traditional or nontraditional career options available to adults in today’s changing society.

FRE 1000 ♦ Practical French, 3 credit hours, 45 lec. (Spring term only)
This course provides training for verbal mastery of French in practical situations as well as instruction in contemporary francophone culture and in the historical and cultural significance of the French-speaking world. Students will research a French country/region.

FRE 1120 ♦ French I, 4 credit hours, 60 lec. (Fall term only)
Pronunciation and grammatical structures of French, with emphasis upon balanced development of all four skills – listening, speaking, reading, and writing. Covers all basic structures of the language.

FRE 1121 ♦ French II, 4 credit hours, 60 lec. (Spring term only)
Pronunciation and grammatical structures of French, with emphasis upon balanced development of all four skills – listening, speaking, reading, and writing. Covers all basic structures of the language. Prerequisite: FRE 1120 or its equivalent.

FRE 2010 ♦ Practical French for Travelers, 4 credit hours, 45 lec., 15 lab. (Spring term only)
This course provides training for verbal mastery of French in practical situations as well as instruction in contemporary francophone culture and in the historical and cultural significance of the French-speaking world. Instruction will be enhanced by the opportunity to visit a French-speaking locale for 6 to 10 days at the end of the semester.

FRE 2200 ♦ French III, 4 credit hours, 60 lec. (Fall term only)
Intermediate level review of grammar, readings in French Literature, and development of conversational and writing skills. Prerequisite: FRE 1121 or its equivalent.

FRE 2201 ♦ French IV, 4 credit hours, 60 lec. (Spring term only)
Completion of intermediate level review of grammar, readings in French literature, and development of conversational and writing skills. Prerequisite: FRE 2200 or its equivalent.

GEA 1000 ♦ World Regional Geography, 3 credit hours, 45 lec. (Offered as needed)
The course introduces the student to geographic regional studies. It will combine the concepts of physical geography and cultural, economic, and human geography as it applies to the differing regions of the world. It will show the relationships between the regional environment and the people who live there, between settlement patterns, economic patterns and cultural patterns within each region; and, using current events, it will show the impact of other phenomena upon those regions and their people. Relationships between the various regions will be highlighted, again using current events as the triggering element.

GEB 1011 Introduction to Business, 3 credit hours, 45 lec. (Fall, Spring, Summer)
Designed to give students a broad understanding of the nature of business and a preliminary idea of the various areas of business specialization.

GEB 1136* Foundations of e-Business, 3 credit hours, 45 lec. (offered as needed)
This course is designed to provide students with a managerial view of e-Business and e-Commerce.

GEB 1940* Internship-Business, 3 credit hours, 90 lab. (Fall, Spring, Summer)
On-the-job training in the Associate of Science/Applied Science Option program in which the student is enrolled. The student is under the supervision at work of a qualified supervisor. The supervisor will rate the student’s performance, knowledge, comprehension, dependability, initiative, cooperativeness, and total performance. A project paper or approved project will be submitted by the student three weeks prior to the close of the semester. May be repeated four times for a total of 12 credit hours.

GEB 2137* e-Business – Models and Strategies, 3 credit hours, 45 lec. (offered as needed)
This course focuses on business models with particular focus on the Internet as a facilitator of commerce. Students will also become familiar with how macro environments impact e-commerce.

GEB 2138* e-Business Law and Ethics 3 credit hours, 45 lec. (offered as needed)
This course focuses on legal and ethical issues involved in forming Web-based companies.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.
❖ This college credit course qualifies as having an international and/or diversity focus for Teacher Education Programs common prerequisites.
GEB 2441  
Business Ethics,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
This course addresses the legal, moral, and societal issues of ethical conduct in the business environment. Actual case studies are used to illustrate appropriate relationships among employers, employees, customers, stockholders, and other business stakeholders. Topics include: codes of ethics, laws and regulations related to ethics, conflict of interest, and moral philosophies associated with ethical conduct.

GLY 2010C  
Physical Geology,  
4 credit hours, 45 lec., 30 lab.  
(Offered as needed)  
A study of the materials, surface feature, structure and processes of the solid earth. Labs in identification of rocks and minerals. Landforms will be analyzed from topographic and geologic maps. Actual landforms and processes will be studied on field trips and exercises.

GLY 2100C  
Historical Geology,  
4 credit hours, 45 lec., 30 lab.  
(Offered as needed)  
A study of the history of the earth, including the origin of continents, mountains and ocean basins as recorded in rocks and fossils. A survey of the fossil record and changes in animal and plant life throughout geological time will also be studied.

GRA 1121C* ∆  
Desktop Publishing I,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
This beginning level publishing course on a Macintosh desktop computer will acquaint students with various software programs, clip-art, digital camera usage, and scanning; students will learn to produce flyers, ads, certificates, business cards, and other printed material.

GRA 1122C* ∆  
Desktop Publishing II,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
This course is a continuation of Desktop Publishing I; the primary focus will be on the use of the software program InDesign for more advanced applications on a Macintosh computer. Prerequisite: GRA 1121C.

GRA 1162C* ∆  
Introduction to 3-D Graphics and Animation, 4 credit hours, 30 lec., 60 lab. (Offered as needed)  
Introductory course in the basic tools, techniques, and applications of 3D graphics and animation. Students will learn to manipulate objects, build models, employ lighting effects and design movement; all planned through careful storytelling and cinematic techniques.

GRA 2100C* ∆  
Computer Graphics I,  
4 credit hours, 30 lec., 60 lab. (Offered as needed)  
This course provides instruction and practical exercises in the use of graphics software Photoshop to create, modify and generate color graphics to produce illustrations and charts on a Macintosh desktop publishing system.

GRA 2140C* ∆  
Multimedia I,  
4 credit hours, 30 lec., 60 lab.  
(Fall, Spring, Summer)  
An introductory course covering basic principles of design affecting interactive multimedia presentations. Students will learn an interactive media authoring software application and its interaction with other supporting software applications. Students will produce a complete interactive CD-ROM title. Prerequisites: ART 2602C and ART 1600C.

GRA 2141C* ∆  
Multimedia II,  
4 credit hours, 30 lec., 60 lab.  
(Offered as needed)  
An advanced course covering principles of design affecting interactive multimedia presentations. Students will learn advanced functions of an interactive media authoring software application and supporting software. Students will produce a finished interactive CD-ROM title. Prerequisite: GRA 2140C.

GRA 2142C* ∆  
Web Design/Graphic,  
4 credit hours, 30 lec., 60 lab. (Offered as needed)  
This course covers the designing, preparation, and the publishing of Home Pages using Hyper Text Markup Language (HTM) for the World Wide Web on the Internet, using Netscape as the browser. This course is taught from a graphics point-of-view using a Macintosh.

GRA 2143C* ∆  
Advanced Web Design/Graphics,  
4 credit hours, 30 lec., 60 lab.,  (Offered as needed)  
An advanced course where students will study an industry standard WYSIWYG web site development tool. Students will produce more sophisticated user interactivity and page layout in a large website project. This course is presented from a graphic perspective. Prerequisite: GRA 2142C.

GRA 2156C* ∆  
Computer Graphics II,  
4 credit hours, 30 lec., 60 lab.  
(Offered as needed)  
This course is a continuation of Computer Graphics I. Advanced Photoshop techniques and processes will be covered using a Power Macintosh desktop computer. This is not a beginning level course and requires prior knowledge/experience with Adobe Photoshop. Prerequisite: GRA 2100C.

GRA 2164C* ∆  
Advanced Graphic Projects,  
4 credit hour, 30 lec., 60 lab.  
(Offered as needed)  
This course is designed for the advanced graphics student. The student will call upon skills/knowledge previously gained in other courses and software programs to produce several QTVR projects. This course will be considered a capstone in the progression of learning and is not a beginning level course. Prerequisite: GRA 2100C.

GRA 2173C* ∆  
Projects in Graphic Design,  
3 credit hours, 30 lec., 30 lab.  
(Offered as needed)  
An advanced course utilizing the student’s full complement of skills and abilities. The student will work under the advisement of the faculty member to produce a large multifaceted project of their own design. Prerequisites: GRA 1121C, ART 1600C, GRA 2100C, and ART 2602C.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

∆ Technology-Across-the-Curriculum Course
GRA 2210C* Pre-Press Assembly, 
4 credit hours, 30 lec., 60 lab.  
(Offered as needed) 
Classroom and lab experiences using a computer to prepare both spot and process color images, colorize artwork, and print separations; students will produce an 8-page booklet from beginning to end. Prerequisites: GRA 1122C and GRA 2100C.

GRA 2900* Δ Independent Study – Graphic Art, 
1 credit hour, 30 lab.  
(Offered as needed) 
Practical treatment of Graphics/Printing Technology. Emphasis on individual work projects. Prerequisite: GRA 1121C.

GRA 2905* Δ Directed Work Study – 
Graphics/Printing,  
1 credit hour, 45 lab.  
(Offered as needed) 
The student will initiate independent computer related work, utilizing various software and hardware. The course may be taken four times for credit. Prerequisite: GRA 1121C.

GRA 2949* Δ Directed Work Study – 
Graphics/Printing,  
1 credit hour, 45 lab.  
(Offered as needed) 
The student will complete computer-related work utilizing various computer-related hardware and software under the direct guidance of an instructor. This course may be taken four times for credit. Prerequisite: GRA 1121C.

HIM 1000* Introduction to Health Information Management, 3 credit hours, 45 lec.  
(Fall, Spring, Summer) 
Orientation to medical records history and professional associations. Confidentiality, filing, retrieving, indexing, numbering, storage and content of the medical record is also discussed. The course includes job search skills and professional job performance.

HIM 1270C* Medical Billing, 
2 credit hours, 15 lec., 30 lab.  
(Summer) 
Introduction to computerized medical billing and reimbursement through various payors. Correct completion of HCFA 1500 forms will be emphasized. Prerequisite: HIM 1282, knowledge of basic computer & keyboarding skills.

HIM 1282* Basic Coding for Medical Records,  
4 credit hours, 60 lec. (Spring) 
Development of nomenclature and classification systems and an introduction to ICD-9-CM and CPT coding. Introduces the student to Ambulatory Payment Classifications (APCs) and Diagnostic Related Groups (DRGs). Prerequisites: HSC 1531, BSC 1080.

HIM 2283C* Advanced Coding for Medical Records with Lab, 5 credit hours, 60 lec. 30 lab. (Summer) 
Advanced instruction in coding/ICD-9-CM diagnoses, and procedures in ICD-9-CM and CPT both manually and automated. Provides sequencing guidelines and rules and regulations in both the hospital and physician office setting. Prerequisites: HIM 1282, knowledge of basic computer and keyboarding skills.

HIM 2433* Pathophysiology, 
4 credit hours, 60 lec.  
(Offered as needed) 
Introduction to the nature, cause, and treatment of disease entities and the body's defense mechanisms. Commonly used drugs will also be introduced.

HLP 1081 Wellness: Practice and Theory,  
3 credit hours, 45 lec.  
(Fall, Spring, & Summer) 
A course designed to promote wellness through assessment, instruction and fitness programs which, if applied, will enable the individual to achieve and/or maintain a high quality of health and fitness throughout life. Based on assessment test results a physical examination by a physician may be recommended.

HSC 1400 First Aid, 3 credit hours, 45 lec.  
(Offered as needed) 
Preparation to meet emergencies that occur in the school, home or on the highway. Instruction and practice in dressing and bandaging, care of wounds, shock, bone and joint injuries, cardiopulmonary resuscitation, transportation of the injured, oral poisoning and other medical emergencies.

HSC 1531 Medical Terminology, 3 credit hours, 45 lec.  
(Offered as needed) 
An introduction to prefixes, suffixes, root words, combining forms, Latin and Greek forms, spelling, and pronunciation, with emphasis on building a working medical vocabulary based on body systems.

HUM 1020 † Humanities – Introduction, 3 credit hours, 45 lec.  
(Fall, Spring, Summer) 
A chronological survey of techniques and forms related to art, dance, film, literature, music, philosophy, religion and theatre. Art works and selected readings are utilized as much as possible. The course includes writing-across-the-curriculum (4,000 words) and speaking-across-the-curriculum. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.
HUM 1905
Independent Study – Arts and Humanities, 1 credit hour
(Offered as needed)
A defined independent study which is pursued under supervision of a faculty directing teacher and recorded through departmental procedures. Designed to permit a student to pursue nonscheduled academic and laboratory work which may be of a specialized or advanced nature and not available through classes or courses available on a college schedule. Departmental approval is required. Placement test may be required.

