

COURSE DESCRIPTIONS

Accounting

AC 1103 Introduction to Accounting 3 Cr Hrs

A course designed to present the basic concepts of the accounting cycle from recording business transactions in the books of original entry to the preparation of periodic financial reports for service and merchandising enterprises. Emphasis will also be placed on the use of special journals, subsidiary ledgers, payroll accounting, and the control of cash. This course may be used to prepare for Financial Accounting I. This course will not transfer as an accounting course and cannot be substituted for Financial Accounting I.

AC 1203 Financial Accounting I 3 Cr Hrs

A beginning course in accounting which introduces the theoretical aspects of financial accounting and their application from the basic concept of a transaction through financial statements.

AC 1213 Financial Accounting II 3 Cr Hrs

A continuation of Financial Accounting I, dealing mainly with corporation accounting, interpretation of financial statements, accounting for costs and controlling business operations.

AC 1303 Computerized Accounting 3 Cr Hrs

A study of the common body of knowledge in accounting and computers as fundamental business tools, with a strong emphasis on the major accounting functions and how they are accomplished using computers.

AC 1313 Spreadsheet Applications for Accounting 3 Cr Hrs

This course will teach students how to use spreadsheet software to solve accounting problems.

AC 1323 QuickBooks for Accounting Applications 3 Cr Hrs

A study of the common body of knowledge in accounting and computers as fundamental business tools. Special emphasis on the major accounting functions and how they are accomplished using the QuickBooks software.

AC 1403 Payroll Accounting 3 Cr Hrs

This course covers records needed in business to meet the requirements of federal and state payroll taxes. It provides a foundation in payroll and personnel records, computation of wages and the accounting for wages paid and payroll deductions.

AC 2103 Managerial Accounting 3 Cr Hrs

This course illustrates how accounting data can be analyzed, interpreted and applied by management in planning and controlling business activities. An interdisciplinary approach is provided through the mix of topics involving economics, mathematics, finance and statistics.

AC 2403 Federal Income Tax 3 Cr Hrs

An introduction to federal income tax, with primary emphasis on the determination of federal income tax liability of an individual.

AC 2902 Accounting Internship I 2 Cr Hrs

(Permission is required before enrollment in this course.) This course is designed to give the student on-the-job training station under the supervision of an employer and a coordinating instructor. The student, instructor and employer will file progress and evaluation reports and keep a continuous record of the on-the-job experience. The student must work a minimum of 136 clock hours for the semester (an average of 8.5 hours per week) to receive the two credit hours. The student may have only four hours of Internship to count toward graduation.

AC 2912 Accounting Internship II 2 Cr Hrs

(Permission is required before enrollment in this course.) This course is designed to give the student on-the-job training station under the supervision of an employer and a coordinating instructor. The student, instructor and employer will file progress and evaluation reports and keep a continuous record of the on-the-job experience. The student must work a minimum of 136 clock hours for the semester (an average of 8.5 hours per week) to receive the two credit hours. The student may have only four hours of Internship to count toward graduation.

Agriculture

AG 1101 Careers in Agriculture 1 Cr Hr

This course is designed to enlighten the student to the different careers available in the field of agriculture and to the training needed to obtain these careers.

AG 1112 Livestock Sales Management 2 Cr Hrs

Hands-on experience in conducting a livestock auction, including animal selection, advertising, cataloging and animal preparation, clerking and sales budgets, with an overview of various purebred livestock sales. 4-H/FFA livestock

project sales and new concepts in livestock marketing will be discussed.

AG 1152 Agriculture Seminar I 2 Cr Hrs

Emphasis on live animal evaluation of beef cattle, swine, sheep and horses. Animal evaluation will include study of live animals, animal performance records, carcass grading and oral defense of decisions made in evaluations.

AG 1162 Agriculture Seminar II 2 Cr Hrs

Emphasis on live animal evaluation of beef cattle, swine, sheep and horses. Animal evaluation will include study of live animals, animal performance records, carcass grading and oral defense of decisions made in evaluations.