NOTE: If this course is used to satisfy Writing-Across-the-Curriculum requirements for transfer courses to OWC, a 4,000 word paper with a minimum grade of “C” is required. This course may be taken up to four (4) times for credit.

HUM 2251 † ❖
Humanities – A Contemporary Perspective, 3 credit hours, (Fall, Spring, Summer)
This course is an integrated study of the artistic, cultural, philosophic, religious, social, and technological influences that shape modern western cultures in the modern era. The focus will begin with the 20th century and follow, chronologically, the issues of the modern era. Gordon Rule course which requires 4,000 words of writing and a minimum grade of “C” if used to satisfy Gordon Rule general education requirements. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC0080 and/or LIN 1670 with a grade of “C” or better.

HUM 2700 ❖
Humanities – Foreign Study, 3 credit hours, 15 lec., 60 lab.
(Offered as needed)
A variable humanities content course designed to allow students first-hand learning experiences outside the United States. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

HUM 2920
Humanities Colloquium –
1 credit hour, 5 lec., 20 lab.
(Fall, Spring, Summer)
Humanities Colloquium is a lab designed to introduce students to critical visual and listening skills to become an intelligent arts consumer. Initial lecture sessions are devoted to discussions of the elements of analysis of art works, music pieces, theatre performances, and dance presentations. Students will be required to attend selected OWC Visual and Performance Arts presentations and to write a short critical review of each. Topics may vary. Prerequisite: Placement test may be required.

HUM 2930
Humanities – Special Topics, 3 credit hours, 45 lec.
(Fall, Spring, Summer)
A defined special topics course which is pursued under supervision of a faculty member and recorded through usual departmental procedures. Designed to permit a student to pursue non-scheduled academic and laboratory work which may be of a specialized nature and not available through the college schedule.

HUN 2201 ∆
Nutrition, 3 credit hours, 45 lec.
(Fall, Spring, Summer)
The role of nutrients in maintenance of physiological well-being. Application of nutrition principles to the individual and family as well as to some selected problems.

HUN 2410A*
Child Nutrition and Health, 3 credit hours, 45 lec.
(Offered as needed)
Methods of meeting physical needs of young children through nutrition and good health practices. Recognition of childhood diseases and care of the handicapped child.

ISS 1905
Independent Study – Social Science, 1 credit hour, 45 hours
(Offered as needed)
Directed study and individual projects designed to meet the needs of students interested in a specialized area of the social sciences for which present course availability is limited. This course may be taken up to four (4) times for credit.

INR 2002
Current World Problems, 3 credit hours, 45 lec.
(Offered as needed)
Critical world issues and immediate troubled areas against a historical, political, economic, and social background as an introduction to international relations. The individual student develops a special area of interest to explore in-depth the principles of international relations after their instruction.

INR 2270
Study Abroad/Introduction to International Studies, 3 credit hours, 30 lec., 30 lab.
(Offered as needed)
A variable content course designed to allow students first-hand learning experiences around the world. Initial classroom hours on campus will give students general background information on the country(ies) to be visited. Foreign countries become, in effect, laboratories. Students will gain a broader vision of world societies through exposure to foreign culture, political, and economic systems. Provides a broad overview of major nations and how they relate to each other as well as their impact on the international balance of power. Major topics include the global community, tools of power, international issues, and the evolution of the international system.

LIN 1670
Writing and Grammar, 3 credit hours, 45 lec., (Fall, Spring, Summer)
The course includes practice in writing short essays and encompasses a comprehensive review of grammar and mechanics. Placement is determined by (1) a grade of “C” or better in ENC 0080 or (2) by a score of 83 or above on the FCPT. This course is strongly recommended for students scoring 83-91 on the FCPT.

LIN 1742
English Grammar and Style, 3 credit hours, 45 lec. (Offered as needed)
Principles and rules of traditional and modern English grammar and effective style.

† Courses listed with this symbol contain an oral communication component and may be used to satisfy the Speaking-Across-the-Curriculum requirement.

❖ This college credit course qualifies as having an international and/or diversity focus for Teacher Education Programs common prerequisites.

∆ Technology-Across-the-Curriculum Course
LIS 1001
Library Skills, 1 credit hour, 30 lab.
(Offers as needed)
A course creating learning situations in which individual students can become effective independent users of Learning Resources facilities. This course is recommended for all degree-seeking students in their first term.

LIS 2004
Introduction to Internet Research, 1 credit hour, 30 lab.
(Offers as needed)
Introduction to Internet Research is a one-credit hour course offered by the Florida Public Community College system. This course is delivered via the World Wide Web and Internet e-mail. The course focuses on methods of accessing information resources available through the Internet. Students will learn to design search strategies, retrieve, evaluate, and cite Internet resources. The World Wide Web, e-mail, discussion groups, chat, FTP, Gopher, and Telnet are some of the topics covered. Prerequisite: A full service Internet account, including an electronic mail address from an Internet Service Provider (ISP), or access through a corporate or educational institution prior to beginning the course.

LIT 2090
Contemporary Literature, 3 credit hours, 45 lec.
(Offers as needed)
Studies in modern drama, prose, and poetry, focusing on their comments on modern man. May be used as Humanities credit. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: ENC 1101.

LIT 2100
World Literature, 3 credit hours, 45 lec.
(Fall, Spring, Summer)
Designed to encourage students to know and appreciate something of the great literature which helps to mold their thinking and everyday living. To include, without regard to national origin, those masterpieces of the Western World which reflect their cultural and intellectual heritage. May be used as a Humanities credit. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: ENC 1101.

MAC 1105
College Algebra, 3 credit hours, 45 lec.
(Fall, Spring, Summer)
Function-based college algebra course which will include the following topics: functions and functional notation; domains and ranges of functions; graphs of functions and relations; operations on functions; inverse functions; exponential and logarithmic functions; absolute value and radical functions; exponential and logarithmic properties, functions, and equations; systems of equations and inequalities; and applications of functions (curve fitting, modeling, optimization, exponential/logarithmic growth and decay). Non-symbolic graphing calculators are required. The TI-83 Series is recommended. Prerequisites: MAT 1033A “Intermediate Algebra” or equivalent with a “C” or better or suitably placement score.

MAC 1114
Trigonometry, 3 credit hours, 45 lec.
(Fall, Spring, Summer)
This is the second course in a pre-calculus sequence. A typical modern trigonometry course which includes the following topics: the six trigonometric functions and their inverses; identities; right triangles; applications; vectors; circular functions; graphs of trig functions and inverse trig functions; trigonometric equations; triangles; complex numbers; and polar graphs. Non-symbolic graphing calculators are required. The TI-83 Series is recommended. Prerequisite: Completion of MAC 1140 with a grade of “C” or better, or concurrent enrollment in MAC 1140. Equivalent courses from other institutions may be used to meet the prerequisites.

MAC 1140
Pre-Calculus Algebra, 3 credit hours, 45 lec.
(Fall, Spring, Summer)
First course in a two-course pre-calculus sequence. Covers equations and inequalities; linear, quadratic logarithmic and exponential functions and relations; systems of equations, matrices and determinants, mathematical proof techniques, including mathematical induction. Binomial theorem, sequences and series; and applications of algebraic techniques in the real world. Non-symbolic graphing calculators are required. The TI-83 Series is recommended. Prerequisite: Completion of MAC 1105 with a grade of “C” or better, or equivalent.

MAC 1147
Precalculus Algebra/Trigonometry, 4 credit hours, 60 lec.
(Offers as needed)
This course reviews algebra and trigonometry. Topics include polynomial, rational, exponential, logarithmic, and trigonometric functions, inverse functions, trigonometric identities and equations, solutions of triangles, vector algebra, topics from analytical geometry, sequences, series, mathematical induction and the binomial theorem. Non-symbolic graphing calculators are required. The TI-83 Series is recommended. Prerequisite: High School trigonometry with a “B” or better.

MAC 1154
Analytic Geometry, 3 credit hours, 45 lec.
(Offers as needed)
Typical modern analytic geometry course in two-and three-dimensional space. Prerequisite: Completion of MAC 1140 and MAC 1114 with a grade of “C” or better or equivalent.

MAC 2233
Calculus for Business, 3 credit hours, 45 lec.
(Offers as needed)
A Calculus course covering limits, continuity, differentiation, and integration with emphasis on business applications. There is some mathematical theory; but, in general, topics are approached from an intuitive and applied point of view. Non-symbolic graphing calculators are required. The TI-83 Series is recommended. Prerequisite: Grade of “C” or better in MAC 1105 or equivalent.
MAC 2311
Calculus I,
4 credit hours, 60 lec.
(Fall, Spring, Summer)
First course in a three-course sequence. Covers limits and continuity, rules of differentiation, the chain rule, derivatives of trigonometric functions, derivatives of logarithmic functions, derivatives of exponential functions, derivatives of inverse trigonometric functions, applications of derivatives to curve sketching, L'Hopital's Rule, indeterminate forms and maxima/minima problems, the mean value theorem, Rolle's theorem, the definite and indefinite integrals and the Fundamental Theorem of Integral Calculus, area, and applications of integrals. Non-symbolic graphing calculators are required. The TI-83 Series is recommended. Prerequisite: Completion of MAC 1147 with a grade of “C” or better, or equivalent.

MAC 2312
Calculus II,
4 credit hours, 60 lec.
(Fall, Spring, Summer)
Second course in a three-course sequence. Techniques for finding areas, volumes, arc lengths and surface areas; methods of integration including integration by parts, trigonometric substitution, and partial fractions; indeterminate forms and L'Hopital's Rule; improper integrals, conic sections; graphing and area in polar coordinates; infinite sequences and series; tests for absolute and conditional convergence of series; power series. Non-symbolic graphing calculators are required. The TI-83 Series is recommended. Prerequisite: Completion of MAC 2311 with a grade of “C” or better, or equivalent.

MAC 2313
Calculus III, 4 credit hours, 60 lec.
(Fall, Spring, Summer)
Third course in a three-course sequence. Vectors and vector functions; dot product, cross product, curvature, and motion in space; quadric surfaces; functions of two or more variables, partial derivatives, gradients, directional derivatives, tangent lines and planes, and application of partial derivatives to maxima/minima; Lagrange multipliers, Taylor's formula; multiple integrals in rectangular, cylindrical, and spherical coordinates, and their applications; line integrals; Green's theorem, surface area, the divergence theorem and Stokes's theorem. Non-symbolic graphing calculators are required. The TI-83 Series is recommended. Prerequisite: Completion of MAC 2312 with a grade of “C” or better, or equivalent.

MAN 2021
Management, 3 credit hours, 45 lec.
(Fall, Spring, Summer)
Each function of management is analyzed and described in a systematic manner. Both the distilled experience of practical managers and the findings of scholars are presented. Other aspects of management are presented such as management process and concepts analysis of the technical knowledge and skills of managers, influences upon managerial decision-making process, and the psychological principles inherent in management.

MAN 2300
Personnel Management, 3 credit hours, 45 lec.
(Fall, Spring, Summer)
An introduction to personnel practices and procedures. Topics include the personnel management system, maximizing employee potential, organizational behavior, and labor management relations.

MAP 2302
Differential Equations, 3 credit hours, 45 lec.
(Fall, Spring)
An introduction to ordinary differential equations with an emphasis on first and second order linear equations and applications. Prerequisite: Either completion of MAC 2313 with a “C” or better or concurrent enrollment in MAC 2313. Equivalent courses from other institutions may be used to meet the prerequisite.

MAR 2011
Introduction to Marketing, 3 credit hours, 45 lec.
(Fall, Spring, Summer)
An introductory course in the field of marketing including a look at marketing as it exists in our economy today. Consideration of the market, the product, distribution channels. Special emphasis on the study of human behavior in marketing promotion.

MAS 2103
Linear Algebra, 3 credit hours, 45 lec.
(Offered as needed)
An introductory course in Linear Algebra intended to give students enough insight to enable successful pursuit of more abstract mathematics courses. Non-symbolic graphing calculators are required. The TI-83 Series is recommended. Prerequisite: MAC 2312 with a grade of “C” or better, or equivalent.

MAT 2905
Independent Study – Mathematics, 1 credit hour, 30 lab.
(Fall, Spring, Summer)
A course designed to allow a student to go deeper into special areas of interest. Prerequisite: Passing score on placement exam. This course may be used as an elective, but does not meet Gordon Rule requirements for B.A.S., A.A., or A.S. transfer students.

MCB 2010C
Microbiology, Allied Health, 4 credit hours, 45 lec., 30 lab.
(Fall, Spring, Summer)
This course is designed for students entering programs in the numerous health fields, but primarily for pre-nursing students. The material presented covers the fundamentals of microbiology needed to understand the biology of infectious diseases and the agents that cause them. Not recommended for biology, pre-med, pre-vet, and dentistry. Prerequisite: CHM1020 or CHM1045C or BSC1010C or BSC1085C.
MCB 2013C  
Microbiology,  
4 credit hours, 30 lec., 60 lab.  
(Offered as needed)  
A general survey of microbiology, the  
cultivation and observation of  
microorganisms and their chemical  
and biological relationships to water,  
food, industrial processes and disease.  
Prerequisite: BOT 1010C or ZOO  
1010C and CHM 1045C.  

MET 1010  
Introduction to Meteorology,  
4 credit hours, 60 lec.  
(Fall, Spring)  
Structure of the atmosphere, weather  
processes, systems and phenomena;  
climate and climatic change, economic  
impact of weather.  

MGF 1106  
Mathematics for Liberal Arts,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
This course is designed for those stu- 
dents requiring only general education  
mathematics courses. It includes sys- 
tematic counting, probability, statisti- 
cs, and history of mathematics,  
geometry, sets and logic. Prerequisite:  
Completion of MAT 1033A or higher  
mathematics course with a grade of  
“C” or better, or equivalent or suitable  
placement score.  

MGF 1107  
Mathematics for Liberal Arts II,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
This course is designed for those stu- 
dents requiring only general educa- 
tion mathematics courses. Topics  
include numeration and mathematical  
systems, number theory, linear and  
exponential growth, history of mathe- 
matics, voting techniques, graph  
theory, and consumer mathematics.  
Prerequisites: MAT 1033A or higher  
level math with a grade of “C” or  
better, or equivalent or appropriate  
placement score.  

MGF 2118  
Math Preparation for CLAST,  
1 credit hour, 15 lec.  
(Fall, Spring, Summer)  
A short course dealing with mathe- 
matical skills needed for success- 
ful completion of coursework in a variety  
of disciplines. Prerequisite: Completion  
of a general education  

MKA 2021*  
Professional Selling,  
3 credit hours, 45 lec.  
(Offered as needed)  
Selling, correct attitudes and personal  
attributes for dealing with the public  
on a business or professional basis.  

MKA 2041*  
Retail Management,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
Retail store management, location,  
buying merchandise, control policies,  
services, pricing, expenses, profits:  
training and supervision of retail sales  
forces, administrative problems. Also  
includes a variety of current perspec- 
tives in retailing management.  

MKA 2511*  
Introduction to Advertising,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
Advertising as a marketing tool, its  
planning, creation, and use. A survey  
of copy writing, layout, and media  
(newspapers, magazines, radio, televi- 
sion, films, etc.)  

MNA 1016*  
ISO9000 – Industrial Management,  
3 credit hours, 45 lec.  
(Offered as needed)  
The course presents the functions of  
a manager, the views, techniques, and  
responsibilities of management.  
Included also are planning, forecast- 
ning, organizing, theory, staffing, and  
other related topics.  

MNA 1161*  
Customer Service,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
Designed to build and maintain the  
critical skills necessary to be a dynam- 
ic and successful professional.  
Students and front-line individuals  
who work with customers every day  
will develop strategies to create posi- 
tive customer relationships. This  
course provides a practical approach  
to the thorny issues of customer dis- 
satisfaction and will enable managers  
to keep service personnel focused on  
the organization’s goals and objec- 
tives.  

MNA 1345*  
Supervision I,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
The course presents the functions of a  
manager, philosophy of general man- 
agement, organizational structure, employer socio-economic  
climate and career information.  
Included also are job descriptions and  
specifications, recruiting practices,  
applications, resumes, interviewing,  
placement, performance appraisals,  
wage and salary administration and  
other related topics.  

MNA 1346*  
Supervision II, 3 credit hours, 45 lec.  
(Offered as needed)  
The course presents a continuing  
study of the functions of a personnel  
manager, philosophy of general  
management, employee socio-economic  
climate and other information.  
Included, also, are orientation, train- 
ing, labor unions, safety, health and  
other related topics.  

MNA 2100*  
Organizational Behavior,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
Designed to help students develop an  
understanding of how they may be  
involved to work together in greater  
harmony in all kinds of organizations.  
The basis of human motivation and  
how it is influenced by leadership, the  
organization itself, and the social envi-
ronment in which the organization  
exists.  

MNA 2141  
Leadership Techniques,  
3 credit hours, 45 lec.,  
(Offered as needed)  
This interdisciplinary course addresses  
leadership in a group setting and  
focuses on leadership development  
through discussion, readings, group  
and individual projects and other  
applied activities.  

MNA 2141A  
Interdisciplinary Leadership  
Development, 3 credit hours, 45 lec.,  
(Offered as needed)  
This course is designed to provide  
emerging and existing leaders the  
opportunity to explore the concept of  
leadership and to develop and  

MSL 1001  
Foundations of Officership,  
1 credit hour, 15 lec., 15 lab. (Fall)  
This course examines the unique  
duties and responsibilities of officers,  
organization and role of the Army,  
reviews skills pertaining to fitness and  

* This college credit course is not in- 
tended for transfer and may not be  

LOWER DIVISION COURSE DESCRIPTIONS 161
MSL 1002
Basic Leadership,
1 credit hour, 15 lec., 15 lab.
(Spring)
This course presents fundamental leadership concepts and doctrine, the practice of basic skills that underlie effective problem solving, and examines the officer experience. This course requires participation in a weekly one-hour leadership laboratory.

MSL 2101
Individual Leadership Studies,
2 credit hours, 30 lec., 15 lab.
(Fall)
This course develops knowledge of self-confidence and individual leadership skills. It develops problem solving and critical thinking skills, as well as how to apply communication, feedback, and conflict resolution skills. This course requires participation in a weekly one-hour leadership laboratory.

MSL 2102
Leadership and Teamwork,
2 credit hours, 30 lec., 15 lab.
(Spring)
This course focuses on self-development guided by knowledge of self and group processes, challenges current beliefs, knowledge, and skills. This course requires participation in a weekly one-hour leadership laboratory.

MTB 1103*
Business Mathematics,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
Prerequisite: MUM 1620.
This course requires participation in several scheduled performance activities. This course may be taken alone. This course may also be taken in conjunction with live performance activities. This course is designed to provide students with “hands on” experience in conjunction with live performance activities. This course may be taken three (3) times for credit. Windows 98 or higher is required for students taking the online distance learning version of this course.

MUH 1001†
Humanities – Music,
3 credit hours, 45 lec.
(Offered as needed)
Designed to develop a more intelligent understanding and appreciation of music. Brings about an awareness of music as a vital source in human life, including the advantageous utilization of leisure time and developing positive attitudes toward culture and the fine arts. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If

used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

MUH 2930
Music Humanities – Special Topics,
3 credit hours, 45 lec.
(Fall, Spring Summer)
A defined special topics course which is pursued under supervision of a faculty member and recorded through usual departmental procedures. Designed to permit a student to pursue non-scheduled academic and laboratory work which may be of a specialized nature and not available through the college schedule.

MUM 1620
Audio and Acoustic Fundamentals,
3 credit hours, 45 lec.
(Offered as needed)
Prerequisite: MUM 2601.
Audio & Acoustic Fundamentals explores the basics of audio systems and equipment and the acoustical environment in which they are used. Emphasis is placed on equipment terminology, function and acoustical listening. The two basic fundamentals are summed together to begin laying the basic foundation required to operate audio & recording equipment.

MUM 2300
Introduction to the Music Industry,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
This course is as an introduction to the history, principles, and practices of the music industry. Topics will include music publishing, copyright, distribution, industry organization, producing, and general business functions. Prerequisite: MUM 1620.

MUM 2600
Recording Techniques I,
3 credit hours, 30 lecture, 30 lab.
(Fall, Spring, Summer)
This course is designed as an introduction to basic audio engineering and studio practices. Listening exercises, psychoacoustics, microphone characteristics, and studio etiquette will be studied. In addition the student will study techniques and practices and procedures of multi-track recording, acoustical balancing, editing, and over dubbing in a variety of situations.
MUN 1001
Summer Ensemble Workshop II, 3 credit hours, 15 lec., 60 lab.
(Summer)
An ensemble workshop and performance to improve vocal and physical presentation skills. A variety of musical physical styles will be studied and performed. Students participating in Summer Ensemble Workshop II will be expected to participate in several scheduled performances. Prerequisite: MUN 1001.

MUN 1002
Summer Ensemble Workshop III, 3 credit hours, 15 lec., 60 lab.
(Summer)
An ensemble workshop open to any student who desires to improve vocal and physical presentation skills. A variety of musical physical styles will be studied. Students participating in Summer Ensemble Workshop will be expected to participate in several scheduled performances. Prerequisite: MUN 1001.

MUN 1180
OWC Band (Community), 1 credit hour, 30 lab.
(Offered as needed)
A music organization providing an outlet and learning experience for both college students and wind or percussion players to read and perform standard band literature, transcriptions and program selections. Required of all wind or percussion music majors and minors. May be taken four times (4) for credit. Prerequisites: Ability to read music and play a band instrument. Audition by Director or 1 year experience in a high school advanced band.

MUN 1210
OWC Symphony Orchestra I, 1 credit hour, 45 lab.
(Fall, Spring)
A music organization providing an outlet and learning experience for both college students and wind or percussion players to read and perform standard band literature, to improve individual instrumental skills, and to sharpen ensemble techniques. The Symphony occasionally performs with guest artists, choral groups and theatre ensembles. This course may be taken four (4) times for credit. Prerequisite: experience in symphony orchestra or symphonic band.

MUN 1310
OWC Chorus I, 1 credit hour, 30 lab.
(Offered as needed)
A music organization open through auditions to any student having experience in reading music. A variety of musical styles will be studied and performed. Students electing OWC Chorus will be expected to participate in scheduled performances. MUN 1310 may be taken four times for credit. Prerequisite: Experience in high school choruses or choirs.

MUN 1340A
OWC Show Choir I, 1 credit hour, 45 lab.
(Fall, Spring)
A study of the fundamental techniques and principles of integrating dance, voice, music and acting into a performance show choir. Training in voice, jazz movement, character interpretation and personality presentation is covered. Membership is open to all part-time or full-time students on a credit or audit basis. All music majors and performance majors must participate. The show choir appears in public performances at frequent intervals throughout the year. Prerequisite: Audition, consent of Department, music or performance minor. This course may be taken four (4) times for credit.

MUN 1360
Madrigal Singers I, 1 credit hour, 45 lab.
(Offered Fall, Spring)
Course teaching madrigal styles to include a cappella, Renaissance madrigals (choral settings of love songs), as well as choral folk songs. May be repeated four times for credit. Prerequisites: audition based on vocal quality, musicianship and sight reading ability.

MUN 1390
Symphonic Chorus I, 1 credit hour, 45 lab.
(Fall, Spring)
A music organization open through auditions to any student. The Symphonic chorus will study and perform literature for the large sized chorus. Prerequisite: Audition or permission of instructor. May be taken up to four (4) times for credit.

MUN 1421
Flute Ensemble, 1 credit hour, 30 contact, 30 lab.
(Fall, Spring)
The study and performance of flute ensemble and flute choir music in a musical group. May be taken four (4) times for credit. Prerequisites: audition or instructor recommendation only.

MUN 1710A
Rock and Jazz Ensembles I, 1 credit hour, 45 lab.
(Offered as needed)
Music performing organization open to any student who wants to develop his or her performance repertoire. Laboratory studies include techniques of performing music, literature, practices, styles and media applicable to designated organized ensemble. May be taken four times for credit. Prerequisite: Some experience in high school bands, etc. This course may be taken up to four (4) times for credit.