AG 1203 Computer Applications/Agriculture 3 Cr Hrs

This course is an introduction in the use of the microcomputer for agriculture production and agribusiness. The student will learn the fundamentals of personal computer operations and be exposed to word processing, database and spreadsheet applications. The student will learn how to apply these operations towards agriculture and agricultural related businesses.

AG 1233 Animal Science 3 Cr Hrs

This course is an introduction to, and a survey of, the total animal industry, from the genetic improvement to meat, milk, egg and wool production.

AG 1243 Principles of Livestock Nutrition 3 Cr Hrs

This course will cover animal nutrition fundamentals, ration balancing, feed selection for types and ages of livestock and other phases of nutrition essential to understanding the feeding of livestock.

AG 1253 Animal Health and Diseases 3 Cr Hrs

This course is designed to familiarize the students about proper animal health and how to diagnose diseases, as well as how to cure them.

AG 1261 Animal Science Lab 1 Cr Hr

The animal science lab will involve activities which will enhance the classroom instruction. This will include problem solving, assignments and field trips. Emphasis will be on gaining a working knowledge of the broad animal agriculture base found in the area, as well as live animal evaluation.

AG 1303 Principles of Feedlot Management 3 Cr Hrs

This course will be a study of the basic principles that are used by feedlot managers. Emphasis will be in the areas of Managing and Human Resource, Managing the Physical Operation, Managing the Capital Base, and Letting and Accepting Bids. A history and current overview of the industry, including laws and regulations affecting the industry, will also be covered.

AG 1401 Business Management in Agriculture 1 Cr Hr

(Fall semester only.) The general objective is to provide farm operators and ranchers with the updated and improved business management tools. Topics will include financial markets, agricultural lending practices, cash flow analysis, farm management and growth goals, and record keeping systems. The emphasis of this course is to provide practical applications for class members.

AG 1411 Agriculture Business Analysis 1 Cr Hr

This course is a continuation of AG 1401, Management in Agriculture. This selection will cover coordinating financial statements, enterprise analysis, strategic planning, technical analysis of business and managing risk.

AG 1503 Horse Production 3 Cr Hrs

This course is a study of the light horse industry in the United States, breeds of horses and ponies for work and pleasure, selection, nutrition, breeding, management, performance and health.

AG 1552 Small Gasoline Engine Repair 2 Cr Hrs

An introduction to the principles of operation, carburetion, and ignition, simple tune-ups, preventive maintenance and consumer information.

AG 1562 Welding 2 Cr Hrs

This course is an introduction for beginners and also an opportunity for those persons who have some knowledge of welding to upgrade their skills. It offers beginning practice in oxyacetylene and electrical arc welding of metals, develops an understanding of the terminology of the welding process and acquaints the individual with the most common types of welds.

AG 1603 Swine Production I 3 Cr Hrs

A study of the principles of swine production in the areas of breeding, nutrition, health, housing, equipment, swine management, feeder pig management, production systems and marketing.

AG 1613 Swine Production II 3 Cr Hrs

An advanced study of the production of swine. This class will be an in-depth study of swine management, with an emphasis on reproductive and lactative efficiency. Employee relations, record keeping and analysis, reproductive physiology, biosecurity programs, and overview of the swine industry will

also be covered.

AG 1622 Swine Farrowing Operations I 2 Cr Hrs

A hands-on experience class for swine management majors only, on the management of swine in the farrowing phase of production. The student will be exposed to basic management skills needed to care for sows and litter during farrowing and lactation.

AG 1632 Swine Farrowing Operations II 2 Cr Hrs

An advanced level hands-on experience class on the management of swine in the farrowing and lactation phase of production. Students will develop skills, knowledge and management skills needed to care for sows and pigs during farrowing and lactation.

AG 1641 Swine Management Seminar 1 Cr Hr

An overview of employment opportunities available and current topics in the swine industry. Current industry issues will be discussed and researched. Resumes, job seeking and interviewing skills will be covered. Career planning, the future outlook of the swine industry and current topics in swine production will also be covered.

AG 1653 Swine Nursery Grow/Finish Operations 3 Cr Hrs

A hands-on experience class on the management of swine in the nursery/grower finishing phases of production. Students will develop skills and knowledge needed to manage a swine nursery/grower finishing unit.