MUN 1711
Jazz Workshop, 1 credit hour, 30 lab.
(Offered as needed)
The study and performance of jazz music in the context of the small ensemble. This will be accomplished through the performance of both stock arrangements and student arrangements. Instrumentation: 5 wind, 4 rhythm, voice. This course may be taken up to four (4) times for credit. Prerequisite: Strong music performance background with basic knowledge of the jazz idiom.

MUN 1720A
Rock and Jazz Ensembles II, 1 credit hour, 45 lab.
(Fall, Spring)
Music performing organization open to any student who wants to develop his/her performance repertoire. Laboratory studies include techniques of performing music, literature, practices, styles and media applicable to designated organized ensemble. Prerequisite: Some experience in high school bands, etc. This course may be taken up to four (4) times for credit.

MUN 2120
OWC Band Community II, 1 credit hour, 45 lab.
(Offered as needed)
A music organization providing an outlet and learning experience for both college students and wind or percussion players to read and perform standard band literature, transcriptions and program selections. Required of all wind or percussion music majors and minors. May be taken four times for credit. Prerequisite: MUN 1180.
MUN 2211  
OWC Symphony Orchestra II,  
1 credit hour, 45 lab.  
(Fall, Spring)  
A music organization providing an outlet and learning experience to study and perform standard orchestra literature, to improve individual instrumental skills, and to sharpen ensemble techniques. The Symphony occasionally performs with guest artists, choral groups and theatre ensembles. This course may be taken four (4) times for credit.

MUN 2361  
Madrigal Singers II,  
1 credit hour, 45 lab.  
(Fall, Spring)  
Madrigal Singers is an advanced choral ensemble composed of approximately 12 to 14 singers. Maybe taken 4 times for credit. Prerequisite: MUN 1360.

MUN 2371  
OWC Show Choir II,  
1 credit hour, 45 lab.  
(Fall, Spring)  
A study of the fundamental techniques and principles of integrating dance, voice, music and acting into a performance show choir. Training in voice, jazz movement, character interpretation and personality presentation is covered. Membership is open to all part-time or fulltime students on a credit or audit basis. All music majors and performance majors must participate. The show choir appears in public performances at frequent intervals throughout the year. Prerequisite: MUN 1340A, Show Choir I. This course may be taken four (4) times for credit.

MUN 2392  
Symphonic Chorus II,  
1 credit hour, 45 lab.  
(Fall, Spring)  
A music organization open through auditions to any student. The Symphonic Chorus will study and perform literature for the large sized chorus. This course may be taken up to four (4) times for credit. Prerequisite: MUN 1390.

MUS 1905  
Independent Study – Music,  
1 credit hour  
(Offered as needed)  
A defined independent study which is pursued under supervision of a faculty directing teacher and recorded through departmental procedures. Designed to permit a student to pursue non-scheduled academic and laboratory work which may be of a specialized or advanced nature and not available through classes or courses available on a college schedule. Departmental approval required. Placement test may be required.

NOTE: If this course is used to satisfy Writing-Across-the-Curriculum requirements for transfer courses to OWC, a 4,000 word paper with a minimum grade of “C” is required. This course may be taken up to four (4) times for credit.

MUS 2930  
Music – Special Topics,  
3 credit hours, 45 lec.  
(Fall, Spring Summer)  
A defined special topics course which is pursued under supervision of a faculty member and recorded through usual departmental procedures. Designed to permit a student to pursue non-scheduled academic and laboratory work which may be of a specialized nature and not available through the college schedule.

MUT 1001  
Fundamentals of Music,  
3 credit hours, 45 lec.  
(Fall, Spring)  
A pre-theory course for the nonmusic major, or for the elementary education major. Included are the studies of reading clefs, rhythm, notation, scales, and doing simple keyboard and sight-singing exercises. The emphasis is on developing music reading skills.

MUT 1121 ∆  
Music Theory I/Ear Training and Sight Singing, 3 credit hours, 30 lec., 30 lab. (Offered as needed)  
A study of the fundamentals of basic musicianship, music notation, understanding of simple rhythms, key situations, intervals, ear training, dictation, sight-singing, major and minor scales, intervals, triads, chords, polyphonic composition and elementary keyboard work. Prerequisite: MUT 1001 or instructor permission.

MUT 1122 ∆  
Music Theory II/Ear Training and Sight Singing, 3 credit hours, 30 lec., 30 lab. (Offered as needed)  
A continuation of MUT 1121. Basic musicianship, writing and reading of music, ear training, dictation, sight-singing will be studied, as well as major and minor scales, intervals, triads, seventh chords, inversions, cadences, periods and progressions in all keys. Two, three and four part chords and polyphonic composition. Prerequisite: MUT 1121.

MUT 1641  
Jazz Improvisation I,  
2 credit hours, 15 lec., 30 lab.  
(Fall, Spring)  
A course designed to introduce the student to the concepts of Jazz Improvisation. Through active participation the student will develop the basic skills necessary to become a competent jazz soloist. This course may be taken two (2) times for credit. Prerequisite: MUT 1121.

MUT 2126  
Music Theory III/Ear Training and Sight Singing, 3 credit hours, 30 lec., 30 lab. (Offered as needed)  
A continuation of MUT 1121 and MUT 1122. The harmonization and modulation of melodies through the use of nondominant harmony and the study of sequence writing. Incorporates keyboard harmony plus sight reading of chromatic melodies, large intervals, and advanced rhythms. Prerequisite: MUT 1122.

MUT 2127  
Music Theory IV/Ear Training and Sight Singing, 3 credit hours, 30 lec., 30 lab. (Offered as needed)  
The continued study of harmonization of melodies, sequence writing, sight reading, intervals, advanced rhythms and structures. Prerequisites: MUT 2126.

MUT 2351  
Introduction to Jazz Theory/Arranging, 3 credit hours, 45 lec. (Offered as needed)  
A lecture-demonstration-workshop, approach to jazz/pop arranging open to any student who wants to begin or understand composing/arranging. Studies include jazz/pop harmonies, arranging fundamentals and techniques, and the use of jazz/pop instrumentation. Workshop practices include assigned arrangements with the arrangements played by the jazz ensemble, and other audio demonstration. Prerequisite: MUT 1122.

MUT 2642  
Jazz Improvisation II,  
2 credit hours, 45 lec., 30 lab.  
(Fall, Spring)  
A continuation of MUT 1641 Jazz Improvisation I. This course is designed to further develop the skills needed to become a competent soloist in the jazz idiom. This course may be taken two (2) times for credit. Prerequisite: MUT 1641.

∆ Technology-Across-the-Curriculum Course
MVB 1201
Applied Music Secondary – Brass I, 1 credit hour, 7.5 lab.
(Offered as needed)
Private instruction: one half-hour private lesson per week. Minimum one hour daily practice. For nonmusic majors and music majors. Course may be taken four (4) times for credit.

MVB 2202
Applied Music Secondary – Brass II, 1 credit hour, 7.5 lab.
(Offered as needed)
Private instruction: one half-hour private lesson per week. Minimum one hour daily practice. For nonmusic majors and music majors. Course may be taken four (4) times for credit.

MVK 1211
Applied Music – Piano I, 1 credit hour, 7.5 lab.
(Fall, Spring, Summer)
Private instruction in piano, as a secondary instrument, consisting of one half-hour lesson per week. Minimum of one hour daily practice is required. Course may be taken four (4) times for credit.

MVK 2221
Applied Music – Piano II, 1 credit hour, 7.5 lab.
(Offered as needed)
Private instruction in piano, as a secondary instrument, consisting of one half-hour lesson per week. Minimum of one hour daily practice is required. Course may be taken four (4) times for credit.

MVP 1201
Applied Music Secondary – Percussion I, 1 credit hour, 7.5 lab.
(Offered as needed)
Private instruction in percussion instruments to develop the student's performance ability in an applied area. One half-hour private lesson per week. Minimum of one hour daily practice. Minimum of one hour daily practice is required. Course may be taken four (4) times for credit.

MVP 2202
Applied Music Secondary – Percussion II, 1 credit hour, 7.5 lab.
(Offered as needed)
Private instruction in percussion instruments to develop the student's performance ability in an applied area. One half-hour private lesson per week. Minimum of one hour daily practice. Course may be repeated four (4) times for credit. Prerequisite: MVP 1201.

MVS 1016
Applied Strings – Guitar I, 1 credit hour, 7.5 lab.
(Fall, Spring, Summer)
Private instruction on guitar. Designed to equip the student for continuing study leading progressively to greater proficiency. May be taken four times for credit.

MVS 1017
Applied Strings – Bass Guitar I, 1 credit hour, 7.5 lab.
(Fall, Spring, Summer)
Private instruction in guitar. Designed to equip the student for continuing study leading progressively to greater proficiency. May be taken four times for credit.

MVS 1111
Class Guitar, 1 credit hour, 15 lec.
(Fall)
The study of basic techniques for the beginning and continuing student.

MVS 1201
Applied Music Secondary – Strings I, 1 credit hour, 7.5 lab.
(Offered as needed)
Private instruction: one half-hour private lesson per week. Minimum one hour daily practice. For non-music majors and music majors. Course may be taken four (4) times for credit.

MVS 2026
Applied Strings – Guitar II, 1 credit hour, 7.5 lab.
(Fall, Spring, Summer)
Private instruction in guitar. Designed to equip the student for continuing study leading progressively to greater proficiency. May be taken four times for credit.

MVS 2027
Applied Strings – Bass Guitar II, 1 credit hour, 7.5 lab.
(Offered as needed)
Private instruction in guitar. Designed to equip the student for continuing study leading progressively to greater proficiency. May be taken four times for credit. Prerequisite: MVS 1016.

MVS 2202
Applied Music Secondary – Strings II, 1 credit hour, 7.5 lab.
(Offered as needed)
Private instruction: one half-hour private lesson per week. Minimum one hour daily practice. For non-music majors and music majors. Course may be taken four (4) times for credit. Prerequisite: MVS 1201.

MVS 2207
Applied Music Secondary – Piano II, 1 credit hour, 7.5 lab.
(Offered as needed)
Private instruction in piano, as a secondary instrument, consisting of one half-hour lesson per week. Minimum one hour daily practice. For non-music majors and music majors. Course may be taken four (4) times for credit.

MVW 1201
Applied Music Secondary – Woodwinds I, 1 credit hour, 7.5 lab.
(Offered as needed)
Private instruction: one half-hour private lesson per week. Minimum one hour daily practice. For non-music majors and music majors. Course may be taken four (4) times for credit.

MVW 2202
Applied Music Secondary – Woodwinds II, 1 credit hour, 7.5 lab.
(Offered as needed)
Private instruction: one half-hour private lesson per week. Minimum one hour daily practice. For non-music majors and music majors. Course may be taken four (4) times for credit. Prerequisite: MVW 1201.

NUR 1021C
Nursing Process I, 6 credit hours, 75 lec., 30 lab. (Fall)
This course introduces concepts and principles of holistic nursing care. Students will build on knowledge obtained in the biophysical and psychosocial sciences in the first of four required clinical nursing courses in the nursing curriculum. Theory content includes an introduction to the healthcare system; ethical-legal aspects of nursing practice; health and illness; functional health patterns of clients; stress-adaptation; professional behaviors (e.g., caring behaviors); communications and all steps of the nursing process with emphasis on assessment of clients. Students begin socialization into the role of the Associate Degree Nurse as a member of an interdisciplinary health care team. Prerequisite: Admission to the Nursing Program or permission of the Director of Nursing. Co-requisites: BSC 1085C or BSC 1086C, DEP 2004. Special Nursing Program policies may apply to this course.
NUR 1021L
Nursing Process I Clinical Experience, 4 credit hours, 180 clin. (Fall)

An introduction to the role of the Associate Degree Nurse in providing direct, holistic nursing care to young, middle-aged and older adults who are hospitalized or receiving care in community settings. Emphasis is on applying all steps of the nursing process with focus on assessment skills. Critical thinking is an expected behavior along with skills in working effectively with peers and other health care professionals as a team member; caring behaviors and therapeutic communication with clients as a provider of bedside, technical nursing care. The student is expected to demonstrate safe performance of basic nursing skills, e.g., medication administration, physical assessment and comfort care. Prerequisite: Admission to the Nursing Program or permission of the Director of Nursing; Co-requisite: NUR 1021C. Special Nursing Program policies may apply to this course.