AG 1663 Swine Anatomy & Health 3 Cr Hrs

Study of swine physiology and disease where the student will examine the cause, nature and control of health-related problems. Emphasis will be on procedures and methods for prevention and control of diseases in swine production.

AG 1702 Livestock Selection I 2 Cr Hrs

Emphasis on live animal evaluation of beef cattle, swine, sheep and horses. Animal evaluation will include study of live animals, animal performance, records, carcass grading and oral defense of decisions made in evaluations.

AG 1712 Livestock Selection II 2 Cr Hrs

Emphasis on live animal evaluation of beef cattle, swine, sheep and horses. Animal evaluation will include study of live animals, animal performance, records, carcass grading and oral defense of decisions made in evaluations.

AG 1723 Modern Breeds of Livestock 3 Cr Hrs

This course is designed to familiarize the student with the various breeds represented in the livestock industry. The student will gain an understanding of origin, growth, purpose and development of the breeds of livestock used throughout the world.

AG 1733 Meat Science 3 Cr Hrs

This course is designed to familiarize the student with the different cuts of meat, carcass and meat evaluation, and grading. In addition, the student will become familiar with where each cut of meat is located on the live animal. Exposure to the meat industry will also be introduced.

AG 1753 Beef Production 3 Cr Hrs

A study of beef cattle production, providing an introduction into cow-calf, stocker and feedlot production. The course will have an integrated approach to cattle production, with an emphasis placed on managing the herd for maximum economic efficiency.

AG 1803 Sheep Production 3 Cr Hrs

A study of the selection, reproduction, basic health and management skills related to the commercial and purebred sheep industry, as well as learning the management of growing, finishing and marketing sheep.

AG 1904 Crop Science 4 Cr Hrs

A study of the principles of plant ecology, physiology and the taxonomical divisions of economically significant plants. The course is designed to introduce and develop botanical principles in regard to economic plant production practices and problems. A laboratory period is an integral part of the course, which is designed to give the student an opportunity for methodical and direct observation of plant morphology, taxonomy and ecological principles of plant growth.

AG 1953 Directed Independent Studies in AG 3 Cr Hrs

(On demand.) This course is an opportunity for the student to pursue a special interest in agriculture through guided independent study in a chosen area. Students must have permission of the instructor, advisor and division chairperson in order to enroll in this course.

AG 2401 Intro to Futures & Options 1 Cr Hr

This course is designed for the individual interested in buying and selling Agriculture Futures and Options contracts. It is anticipated that the individual will acquire the needed vocabulary and skills to more effectively trade in commodities.

AG 2413 Farm & Ranch Management 3 Cr Hrs

This course is designed to give students an introduction to basic farm and ranch management principles. Planning, organizing, controlling and directing will be the four main areas covered. Particular attention will be given to correctly preparing financial statement and calculating financial ratios from the statements.

AG 2423 Agriculture Economics 3 Cr Hrs

A study of economic principles, with special emphasis on their applicability and current utilization in the field of agriculture. The principles of economics and their use in sustaining or questioning current economic policy will be a central theme of this course.

AG 2431 Advanced Hedging & Options 1 Cr Hr

This course is designed for the individual interested in buying and selling commodities or trading options. It is anticipated that the individual will expand and improve on current vocabulary and marketing skills to more effectively market commodities.

AG 2443 Grain & Livestock Marketing 3 Cr Hrs

A study of the market structures and organization of the livestock meat and grain economy. Emphasis will be on factors affecting prices, changing competitive arrangements and marketing problems of farmers and ranchers. Additional emphasis will be placed on the development of a logical marketing plan.

AG 2452 Commodity Marketing Strategies 2 Cr Hrs

This course is designed for individuals with experience and knowledge in marketing agricultural products. Topics covered will include use of agricultural options, hedging strategies, sources of marketing information, developing strategies for marketing agricultural products, marketing alternatives and financing marketing activities.

AG 2602 Swine Breeding/Gestation Operations I 2 Cr Hrs

A hands-on experience class on the management of swine during the breeding and gestation stages of production. Students will be exposed to basic management skills as they relate to the care of sows and gilts during breeding and gestation. Additional attention will be given to care and proper handling of the boar during breeding.

AG 2612 Swine Breeding/Gestation Operations II 2 Cr Hrs

A continuation of Swine Breeding & Gestation Operations I. Students will continue skill development in the care of the breeding herd, heat detection and breeding techniques, department organization and animal flows.

AG 2622 Swine Records Analysis 2 Cr Hrs

This course is an emphasis on assessment records of a production swine operation.

AG 2904 Soils 4 Cr Hrs

A study of the physical, biological and chemical properties of soils, with a view towards the proper management of soils for efficient crop production and minimum soil erosion. A laboratory period is an integral part of the course designed to give the student and opportunity to observe firsthand the different physical properties of soils and to make different soil chemistry tests.

AG 2923 Agriculture Chemicals 3 Cr Hrs

This course is designed to train the student to meet verification requirements of a private applicator under federal guidelines in pesticide use, handling and application.

AG 2952 Supervised Occupational Experience I 2 Cr Hrs

Before a student may enroll in Occupational Experience, the student must have completed one semester of college-level courses and have the permission of the instructor. Students may earn a maximum of eight credit hours. On-the-job training will be arranged in the livestock area in which the student has special interest. An outline of activities to be encountered will be set forth in accordance with the student's desires and the coordinator's counsel. A minimum of 68 clock hours is required for two hours of credit.

AG 2962 Supervised Occupational Experience II 2 Cr Hrs

Before a student may enroll in Occupational Experience, the student must have completed one semester of college-level courses and have the permission of the instructor. Students may earn a maximum of eight credit hours. On-the-job training will be arranged in the livestock area in which the student has special interest. An outline of activities to be encountered will be set forth in accordance with the student's desires and the coordinator's counsel. A minimum of 68 clock hours is required for two hours of credit.

AG 2972 Supervised Occupational Experience III 2 Cr Hrs

Before a student may enroll in Occupational Experience, the student must have completed one semester of college-level courses and have the permission of the instructor. Students may earn a maximum of eight credit hours. On-the-job training will be arranged in the livestock area in which the student has special interest. An outline of activities to be encountered will be set forth in accor-

dance with the student's desires and the coordinator's counsel. A minimum of 68 clock hours is required for two hours of credit.

AG 2982 Supervised Occupational Experience IV 2 Cr Hrs

Before a student may enroll in Occupational Experience, the student must have completed one semester of college-level courses and have the permission of the instructor. Students may earn a maximum of eight credit hours. On-the-job training will be arranged in the livestock area in which the student has special interest. An outline of activities to be encountered will be set forth in accordance with the student's desires and the coordinator's counsel. A minimum of 68 clock hours is required for two hours of credit.

Administrative Professionals

AP 1101 Introduction to Keyboarding 1 Cr Hr

A course designed to enable students to learn the keyboard and develop inputting skills at a minimum speed in a minimum amount of time. This course is taught on microcomputers.

AP 1103 Input Tech: Voice & Handwriting 3 Cr Hrs

This course is designed to build voice and handwriting recognition skills as an alternative to keyboarding. Students will be introduced to the basic techniques of using voice and handwriting recognition to write and edit documents using the Microsoft Office product applications Word, PowerPoint, Excel and Access. Benefits include increased accuracy in document preparation and reduction of repetitive stress injuries.

AP 1113 Basic Keyboarding 3 Cr Hrs

A course designed for students wanting a basic keyboarding and document preparation course for personal or career purposes. This course is taught on microcomputers. Additional lab-time may be required.

AP 1133 Intermediate Keyboarding 3 Cr Hrs

A continuation of Beginning Keyboarding/Formatting (AP 1113) or Refresher Keyboarding (AP 1123). More emphasis is placed forms and other production problems. Forms and other production problems.