NUR 1141L
Pharmacologic Principles in Nursing, 1 credit hour, 30 lab. (Spring)

This course provides an introduction to concepts and principles of pharmacology related to safe administration of therapeutic agents by the nurse. Students learn major drug classifications and selected prototypes along with principles of safe, effective administration of drugs and other therapeutic agents. By the end of the course, students must apply computation skills to demonstrate administration of drugs without error in order to successfully pass the course and progress in the nursing program. Prerequisites: Admission to the Nursing Program or permission of the Director of Nursing, NUR 1021C, BSC 1085C, BSC 1086C, or BSC 1086C, HUN 2201, SYG 2000, ENC 1101, DEP 2004 and LPN Licensure or equivalent education. Co-requisites: MCB 2010C, NUR 1200L. Special Nursing Program policies may apply to this course.

NUR 1200L
Orientation to AD Nursing Clinical Experience, 3 credit hours, 90 clin. (Summer)

This course is designed for LPNs and other special students; an opportunity for advanced placement in the nursing program via reviewing and validating prior learning. Students will learn physical assessment skills, holistic care planning and demonstrate nursing skills at the bedside of clients in acute care settings, i.e., the perioperative client, the obstetrical client and newborn. Critical thinking is stressed as students transition into the associate degree nursing student role. Successful completion of this course will allow students to progress to the second year of the nursing program. Prerequisites: Admission to the Nursing Program or permission of the Director of Nursing, BSC 1086C, HUN 2201, SYG 2000, ENC 1101, DEP 2004 and LPN Licensure or equivalent education; Co-requisites: MCB 2010C, NUR 1200C. Special Nursing Program policies may apply to this course.

NUR 1231C
Nursing Process II, 5 credit hours, 60 lec., 30 lab. (Spring)

The nursing process continues with emphasis on the planning of nursing care for adult clients experiencing threats to functional health patterns, including women and infants within a significant support system (e.g., families). Basic concepts and principles of holistic nursing are built upon with the care of adult perioperative clients, elderly clients whose health problems are more acute or chronic; the client with psycho-emotional dysfunctions, dysfunctional support systems situations, grief & loss. Students learn basic management skills as a team member in caring for a limited number of clients in hospitals with emphasis on coordination of nursing care and discharge planning. Conflict management skills are highlighted as the student increases role as client advocate. Prerequisites: Admission to the Nursing Program or permission of the Director of Nursing, NUR 1021C, NUR 1021L, BSC 1085C or BSC 1086C; Co-requisites: NUR 1231C, NUR 1411L, MCB 2010C, SYG 2000, BSC 1086C. Special Nursing Program policies may apply to this course.

NUR 1750L
Nursing Process II Clinical Experience, 4 credit hours, 180 clin. (Spring)

Continuation of the role of the Associate Degree Nurse in providing direct, holistic nursing care for adult clients during the childbearing process and/or experiencing dysfunctional health patterns. Clinical experiences in hospitals, clinics, long term facilities and community settings provide students with opportunities to plan, prioritize and begin to evaluate the effectiveness of bedside nursing care of adult perioperative clients, elderly clients and geriatric clients who benefit from a life review process, newborns and other clients experiencing situational and/or maturational crises. Students continue to develop management skills through conflict management and other professional behaviors. Students demonstrate safe performance of all basic and more complex nursing skills. Prerequisites: Admission to the Nursing Program or permission of the Director of Nursing, NUR 1021C, NUR 1021L, BSC 1085C or BSC 1086C; Co-requisites: NUR 1231C, NUR 1411L, MCB 2010C, SYG 2000, BSC 1086C. Special Nursing Program policies may apply to this course.

NUR 1940L
Nursing Clinical Externship, 3 credit hours, 126 clin. (Summer)

This elective course is designed to offer students the opportunity to gain additional clinical skills practice between the first and second year of the program. Working with a preceptor and the nursing faculty, the student will be able to perform all skills.
NUR 1940L (continued)
learned in the first two nursing courses in area hospitals, clinics or nursing homes as arranged by the instructor. Prerequisites: Admission to the Nursing Program or permission of the Director of Nursing, NUR 1231C/NUR 1750L; NUR 1141L. Special Nursing Program policies may apply to this course.

NUR 2233C
Nursing Process III, 6 credit hours, 75 lec., 30 lab. (Offered Fall)
Students continue to use the nursing process and critical thinking with emphasis on primary and secondary prevention as nursing interventions in clients experiencing threats to functional health patterns, including adults and children whose normal lines of defense have been invaded by stressors to the degree that hospitalization is necessary. Nursing practice issues continue to focus on ethical-legal issues related to acute and/or chronic illness and disability. Management skills include delegation and career development. Prerequisites: NUR 1231C, NUR 2811L; Co-requisite: NUR 2233L. Special Nursing Program policies may apply to this course.

NUR 2233L
Nursing Process III Clinical Experience, 4 credit hours, 180 lab. (Offered Fall)
Students continue to apply knowledge and skills learned in previous nursing courses in providing nursing care for hospitalized adults and children whose health problems are more complex and/or chronic. Clinical sites include health departments, clinics, physician offices, schools and other community settings. Students adapt therapeutic skills to meet the needs of clients experiencing psycho-emotional dysfunctions to the extent that they may be hospitalized. Students apply conflict resolution skills as needed to meet client and/or peer learning goals; they also begin to practice delegation skills with their peers. Students demonstrate continuation of all previously learned nursing skills and must perform safely all advanced nursing skills in this course. Prerequisites: NUR 1231C, NUR 1751L, BSC 2010C; Co-requisite: NUR 2233C. Special Nursing Program policies may apply to this course.

NUR 2241C
Nursing Process IV, 5 credit hours, 60 lec., 30 lab. (Offered Spring)
Students integrate knowledge and principles of the biophysical and psychosocial sciences to solve life-threatening problems that affect a limited number of critically ill clients in a variety of clinical settings. Students differentiate holistic nursing care therapies in primary, secondary and tertiary care settings. Students become proficient in applying all steps in the nursing process with emphasis on evaluating nursing care outcomes. Students apply critical thinking skills in exploring case-based practice situations and work together in learning seminars to select effective client care improvement processes. Self-evaluation is part of the socialization process to prepare students for the work world as competent, caring staff nurses. Nursing practice issues include licensure standards and continued professional development. Prerequisites: NUR 2233C; Co-requisite: NUR 2241L. Special Nursing Program policies may apply to this course.

NUR 2241L
Nursing Process IV Clinical Experience, 4 credit hours, 180 lab. (Offered Spring)
Students apply knowledge and principles of the biophysical and psychosocial sciences to assess, plan, implement and evaluate holistic nursing care of critically ill adults in hospitals, nursing homes, ambulatory care settings, and the home. Students will expand on management of care skills in preparation for their four-week clinical practicum prior to graduation from the program. Students will also shadow a home health/hospice nurse in observing treatment and palliative care of adults and children. Students must demonstrate competency in all behaviors required for an Associate Degree graduate. Prerequisites: NUR 2233L; Co-requisite: NUR 2241C. Special Nursing Program policies may apply to this course.

NUR 2811L
Nursing Practicum, 3 credit hours, 144 lab. (Offered Spring)
This course provides a time during the latter part of the last semester of the nursing program in which students begin to transition from the student role into the graduate role as Associate Degree Nurses. Students work with an experienced registered nurse preceptor to provide holistic nursing care for a limited number of clients with potentially life threatening health problems. Clinical experiences may take place in a variety of clinical settings and work schedules. Students develop team-leading skills in the clinical setting, delegating and evaluating aspects of care to other health team members. Focus is on demonstration of all professional behaviors and competencies expected of the Associate Degree Registered Nurse graduate at entry staff nurse level. Prerequisite: NUR 2241L. Special Nursing Program policies may apply to this course.

NUR 2930L
Nursing Practice Readiness, 1 credit hour, 30 lab. (Offered Spring)
This elective laboratory course assists the nursing student to prepare for the RN licensure examination (NCLEX-RN). Web-based instructional methodologies allow the student to complete the course within a self-paced time frame. Students practice test taking skills, self-evaluation and other strategies to gain confidence in sitting for the NCLEX-RN. Prerequisites: NUR 2241 or permission from nursing program director. Special Nursing Program policies may apply to this course.

NUR 2931
Special Topics in Associate Degree Nursing, 5 credit hours, 75 lec. (Offered as needed)
Students work individually to enhance nursing knowledge and skills applicable to selected topics in Associate Degree Nursing. AD nursing competencies provide the framework for learning prescriptions which include critical thinking and problem-solving. Seminars, journals, CAI, written assignments and student – instructor conferences guides students in meeting course objectives. Flexible schedule. Prerequisite: Admission to the program; permission of program director.

NUR 2931L
Special Topics in Associate Degree Nursing Laboratory, 4 credit hours, 120 lab. (Offered as needed)
Students work individually to apply concepts, principles and standards of nursing practice pertaining to client care needs in the acute, ambulatory or long-term care setting. Simulations, CAI and other laboratory activities within a flexible schedule assist students to meet individual learning goals. Prerequisite: Admission to the program; permission of program director. Corequisite: NUR 2293C.
OCE 1005C
Introduction to Oceanography,
4 credit hours, 45 lec., 30 lab.
(Fall, Spring)
A survey of the physics, chemistry, geology and biology of the oceans. Interrelationships between the atmosphere and oceans, methods of measurement and research, processes of coastal change and marine conservation. May be used to satisfy A.A. requirements in physical science for career goals other than the sciences, engineering, and pre-professional health care.

ORI 2000
Oral Interpretation,
3 credit hours, 45 lec.
(Offered as needed)
Oral interpretation of all genres of literature. Students read and research appropriate literature to cut, adapt, and present to the class as solo, duet, and group interpretations.

OST 1107
Typing and Word Processing I,
3 credit hours, 45 lec.
(Fall, Spring)
Integration of basic keyboarding and word processing – learning the keyboard, creating, editing, saving, and other word processing functions.

OST 1355*
Records Management,
3 credit hours, 45 lec.,
(Fall, Spring, Summer)
Methods and systems of filing used in business offices, filing equipment, and time-and-motion skills. Filing practice sets are used.

OST 2117
Typing and Word Processing II,
3 credit hours, 45 lec. (Spring)
Continuation of Typing and Word Processing I – develop keyboarding and document processing using a microcomputer. Prerequisite: OST 1107 or equivalent.

OST 2127*
Typing and Word Processing III,
3 credit hours, 45 lec.
(Offered as needed)
Development of occupational proficiency in business letter writing, legal papers, executive forms and papers, and manuscripts through the use of a word processor. Prerequisite: OST 2117 or equivalent.

OST 2335
Business Communications,
3 credit hours, 45 contact hours,
3 lec. (Fall, Spring, Summer)
Business Communications is a comprehensive coverage of language structure and particular emphasis on writing superior business letters and reports. Instruction in principle, then illustration, and practice in applying the principles. A fundamental concept of the appearance, language and style, tone and psychology of effective business letters. Prerequisites: passing score on English placement test or passing grade of “C” in ENC 0080.

OST 2401*
General Office Management,
3 credit hours, 30 lec., 30 lab.
(Fall, Spring, Summer)
Study of practices and procedures in the modern office. Emphasis on exercising judgment, handling incoming calls and callers, processing mail, word processing systems, editing and composing techniques, travel arrangements, banking procedures, employment applications and resumes. Prerequisite: OST 2117.

PCB 2011C
Cell Biology,
4 credit hours, 45 lec., 45 lab.
(Fall, Spring, Summer)
A study of the cell as the structural and functional unit of living organisms. To include the ultrastructure and biochemical aspects of the cell. Prerequisite: One year of High School chemistry.

PEL 1121
Beginning Golf, 1 credit hour, 30 lab.
(Offered as needed)
Instruction in the fundamental technique and the development of personal skills through participation.

PEL 1212
Advanced Softball, 1 credit hour, 30 lab.
(Offered as needed)
Instruction, practice, and participation in advanced softball. The continuous development of physical skills is of major importance in this course. May be taken four (4) times for credit. (Athletes)

PEL 1217
Advanced Baseball, 1 credit hour, 30 lab.
(Offered as needed)
Instruction, practice, and participation in advanced baseball. The continuous development of physical skills is of major importance in this course. May be taken four (4) times for credit. (Athletes)

PEL 1321
Volleyball, 1 credit hour, 30 lab.
(Offered as needed)
Instruction and practice in the basic skills for full participation and enjoyment of the game of volleyball.