AP 1203 Note Taking 3 Cr Hrs

An introduction course presenting the fundamentals of SuperWrite, an abbreviated writing system based primarily on longhand and secondarily on phonetics. It is designed to provide students with quick, easy-to-learn note taking skills that will increase writing speeds significantly. This is beneficial both in the classroom and in the professional marketplace. Study habits, outlining and proper spelling, vocabulary and punctuation are covered.

AP 1223 Records Management 3 Cr Hrs

This course serves as a basic introduction to the comprehensive field of records management. Principles and practices of effective records systems are emphasized. A manual/computerized simulation allows hands-on instruction in the storing and retrieving of information based upon updated ARMA Simplified Rules.

AP 1302 Administrative Professionals Internship I 2 Cr Hrs

This course is designed to give the student on-the-job training in a related training station under the supervision of an employer and a coordinating instructor. Students, instructors and an employer will file progress and evaluation reports, attend arranged conferences, keep a continuous record of the on-the-job experience and complete the various projects assigned individually by and with the coordinating instructor. The student must work a minimum of 136 clock hours for the semester (an average of 8.5 per week) to receive the two credit hours. The student may only have eight credit hours of Internship to count toward the total hours required for graduation (64). (Permission is required before enrollment in this course.)

AP 1312 Administrative Professionals Internship II 2 Cr Hrs

This course is designed to give the student on-the-job training in a related training station under the supervision of an employer and a coordinating instructor. Students, instructors and an employer will file progress and evaluation reports, attend arranged conferences, keep a continuous record of the on-the-job experience and complete the various projects assigned individually by and with the coordinating instructor. The student must work a minimum of 136 clock hours for the semester (an average of 8.5 per week) to receive the two credit hours. The student may only have eight credit hours of Internship to count toward the total hours required for graduation (64). (Permission is required before enrollment in this course.)

AP 1322 Administrative Professionals Internship III 2 Cr Hrs

This course is designed to give the student on-the-job training in a related training station under the supervision of an employer and a coordinating instructor. Students, instructors and an employer will file progress and evaluation reports, attend arranged conferences, keep a continuous record of the on-the-job experience and complete the various projects assigned individually

by and with the coordinating instructor. The student must work a minimum of 136 clock hours for the semester (an average of 8.5 per week) to receive the two credit hours. The student may only have eight credit hours of Internship to count toward the total hours required for graduation (64). (Permission is required before enrollment in this course.)

AP 1332 Administrative Professionals Internship IV 2 Cr Hrs

This course is designed to give the student on-the-job training in a related training station under the supervision of an employer and a coordinating instructor. Students, instructors and an employer will file progress and evaluation reports, attend arranged conferences, keep a continuous record of the on-the-job experience and complete the various projects assigned individually by and with the coordinating instructor. The student must work a minimum of 136 clock hours for the semester (an average of 8.5 per week) to receive the two credit hours. The student may only have eight credit hours of Internship to count toward the total hours required for graduation (64). (Permission is required before enrollment in this course.)

AP 1403 Word Processing Applications 3 Cr Hrs

A course designed to introduce theories and practical applications in word processing software packages. The course will include information about careers that utilize word processing applications for employment purposes and home use, basic microcomputer functions, writing activities and workplace skills. Students will receive hands-on experience in document preparation emphasizing the basic word processing features.

AP 1413 Advanced Word Processing Applications 3 Cr Hrs

A course designed to provide the students with applications to develop advanced skills used to perform word/information processing applications on microcomputer-based systems. The course includes applications to integrate word processing with data processing, communications, record processing, integrated programs, desktop publishing and data base management to achieve a total information network.

AP 2103 Advanced Keyboarding 3 Cr Hrs

This course is designed for the administrative professionals major. A high degree of proficiency in production work will be reached through various technical simulations. Both electronic typewriters and microcomputers will be used.

AP 2202 Machine Transcription 2 Cr Hrs

Though the use of cassette tapes, a transcribing/dictation machine and a text-workbook, the student will transcribe, dictate and proofread documents based on real-life situations. The word processing environment, modern business procedures, terminology, and equipment will be studied.

AP 2303 Office Procedures 3 Cr Hrs

This finishing course is designed for students to further develop not only technology skills but also a broad range of human relation skills (including verbal and written communication) and critical-thinking skills. Emphasis is placed on telecommunications, records management, ethical behavior, presenting successfully, travel arrangements and mail procedures.

AP 2403 Office Procedures: Legal/Medical 3 Cr Hrs

A study of the responsibilities, duties and functions of the specialized (legal/medical) secretarial areas relative to employers, clients/patients and others. This course includes secretarial communications, transcription, telephone procedures, financial records, word processing procedures and related professional activities.

AP 2413 Administrative Office Management 3 Cr Hrs

A course that will study the process of planning, organizing and controlling all the office activities of the firm and leading or directing people so that the objectives of the firm may be attained. Special attention will be given to the management of information systems in the office.

AP 2423 Legal Office Assistant 3 Cr Hrs

A study of the legal procedures related to appellate, criminal, federal, administrative, civil, probate and corporate law and duties of the legal secretary relative to employers, clients and others.

Art

AR 1103 Interior Design I 3 Cr Hrs

This course will help students develop an appreciation of the principles of art as applied to interior decoration. Exterior and interior styles, the art principle and elements of design, color schemes, arrangement of home furnishings, selection of floor, textile, window and wall treatments, and dealing with lighting, accessories and storage will be covered.

AR 1153 Introduction to Crafts 3 Cr Hrs

This course is designed for both the general student and the art major. Students will be introduced to a variety of craft areas, which might include such areas as

weaving, papermaking, jewelry, candle making, marbling paper, paper maché and batik. The student will learn about the diverse cultures/histories of the crafts covered, complete hands-on projects, meet with artists and visit exhibits, and participate in classroom discussions.

AR 1203 Photography I 3 Cr Hrs

This is a course in the theory of black and white photography, with practical experience in the use of the camera, its variables (shutter, aperture, film), dark-room techniques, and the theory of design as it applies to photography. This includes an extended lab for practical application of the camera and darkroom techniques.

AR 1213 Photography II 3 Cr Hrs

An advanced course in photography designed for students with experience in basic black and white photographic techniques. The student will deal with an advanced level of investigation and experimentation relating to the technical and creative aspects of photography.

AR 1223 Wilderness Photography 3 Cr Hrs

This is a multifaceted course that will provide students an opportunity to learn the theories of black and white photography and artistic designs as it applies to this medium, as well as the use of the camera with its variables of shutter, aperture, and film, darkroom techniques, and to experience the opportunities and challenges of wilderness photography.

AR 1253 Glass Blowing I 3 Cr Hrs

This studio class will provide practical experiences in working with glass. Design skills, cold forming techniques, and hot blown techniques will be emphasized. Applicable research into glass formation and its historic uses will also be discussed.

AR 1263 Glass Blowing II 3 Cr Hrs

This is a course in learning advanced skills in the working of hot glass in three media areas: hot glass with blowpipes and manipulative tools, hot bead making with a lamp working torch, and hot kiln glass working (fusing and slumping)

AR 1302 Ceramics for Seniors 2 Cr Hrs

(One-hour lecture, one-hour lab) A course designed to introduce the beginning student to the medium of clay. Emphasis is primarily on learning to pour clay into molds and decorating techniques.

AR 1303 Ceramics I 3 Cr Hrs

A course designed to introduce the beginning student to the medium of clay. Emphasis is primarily on learning hand building and decorating techniques to create clay objects and a fundamental integration of the elements of art and the principles of design.

AR 1313 Ceramics II 3 Cr Hrs

A course designed for the student who desires to further the investigation of the discipline of clay. An emphasis on hand building, throwing and decorating techniques to create clay objects and a fundamental integration of the elements of art and the principles of design is applied.

AR 1323 Art Appreciation 3 Cr Hrs

This course is designed as a fundamental course in the appreciation of art for the non-artist. The basis for the course is the belief that an understanding of the visual arts can be heightened through the study of the vocabulary, visual qualities, functions and meaning of a variety of art works from different cultures and periods.

AR 1403 Two-Dimensional Design 3 Cr Hrs

This is a beginning course in the basic concepts underlying two-dimensional artwork. This course is designed to give the student a working knowledge of the elements and principles of art and will be helpful to anyone who wishes to communicate visually. The course consists of lecture and studio assignments.