PEL 1341
Beginning Tennis,
1 credit hour, 30 lab.
(Offered as needed)
The history of tennis, the fundamental techniques and the development of personal skills through participation.

PEL 1441
Beginning Racquetball,
1 credit hour, 30 lab.
(Offered as needed)
Instruction and participation in the skills necessary for satisfactory competition in the sport of racquetball.

PEL 1622M
Advanced Basketball (Men),
1 credit hour, 30 lab.
(Offered as needed)
This course is a high intensity, drill-oriented program designed to increase the knowledge, skill ability, and endurance levels of individuals interested in basketball. Instruction includes various aspects of the game of basketball including rules and regulations, basic fundamentals, offensive set, defensive sets, and scouting procedures. Instruction will be given through classroom lectures, as well as on-the-court lectures and activities. It is strongly recommended that students participate in an exercise program outside of class hours. It may be recommended and in some cases required that the student obtain medical approval before participating in this course. May be taken up to four (4) times for credit.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.

Δ Technology-Across-the-Curriculum Course
PEL 1622W
Advanced Basketball (Women), 1 credit hour, 30 lab. (Offered as needed)
This course is a high intensity, drill oriented program designed to increase the knowledge, skill ability, and endurance levels of individuals interested in basketball. Instruction includes various aspects of the game of basketball including rules and regulations, basic fundamentals, offensive set, defensive sets, and scouting procedures. Instruction will be given through classroom lectures, as well as on-the-court lectures and activities. It is strongly recommended that students participate in an exercise program outside of class hours. It may be recommended and in some cases required that the student obtain medical approval before participating in this course. May be taken up to four (4) times for credit.

PEL 1905
Independent Study – Physical Education, 1 credit hour, 30 lab. (Fall, Spring, Summer)
Directed study and/or individual projects designed to meet the needs and interests of students in a specialized area of health, physical education and recreation, for which present course availability is limited. May be taken up to four (4) times for credit.

PEL 2442
Intermediate Racquetball, 1 credit hour, 30 lab. (Offered as needed)
A continuation of skills learned in beginning racquetball with emphasis on more advanced skills and techniques. Particular emphasis is placed on the strategy of the game. Prerequisites: PEL 1441 or permission of instructor.

PEL 2905
Directed Work Study – Physical Education, 1 credit hour, 45 lab. (Offered as needed)
Directed experience in instructional, laboratory and/or materials assistance in a designated Physical Education area. Entry by permission of department chair only. May be taken up to four (4) times for credit.

PEM 1104
Body Conditioning, 2 credit hours, 15 lec., 30 lab. (Fall, Spring, & Summer)
An in-depth and advanced continuation of the exercise component of HLP 1081. Using progressive goal setting techniques, the course is designed to assist the student in the development of a regular, systemized program of exercise into their daily life-style. Initially, the students’ health and fitness levels are evaluated; progress of their personal exercise prescriptions monitored, and followed with a reevaluation at the termination of the course. Prerequisite: HLP 1081. May be taken up to two (2) times for credit.

PEM 1131A
Strength Training, 3 credit hours, 30 lec., 30 lab. (Offered as needed)
This course is a high intensity lecture/demonstration and flexible lab hour weight training program designed to increase the size, strength, and endurance of the skeletal muscle system. Instruction includes, but is not limited to, weight training safety, etiquette, history, and nutrition. Instruction will be given in the design of progressive resistance programs to increase total body efficiency and to meet the objectives of the individual student. Students are responsible for determining fitness for training, and those with medical problems which restrict personal activities are encouraged to obtain medical clearance before enrolling in the course.

PEM 1171
Aerobic Dance, 1 credit hour, 30 lab. (Offered as needed)
Instruction and participation in a physical fitness program that offers conditioning of the figure muscles and of the cardiovascular system through dance activities.

PEM 1173
Step Aerobics, 1 credit hour, 30 lab. (Offered as needed)
Instruction and participation in a vigorous, low-impact program of aerobic exercise, with emphasis on correct techniques, safety, cardiovascular and muscle conditioning.

PEM 1174
Step Aerobics II, 1 credit hour, 30 lab. (Offered as needed)
Continuation of techniques and combinations from Step Aerobics for further cardiovascular and muscle conditioning. Prerequisite: PEM 1173.

PEM 2108
Fitness Lab, 1 credit hour, 30 lab. (Offered as needed)
Instruction and participation in an exercise program with emphasis on muscle endurance, strength and flexibility. May be taken up to four (4) times for credit. Prerequisite: HLP 1081 or approved wellness assessment by the department chair.

PEM 2172
Aerobic Dance II, 1 credit hour, 30 lab. (Offered as needed)
Advanced level of instruction and participation in a physical fitness program that offers conditioning of the figure muscles and of the cardiovascular system through dance activities. Prerequisite: PEM 1171.

PEO 2004
Theory and Practice of Teaching a Specific Sport, 3 credit hours, 45 lec. (Offered as needed)
This course is designed to provide knowledge of the rules, teaching progressions and strategies for competition. The course includes acceptable behavior and ethics for coaches. This course will be offered for the following specific sports: Baseball/Sofball, Basketball, Football, Golf, Soccer, Swimming, Tennis, Track and Field/Cross Country, Volleyball and Wrestling.

PEO 2005
Coaching Theory, 3 credit hours, 45 lec. (Offered as needed)
This course is designed to provide knowledge of the characteristics, principles, ethics, and theories related to coaching sports in educational and recreational settings. Emphasis is placed on preparing coaches to train athletes to achieve optimal levels of performance.

PET 1000
Introduction to Physical Education, 3 credit hours, 45 lec. (Offered as needed)
A study of the history of physical education and sport with particular emphasis placed on present practices and trends.

PET 2622
Care and Prevention of Athletic Injuries, 3 credit hours, 45 lec. (Offered as needed)
Designed to provide students with a basic knowledge of the care, prevention, and rehabilitation of injuries received during participation in physical education activities.
PGY 1220C
Commercial Photography I,
4 credit hours, 30 lec., 60 lab.
(Offered as needed)
A beginning course that introduces students to the procedures and aesthetics of developing photographic illustrations for industrial and advertising use. Students will gain experience using the view camera, electronic lighting, and digital applications of their work.

PGY 1401C
Basic Photography,
3 credit hours, 15 lec., 30 lab.
(Offered as needed)
A beginning course in black and white photography. Students will learn the functions of their camera and darkroom equipment. Students will apply their technical knowledge to various artistic challenges. Access to a 35mm camera with manual mode required.

PGY 1420C
Advanced Black and White Photography,
3 credit hours, 30 lec., 30 lab.
(Fall, Spring, Summer)
An advanced course in black and white photography. Students will be exposed to a variety of advanced procedures in the darkroom. Access to a 35mm camera with manual mode required. Prerequisite: PGY 1401C or equivalent.

PGY 1801C △
Digital Photography I,
4 credit hours, 15 lec., 45 lab.
(Offered as needed)
A beginning course in photography with an emphasis on digital darkroom production techniques. Students will be exposed to procedures and aesthetic concerns relating to photography and digital image production. Access to an appropriate high-quality camera required.

PGY 2802C △
Digital Photography II,
4 credit hours, 15 lec., 45 lab.
(Offered as needed)
An intermediate-level photography course where creative idea generation and composition in photography are emphasized. Students research more deeply the history of photography and apply new skills to creative digital photographic work. Access to an appropriate high-quality camera required. Prerequisite: PGY 1801C.

PHI 2010 ♦
Introduction to Philosophy,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
Central concepts of philosophy are developed, including a description of the main philosophical problems involved through ancient, medieval, and contemporary thought. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

PHI 2600 ♦
Introduction to Ethics,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
Ways to frame and resolve ethical issues are studied. Major historical theories — including consequentialism, deontology, and virtue ethics — are presented in moral arguments and narratives. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

PHI 2930
Philosophy – Special Topics,
3 credit hours, 45 lec.
(Fall, Spring Summer)
A defined special topics course which is pursued under supervision of a faculty member and recorded through usual departmental procedures. Designed to permit a student to pursue non-scheduled academic and laboratory work which may be of a specialized nature and not available through the college schedule. Prerequisite: PHI 1053C or equivalent.

PHY 1020
Physical Science,
4 credit hours, 60 lec.
(Fall, Spring, Summer)
A one term course of lectures and demonstrations designed 1) to meet the general education requirements in physical science for non-science majors and 2) for students who need a preparatory course prior to taking physics. The course presents the fundamental classical and modern concepts of physics in the area of mechanics, energy, wave motion, electromagnetism, and atomic structure. Also topics in earth science and astronomy will be discussed.

PHY 1020L
Physical Science Laboratory,
1 credit hour, 30 lab.
(Offered as needed)
A laboratory course designed to supplement principles covered in physical science. Specifically experiments in motion, forces, light, electricity, thermodynamics, Astronomy, Earth Science and Meteorology. It is recommended that the student have previously taken PHY 1020 or be currently enrolled in PHY 1020.

PHY 1053C
Physics I,
4 credit hours, 45 lec., 45 lab.
(Offered as needed)
The first half of a two term sequence of noncalculus physics designed for the nonphysical science major. Physics I covers the areas of mechanics, mechanical energy, temperature and heat. The entering student is assumed to have a working knowledge of basic algebra and trigonometric functions. Prerequisite: MAC 1114.

PHY 1054C
Physics II,
4 credit hours, 45 lec., 45 lab.
(Offered as needed)
The second half of a two term sequence of noncalculus physics designed for the nonphysical science major. Physics II covers the areas of electricity, magnetism, light, quantum theory, atomic and nuclear structure, and elementary nuclear processes. Prerequisite: PHY 1053C or equivalent.

PHY 2048C
College Physics
I, 4 credit hours, 45 lec., 45 lab.
(Offered as needed)
The first half of a two term sequence designed for majors in engineering, math and the physical sciences. Physics I covers the areas of mechanics, mechanical energy, heat, thermodynamics, and mechanical waves. Calculus is used when feasible. Prerequisite: MAC 2311.
PHY 2049C  
College Physics II,  
4 credit hours, 45 lec., 45 lab.  
(Spring, or as needed)  
The second term of a two term sequence designed for majors in engineering, math and the physical sciences. Physics II covers the areas of electricity, magnetism and optics. Calculus is used where feasible. Prerequisite: PHY 2048C and MAC 2312 or equivalent. MAC 2312 may be a co-requisite.

PHY 2105  
Modern Physics,  
3 credit hours, 45 lec.  
(Of ered as needed)  
This course will study topics in the physics of the twentieth century. The student will be introduced to basic quantum mechanics, including Bohr Theory of the Atom, the Schroedinger Equation, molecular structure, radiation, and x-ray spectra. Also, the student will be introduced to solid state physics and electronics, statistical mechanics and atomic and nuclear physics. Intended for science and engineering students and physics majors. Prerequisite: PHY 2048C College Physics I.

PLA 1003*  
Introduction to Paralegalism,  
3 credit hours, 45 lec.  
(Of ered as needed)  
Designed to give students a broad understanding of the nature of the paralegal professional and its responsibility.

PLA 1005*  
Legal Terminology,  
3 credit hours, 45 lec.  
(Of ered as needed)  
This course is designed to give an explanation of the common legal vocabulary involved in the broad, general principles of substantive and common law.

PLA 1013*  
Introduction to the Legal System,  
3 credit hours, 45 lec.  
(Of ered as needed)  
A practical introduction to the US legal system, types and sources of law, the courts, and related topics; a beginning course for students seeking careers in legal secretary technology or legal assisting.

PLA 1103*  
Legal Research, 3 credit hours, 45 lec.  
(Of ered as needed)  
The student is systematically introduced to the essentials of legal research in such areas as searching for precedence, gathering citations and legal opinions, preparing legal briefs and conducting title searches.

PLA 1114*  
Case Analysis and Legal Writing,  
3 credit hours, 45 lec.  
(Of ered as needed)  
This course was designed to provide the student with necessary skills and knowledge required in case analysis and legal writing.

PLA 1203*  
Introduction to Civil Law,  
3 credit hours, 45 lec.  
(Of ered as needed)  
An introduction to civil law in reference to evidence. Criminal court procedures. The student is introduced to the rules of evidence as they apply in civil and criminal court procedures. The student is prepared to locate legal case law in reference to evidence.

PLA 1600*  
Wills, Trusts, and Probate,  
3 credit hours, 45 lec.  
(Of ered as needed)  
An introduction to estate planning, wills, and probate administration.

PLA 1800*  
Introduction to Family Law,  
3 credit hours, 45 lec.  
(Of ered as needed)  
An introduction to practice as they relate to family law.

PLA 2263*  
Rules of Evidence,  
3 credit hours, 45 lec.  
(Of ered as needed)  
The student is introduced to the rules of evidence as they apply in civil and criminal court procedures. The student is prepared to locate legal case law in reference to evidence.

PLA 2273*  
Torts: Personal Injury Litigation,  
3 credit hours, 45 lec.  
(Of ered as needed)  
This course is designed to provide the student with an introductory knowledge of tort law with objectives centered on personal injury torts.

PLA 2949*  
Internship – Paralegal,  
3 credit hours, 90 lab.  
(Of ered as needed)  
On-the-job training in the Associate of Applied Science Option program in which the student is enrolled. The student is under the supervision, at work, of a qualified supervisor. The supervisor will rate the student’s performance, knowledge, comprehension, dependability, initiative, cooperativeness, and total performance. A project paper or approved project will be submitted by the student three weeks prior to the close of the semester. May be repeated four times. Only three credits can be applied toward graduation. Prerequisites: Must have completed a minimum of 24 hours credit in the appropriate discipline.

PMT 2405*  
Production Technology,  
3 credit hours, 45 lec.  
(Of ered as needed)  
Production Technology examines the new manufacturing technology that has resulted from the concepts of automation and integration in manufacturing. Some of the topics covered include: automated assembly, CAD/CAM, numerical control, industrial robots, lasers, flexible manufacturing, computer integrated manufacturing, and other related technologies.

PMT 2512*  
Production Technology II,  
3 credit hours, 45 lec.  
(Of ered as needed)  
Production Technology II continues to examine the new manufacturing technology that has resulted from the concepts of automation and integration in manufacturing. Some of the topics covered include: automated manufacturing, control solving processes, and other related technologies. Prerequisite: PMT 2405.

POS 1041  
American Government,  
3 credit hours, 45 lec.  
(Fall, Spring, Summer)  
Examines government, political ideals, and institutions. Strong emphasis is placed on political thought, the origin of the American federal system, and the distribution of powers between state and national governments. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

* This college credit course is not intended for transfer and may not be applied toward the A.A. degree.
POT 1002
History and Ideas of Political Science, 3 credit hours, 45 lec.  
(Offered as needed)
This course reviews classical ideas, political theory and institutions from a historical and comparative viewpoint. It examines the rise of the State, its organization, economic systems, the use of force, and persuasion. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

PPE 2001
Personality Theorists and Their Theories, 3 credit hours, 45 lec.  
(Offered as needed)
This course examines the theorists and their theories in the field of Personality. Major theorists studied are Freud, Jung, Adler, Horney, Erickson, Rogers, Bandura, Skinner and others, combining biographical information with the theories studied. Relationships between the theories are highlighted, showing the evolution of the field.

PSC 2905
Independent Study – Physical Science, 1 credit hour, 15 lec.  
(Fall, Spring, Summer)
Directed study and individual projects designed to meet the needs of students interested in a specialized area of the physical sciences for which present course availability is limited. Meets specific general education requirements. This course may be taken up to four (4) times for credit.

PSC 2906
Directed Work Study - Physical Science, 1 credit hour, 45 lab.  
(Offered as needed)
Practical experience with use - maintenance of lab equipment and materials. Participation in support activities and organizational routines of lab courses. Tuition may be waived. May be taken four (4) times for credit. Departmental approval following interview is required.

PSY 2012
Psychology, 3 credit hours, 45 lec.  
(Fall, Spring, Summer)
Surveys of the various fields of psychology. Understanding human behavior by studying the adaptation of the individual to the physical and social environment.

REA 1205
Reading Across the Genres I, 3 credit hours, 45 lec.  
(Offered as needed)
This college-level reading course employs a variety of literary genres as the source material for building student skills in comprehension, context clues, reading speed, critical analysis, vocabulary, and other related reading skills. Students will be exposed to numerous styles and levels of reading material including novels, short stories, critical essays, drama, news reporting. Students will also develop a personal reading preference profile and learn how to identify books, magazines and other reading material commensurate with that profile. Prerequisite: FCPT placement score of 83 or higher.

REA 1206
Reading Across the Genres II, 3 credit hours, 45 lec.  
(Offered as needed)
This college-level reading course employs a variety of literary genres as the source material for building student skills in comprehension, context clues, reading speed, critical analysis, vocabulary, and other related reading skills. Students will be exposed to numerous styles and levels of reading material including novels, short stories, critical essays, drama, news reporting. Special emphasis will be placed on the mastery of advanced comprehension skills. Prerequisite: FCPT placement score of 83 or higher.

REA 2105
Advanced Reading, 2 credit hours, 15 lec., 30 lab.  
(Fall, Spring, Summer)
An individualized approach designed to improve reading speed, comprehension, and critical analysis skills while reading various types of material for either educational or recreational purposes. Activities and materials are individualized to meet specific needs of students as determined through diagnostic instruments. Also used as a preparation course covering (at a more critical level) the skills tested on the CLAST. Helpful for those students whose speed, comprehension, and analysis skills are weak or inadequate for proper text book analysis.

REA 2125
CLAST Review: Reading Skills, 1 credit hour, 15 lec.  
(Fall, Spring, Summer)
A short course specifically designed to prepare students to take or retake the CLAST Reading Skills subtest. Through pre-testing, weak areas in CLAST skills are identified. These identified weak areas will be strengthened through drills, exercises, and/or other means.

REL 2163
Issues in Science and Religion, 3 credit hours, 45 lec.  
(Fall, Spring, Summer)
The course will explore Eastern and Western religious conceptions of the natural world, and relate them to scientific ways of knowing. This includes a survey of major scientific discoveries and theories that both challenge and inform religious belief, including cosmology, evolution and global change. It also includes an overview of the ecumenical dimensions of Eastern and Western spiritual experience and expression. Emphasis is placed on integrating and harmonizing scientific and religious understandings to develop a meaningful, contemporary worldview.

REL 2300
Introduction to World Religions, 3 credit hours, 45 lec.  
(Offered as needed)
This course will explore the principles and practices of the world’s major religious traditions. The religions will be studied in their historical and contemporary forms. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

REL 2930
Religion – Special Topics, 3 credit hours, 45 lec.  
(Fall, Spring Summer)
A defined special topics course which is pursued under supervision of a faculty member and recorded through usual departmental procedures. Designed to permit a student to pursue non-scheduled academic and laboratory work which may be of a specialized nature and not available through the college schedule.
RMI 1600*
General Insurance Lines, 
12 credit hours, 180 lec., 
(Offered as needed)
This course is designed to prepare stu-
dents to successfully pass the Qualification Examination for licensing in the State of Florida as a General Lines Agent.

RMI 1641*
Life and Health Insurance I, 
3 credit hours, 45 lec. 
(Offered as needed)
This course will prepare the student for the Qualification Examination to gain a license to conduct business in Florida as a Life and Health Insurance Agent.

SLS 1101
College Success, 
3 credit hours, 45 lec., 
(Fall, Spring, Summer)
A course designed to focus on develop-
ing practical study skills to enhance academic success. Skills taught in this course are time management, concentra-
tion/memorization, listening, note taking, test taking, use of college resources, establishing goals, identifying learning styles, developing career choices and learning to cope with personal issues that face many college students.

SLS 1102
Freshman Seminar, 
3 credit hour, 45 lec., 
(Offered as needed)
A seminar designed to orient entering students to OWC, to familiarize them with the requirements of the College Level Academic Skills program, to assist them in assessing their academic competencies (i.e., identify strengths and weaknesses), to identify means for capitalizing on strengths and for overcoming weaknesses, and to enter and pursue academic specializations (majors) based on reasonable career choices. This course is recom-

SLS 1201
Service Learning Seminar, 
1 credit hour, 5 lec., 20 lab. 
(Offered as needed)
A seminar course designed to enhance and reinforce the value of civic responsibility and to provide stu-
dents with a community service pro-
gram opportunity by volunteering in community agencies in the public and private sectors.

SLS 1301
Career and Life Planning, 
1 credit hour, 15 lec., 15 lab. 
(Offered as needed)
The course is designed to help stu-
dents assess their values, competen-
cies and goals in relation to the selec-
tion of careers and life-styles for which they are best suited. On a national average, two thirds of enter-
ning college freshmen have not made a choice concerning a career. Further-
more, extensive research shows that the student who has not made a career choice is much more likely to drop-out of college. This course will help students make an informed, real-
istic career choice which will form the basis for their life’s work and which will also increase the probability of completing an academic program.

SLS 1340*
Professional Portfolio Building, 
1 credit hour, 15 lec. 
(Offered as needed)
This course is designed to increase student success through the develop-
ment of a professional career portfolio that will help students document and showcase specific skill area achieve-
ments, competencies and career read-
iness for potential employers. The course will include a systematic study and review of the student’s knowl-
edge, skills and attitudes in their spec-
ific degree/certificate program. 
Students pursuing this course should have a declared program of study in A.S., A.A.S., A.T.D. or any other Certificate Program.

SLS 1341*
Job Search Techniques, 
1 credit hour, 15 lec. 
(Offered as needed)
A course designed to assist students assess interests, aptitudes, abilities and acquire skills necessary to conduct a job search, obtain employment, and maintain employment. This course will cover such topics as current job search techniques, skills identification, resume writing, interview skills, job retention skills and career exploration.

SLS 1501
Effective Study, 
1 credit hour, 15 lec., 15 lab. 
(Offered as needed)
Practical application of psychological principles to personal learning and study skills. Recommended for all stu-
dents who feel deficient in study tech-
niques or who otherwise wish to improve their study skills. May be taken up to four (4) times for credit.

SLS 1505
Reading Skills/Effective Study Skills, 
2 credit hours, 30 lec. 
(Offered as needed)
This course is designed to improve reading comprehension and vocabu-
ulary. Activities and materials are in-
dividualized to meet each student’s specific needs as determined by diag-
nostic instruments. This course is also designed to improve note-taking, test-
taking, memory/recall and time man-
agement skills.

SOW 2020
Introduction to Social Work, 
3 credit hours, 45 lec. 
(Offered as needed)
This course is a generalist approach to the study of the social work profes-
sion focusing on the practice of social work itself, in both its social policy and direct practice perspectives. Among other topics, this ecosystems approach will examine values and ethics, social justice, cultural diversity, and the varied roles of the social worker.

SPA 1612 ❖
American Sign Language I, 4 credit hours, 60 lec. (Fall) 
To introduce the student to the basic vocabulary and fngerspelling of American Sign Language. Emphasis will be on learning to express this lan-
guage in a simple form and have a basic receptive language competency.

SPA 1613 ❖
American Sign Language II, 
4 credit hours, 60 lec. (Spring) 
To increase the student’s ASL vocabu-
larv and use more complex expres-
sion of thoughts, ideas, and emotions. To increase the receptive and expres-

SPA 1612 ❖
American Sign Language I, 4 credit hours, 60 lec. (Fall) 
To introduce the student to the basic vocabu-
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guage in a simple form and have a basic receptive language competency.

SPA 1613 ❖
American Sign Language II, 
4 credit hours, 60 lec. (Spring) 
To increase the student’s ASL vocabu-
larv and use more complex expres-
sion of thoughts, ideas, and emotions. To increase the receptive and expres-

SPA 1612 ❖
American Sign Language I, 4 credit hours, 60 lec. (Fall) 
To introduce the student to the basic vocabu-
larv and fngerspelling of American Sign Language. Emphasis will be on learning to express this lan-
guage in a simple form and have a basic receptive language competency.
SPA 2614 ✤
American Sign Language III, 4 credit hours, 60 lec. (Spring)
A conversational course in American Sign Language utilizing skills and vocabulary from American Sign Language I and II and building on these to form more complex expressions in American Sign Language. Impromptu and planned stories, dialogues and skits will be performed. Receptive and expressive finger spelling will be advanced. No voice will be used for the majority of classroom time. Prerequisite: SPA 1613 or instructor permission.