AR 1413 Three-Dimensional Design 3 Cr Hrs

This is a fundamental course in the effective three-dimensional organization of the visual elements and emphasizes the interrelationships of the parts of the whole involving space and motion.

AR 1453 Drawing I 3 Cr Hrs

A beginning course in the fundamentals of drawing. Art elements of line, shape, value, space/volume and texture will be explored via drawing. The student will use a variety of media to produce drawings from life observation. Emphasis is on development of the student's perceptual and technical skills as they relate to drawing.

AR 1463 Drawing II 3 Cr Hrs

A continuation of skill development, with an emphasis on individual style and expression. Students will work on advanced problems that will continue the study of art elements and principles as they relate to drawing.

AR 1493 Intro to Graphic Design 3 Cr Hrs

In this course students will trace early processes for graphic design through

typography and typesetting, learn fundamentals of a good layout and design, and become familiar with different design areas. Students will use current technology and graphic design software to complete various projects in the computer lab.

AR 1503 Graphic Design I 3 Cr Hrs

In this course students will become familiar with various areas of graphic design through the completion of projects in the studio.

AR 1603 Silversmithing/Jewelry Making 3 Cr Hrs

Primarily a studio class, Silversmithing/Jewelry Making is designed to offer a broad overview of silver/metalsmithing, including its technical, historical, aesthetic and critical aspects.

AR 1613 Silversmithing/Jewelry Making II 3 Cr Hrs

Primarily a studio class, Silversmithing/Jewelry Making II is designed to offer a broad overview of silver/metalsmithing, including its technical, historical, aesthetic and critical aspects. Students build on skills learned in AR1603.

AR 1652 Watercolor - Senior Center 2 Cr Hrs

This is a fundamental course in the uses of the elements of art via the medium of watercolor. Approaches to the problems of watercolor are handled on an individual basis, allowing the student a better opportunity to explore and define a personal artistic statement.

AR 1653 Watercolor I 3 Cr Hrs

This is a fundamental course in the use of color via the medium of watercolor. Skill development and color theory are areas of emphasis. Students will find a basic understanding of drawing concepts helpful. Drawing I recommended.

AR 1663 Watercolor II 3 Cr Hrs

A continuation of skill development with an emphasis on individual style and self-expression via technique and organizational development will be the focus of this class.

AR 1703 Survey of Art History I 3 Cr Hrs

A survey course of the history of art from the Paleolithic to the Middle Ages. Students will examine the major art historical periods in this time frame, and the political, religious, cultural, and personal concerns that have influenced representative works of art from these major periods.

AR 1713 Survey of Art History II 3 Cr Hrs

A survey of the history of art from the Late Gothic to Post-Modernism. Students will examine the major art historical periods within this time frame and the political, religious, cultural and personal concerns that have influenced representative works of art from these stylistic periods.

AR 2113 Interior Design II 3 Cr Hrs

This course is designed to enhance the knowledge obtained in the Interior Design I class. By researching, having guest speakers, lectures, new developments, and going on field trips, this class will deepen the student's understanding and knowledge of specific areas of Interior Design.

AR 2123 Digital Photography 3 Cr Hrs

This is a course in the theory and practice of photography using the digital camera and photo editing software, with an emphasis on expressing and communicating ideas through photography as an art medium. Digital camera and basic computer skills required. Course is blended online and face-to-face.

AR 2133 Digital Photography II 3 Cr Hrs

This is an advanced course in the theory and practice of photography using the digital camera and digital darkroom, with an emphasis on developing personal expression through photography as an art medium. Digital camera and basic computer skills required. Course is blended online and face-to-face.

AR 2303 Ceramics III 3 Cr Hrs

A course designed for the student who desires to further the investigation of the discipline of clay. An emphasis on hand building, throwing and decorating techniques to create clay objects and a fundamental integration of the elements of art and the principles of design is applied.

AR 2313 Ceramics IV 3 Cr Hrs

A course designed for the student who desires to further the investigation of the discipline of clay. An emphasis on wheel throwing and hand building is applied.