SPC 1006 ✤
Essentials of Speech, 1 credit hour, 15 lec. (Offered as needed)
This course can be used to satisfy missing transfer requirements and/or oral components required in certain programs. Individuals participate in the preparation and presentation of speeches.

SPC 1600 ✤
Speech, 3 credit hours, 45 lec. (Fall, Spring, Summer)
Emphasis is on assisting the individual to develop his/her potential in oral communication. Individual participation in preparation and presentation of speeches reinforced by continuing group analysis and constructive criticism.

SPC 2511
Discussion and Debate, 3 credit hours, 15 lec., 60 lab. (Offered as needed)
This course is designed to provide learning experiences in rational decision making incorporating the techniques of persuasion through organized procedures for argumentation, debate and discussion. Prerequisite: membership on forensic team.

SPN 1030
Spanish for Health Care I, 3 credit hours, 45 lec. (Spring, Summer, Fall)
Spanish for Health Care is designed for individuals majoring or working in health-related areas. The course focuses on vocabulary needed for the workplace, and the grammar is taught as task-based practical skills. Students will conduct interviews, fill out medical forms, write letters, and read medical articles and brochures. Does not meet State University System foreign language admissions requirement.

SPN 1032
Spanish for Health Care II, 3 credit hours, 45 lec. (Offered as needed)
Spanish for Health Care is a 3-credit course designed for individuals majoring or working in health-related areas. The course focuses on vocabulary needed for the workplace, and the grammar is taught as task-based practical skills. Students will conduct interviews, fill out medical forms, write letters, and read medical articles and brochures. Does not meet State University System foreign language admissions requirement.

SPN 1042
Spanish for Law Enforcement I, 3 credit hours, 45 lec. (Spring, Summer, Fall)
Spanish for Law Enforcement is designed for individuals majoring or working in law-related areas. The course focuses on vocabulary needed for the workplace, and the grammar is taught as task-based practical skills. Students will conduct interviews, fill out forms related to police or legal issues, write letters, and read articles and brochures pertaining to law enforcement.

SPN 2200 ✤
Spanish III, 4 credit hours, 60 lec. (Fall)
Intermediate level review of grammar, readings in Spanish Literature, and development of conversational and writing skills. Prerequisite: SPN 2200 or its equivalent.

STA 2023
Statistics, 3 credit hours, 45 lec. (Fall, Spring, Summer)
General introduction to understanding and applying statistical concepts; topics include descriptive statistics, probability, random variables, distributions, estimations, hypothesis testing, two sample inferences, correlation and simple linear regression. Non-symbolic graphing calculators are required. The TI-83 Series is recommended. Prerequisite: MAT1033A or equivalent with a “C” or better, or appropriate placement score.

SUR 2100C*
Surveying, 3 credit hours, 15 lec., 60 lab. (Fall, Spring)
Measurement of distances; elevations and angles; analysis of errors; adjustment of instruments; computation of positions, areas and volumes; contours; establishing grades; topographic mapping and land surveying.

SUR 2140C*
Surveying II, 3 credit hours, 15 lec., 60 lab. (Fall, Spring)
This course covers advanced surveying concepts. Topics will include: measurement of distances, elevations and angles, analysis of errors, and adjustment of instruments. Additional coverage will include computation of positions, areas and volumes; contours, determining grades; topographic mapping and land surveying. Prerequisite: SUR 2100C or equivalent.

SYG 2000 ✤
Sociology, 3 credit hours, 45 lec. (Fall, Spring, Summer)
Concentrates on the description of individual and group behavior. Basic concepts are related to the family and the city, individual, industrial, and political problem areas.
SYG 2010 †
Social Problems,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
Introduction to the sociological study of the nature of social problems to
insure understanding of their impact
on the individual, the group and social
institutions in societal and cultural set-
tings. Writing-Across-the-Curriculum
course requiring a minimum of 4,000
words of writing. If used to meet AA
Gordon Rule requirements for general
education, a minimum grade of “C” is
also required. Prerequisite: A passing
score on the standardized placement test
measuring communication/verbal
achievement or successful completion
of ENC 0080 and/or LIN 1670 with a
grade of “C” or better.

SYG 2430
The Family and Society,
3 credit hours, 45 lec.
(Offered as needed)
An examination of the problems
which arise out of participation in
marriage, family and community situa-
tions. Designed to provide students
with a basic understanding of the
dynamics of family interaction, the
effects upon the children, and the
family’s relationship to and participa-
tion in the community.

TAR 2121C
Architectural Drafting,
3 credit hours, 15 lec., 60 lab.
(Offered as needed)
Architectural design and development
of residential and light commercial
buildings to include: development and
construction of good architectural
freehand lettering, VA and FHA
approved residential house plans,
“Good Sense” house plans as defined
in the Arkansas Plan, and heat
loss/heat gain calculations.
Prerequisite: ETD 1100 or ETD 1111
or equivalent.

TAX 2000
Federal Income Tax: Individual,
3 credit hours, 45 lec.
(Offered as needed)
Federal Income Taxes. Determine
income tax for individuals, interpreta-
tions of Internal Revenue Code and
Regulation, tax planning and advisory
service. Brief introduction to partner-
ship, corporation, estate and gift
taxes. Extensive practice problems in
individual income tax returns and
research in tax questions.

THE 1905
Independent Study – Theatre,
1 credit hour
(Fall, Spring, Summer)
A defined independent study which is
pursued under supervision of a faculty
member and recorded through usual
departmental procedures. Designed
to permit a student to pursue non-
scheduled academic and laboratory
work which may be of a specialized
nature and not available through the
college schedule. Departmental
approval required. Placement test may
be required.

NOTE: If this course is used to satisfy
Writing-Across-the-Curriculum require-
ments for transfer courses to OWC, a
4,000 word paper with a minimum grade of “C” is
required. This course may be taken up to four (4) times for
credit.

THE 2071 †
Humanities – Cinema Appreciation,
3 credit hours, 45 lec.
(Offered as needed)
An introduction to the origin, develop-
ment, cultural aspects and analysis of
cinema topics. Writing-Across-the-
Curriculum course requiring a mini-
imum of 4,000 words of writing. If
used to meet AA Gordon Rule
requirements for general education, a
minimum grade of “C” is also
required. Prerequisite: A passing score
on the standardized placement test
measuring communication/verbal
achievement or successful completion
of ENC 0080 and/or LIN 1670 with a
grade of “C” or better.

THE 2820
Introduction to Creative Dramatics,
3 credit hours, 15 lec., 60 lab.
(Offered as needed)
An introduction to creative dramatics
and children’s theatre. Topics span a
wide range of interests: critical, his-
torical, aesthetic and practical – intended to
lay a foundation for further knowledge
and skill of the theatre. Writing-Across-
the-Curriculum course requiring a min-
imum of 4,000 words of writing. If
used to meet AA Gordon Rule
requirements for general education, a
minimum grade of “C” is also
required. Prerequisite: A passing score
on the standardized placement test
measuring communication/verbal
achievement or successful completion
of ENC 0080 and/or LIN 1670 with a
grade of “C” or better.

THE 2821
Introduction to Creative Dramatics
I, 3 credit hours, 15 lec., 60 lab.
(Offered as needed)
Creative Dramatics introduces the
many elements of theatre: dance,
voice and musical theatre. Topics span a
wide range of interests: the creative
process, workshop procedures, rehearsal and performance. Creative
Dramatics will focus on producing a
final performance. Prerequisite: THE
2820.
THE 2930
Theater – Special Topics,
3 credit hours, 45 lec.
(Fall, Spring Summer)
A defined special topics course which is pursued under supervision of a fac-
ulty member and recorded through usual departmental procedures.
Designed to permit a student to purs-
sue non-scheduled academic and lab-
oratory work which may be of a spe-
cialized nature and not available
through the college schedule.

TPA 1210
Stagecraft,
3 credit hours, 15 lec., 60 lab.
(Offered as needed)
This course is an introduction to the
principles of stagecraft: stage terminol-
ogy, stage safety, instruction in proper
use of shop tools, basic theatre con-
struction methods, understanding of
theatrical rigging, and understanding
of general background practices.

TPA 1290
Technical Theatre Lab I,
3 credit hours, 15 lec., 60 lab.
(Offered as needed)
An introduction to technical theatre
and scene technology. Topics include
scene drawings, safety and health,
stage facility, basic crafts, two- and
three-dimensional scenery, scene
painting, scene assembly, rigging,
properties, special effects and shop
organization. Prerequisite: TPA 1210.

TPA 2220
Technical Theatre Lab II,
3 credit hours, 15 lec., 60 lab.
(Offered as needed)
An introduction to stage lighting.
Topics include history of stage light-
ing, fundamentals of light and illumina-
tion, lighting control, and lighting
practices. Prerequisite: TPA 1210

TPA 2232
Introduction to Costuming
Technology,
3 credit hours, 15 lec., 60 lab.
(Offered as needed)
An introduction to costume tech-
niques and wardrobe practices. Topics
span a wide range: costume construc-
tion techniques, problems in cos-
tumes, costume history, construction
styles, sewing machine practices,
seam finishes, flat pattern layout and
production techniques. This course is
intended to develop practical experi-
ences in theatre costumes.

TPA 2600
Stage Management,
3 credit hours, 15 lec., 60 lab.
(Offered as needed)
This course is an introduction to the
study and application of stage man-
magement as it relates to the manager
portfolio, the stage manager morgue,
rules and regulations relating to
I.A.T.S.E.; rules related to contracts,
competence in stage management,
proper communication with directors,
technical directors, designers, cast
members and crews, competence in
technical discussion areas and basic
first aid.

TPP 1190
Rehearsal and Performance I,
3 credit hours, 15 lec., 60 lab.
(Offered as needed)
An ensemble theatre performance
experience open to any student who
wishes to develop rehearsal and per-
formance skills. Students must partic-
ipate in scheduled rehearsals and per-
formances. Prerequisite: Experience in
high school or a desire to learn.

TPP 1191
Rehearsal and Performance II,
3 credit hours, 15 lec., 60 lab.
(Offered as needed)
An ensemble theatre performance
experience open to any student who
wishes to develop rehearsal and per-
formance skills. Students must partic-
ipate in scheduled rehearsals and per-
formances. Prerequisites: TPP 1190.

TPP 1192
Rehearsal and Performance III,
3 credit hours, 15 lec., 60 lab.
(Offered as needed)
An ensemble theatre performance
experience open to any student who
wishes to develop rehearsal and per-
formance skills. Students must partic-
ipate in scheduled rehearsals and per-
formances. Prerequisites: TPP 1190.

TPP 2110
Acting I,
3 credit hours, 30 lec., 30 lab.
(Offered as needed)
Through in-class performance the
student will develop an understanding
and proficiency of those skills of
movement, voice, and expression
which are required of a theatrical
performer.
WOH 1012 ❖
World Civilization I,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
A study of world history from 4000 BC to 1650 AD as it relates to the development of western civilization. History is analyzed in terms of social, religious, philosophical, political, and economic concepts rather than chronological facts. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

WOH 1022 ❖
World Civilization II,
3 credit hours, 45 lec.
(Fall, Spring, Summer)
A study of history from 1650 AD to the present as it relates to the development of the modern world. History is analyzed in terms of social, religious, philosophical, political, and economic concepts rather than chronological facts. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

WOH 2040 ❖
Twentieth Century,
3 credit hours, 45 lec.
(Offered as needed)
International political and historical affairs in the twentieth century through the institutions and organizations of the Western State System. Attention is on international cooperation, decision making, force, world resources, and world political geography by the selection of a specific problem. Writing-Across-the-Curriculum course requiring a minimum of 4,000 words of writing. If used to meet AA Gordon Rule requirements for general education, a minimum grade of “C” is also required. Prerequisite: A passing score on the standardized placement test measuring communication/verbal achievement or successful completion of ENC 0080 and/or LIN 1670 with a grade of “C” or better.

ZOO 1010C
Zoology,
4 credit hours, 45 lec., 45 lab.
(Fall, Spring, Summer)
An introduction to the major concepts of animal life, to include the embryology and phylogeny of MAJOR animal groups.

❖ This college credit course qualifies as having an international and/or diversity focus for Teacher Education Programs common prerequisites.