AR 2552 Oil Painting - Senior Center 2 Cr Hrs

This is a fundamental course in the use of color via the medium of oil paint. Skill development and color theory are areas of emphasis. Students will find a basic understanding of drawing concepts is helpful.

AR 2553 Oil Painting I 3 Cr Hrs

This is a fundamental course in the use of color via the medium of oil paint. Skill development and color theory are areas of emphasis. Students will find a basic understanding of drawing concepts is helpful.

AR 2563 Oil Painting II 3 Cr Hrs

This course is a continuation of skill development with an emphasis on in-

dividual style and self-expression via technique and organizational development.

AR 2603 Sculpture I 3 Cr Hrs

A fundamental course in the use of three-dimensional form and texture via various sculptural materials and techniques. Clay, plaster, wood and other materials are carved and modeled to produce realistic and abstract forms.

AR 2613 Sculpture II 3 Cr Hrs

This course is a continuation of sculptural skill development, with an emphasis on technique variation and development.

AR 2803 Intro to Visual Communications 3 Cr Hrs

A course designed to introduce students to the fundamentals of visual communication, with an emphasis on illustration. Students will learn about different areas of illustration and use a variety of media and software to complete projects relating to such areas as caricature, animation and technical, editorial and advertising illustration.

AR 2813 Graphic Design II 3 Cr Hrs

In this course students will complete a range of advanced projects and then assemble a portfolio and resume in preparation for seeking employment in the field of graphic design.

AR 2903 Individual Studio Research 3 Cr Hrs

This course will give students the opportunity to pursue special interests in art through guided independent study in a chosen area. The student and instructor will develop a course outline and evaluation format.

AR 2953 Directed Independent Studies in Art 3 Cr Hrs

In this course advanced problems in specialty areas of art not covered in other courses will be stressed. This course may be repeated for credit. (This course may be taken by permission of the instructor only.)

Auto Body/Collision Repair

AT 1002 Refinishing I 2 Cr Hrs

This course will give the student basic knowledge of the vehicle finish, finish defects. Complete detailing of the interior and exterior of a vehicle is also taught.

AT 1004 Refinishing II 4 Cr Hrs

This course will introduce the student to the paint and refinishing side of collision repair. Safety precautions, surface preparation, spray gun operation, paint mixing, matching, and applying are also included in this course.

AT 1005 Orientation & Safety for Auto Body/Collision Repair 5 Cr Hrs

This course introduces the to the collision repair occupation. Personal safety is emphasized by the student learning OSHA laws. Proper handling and disposal of wastes including those classified as hazardous are discussed. Tool identification and safety along with basic auto construction and estimating systems are also introduced.

AT 1010 Non-Structural Repair I 10 Cr Hrs

This course will teach the student to exhibit basic skills needed to perform minor service operations. These skills will be the foundation needed to build other more complicated skills in the trade.

AT 1012 Mechanical & Electrical Repair 2 Cr Hrs

This course goes beyond the basics to include disarming and arming and installing air bags. Steering and suspension replacement and alignment are also included. Heating and air conditioning, brakes, cooling systems, drive train, fuel, intake and exhaust systems damaged from a collision are also taught in the course.

AT 1014 Refinishing III 4 Cr Hrs

This course is an advanced course that involves the student into the live work associated with all areas of refinishing from surface preparation to top coat application. Color matching skills are developed by introducing color theory and tinting skills for solid and metallic color match. Custom painting is also taught in this course.

AT 1015 Structural Repair I 5 Cr Hrs

This course will teach the student to identify structural panels of the vehicle and learn the procedures for the replacement or repair, including restoring corrosion protection. Replacement of stationary glass and welding are included in this course.

AT 1016 Structural Repair II 6 Cr Hrs

This course will teach the student to identify structural panels of the vehicle and learn the procedures for the replacement or repair, including restoring corrosion protection. This is a continuation of Structural Repair I

AT 1110 Non-Structural Repair II 10 Cr Hrs

This course goes beyond the basics of metal working to include, introduction to paintless dent repair, plastic repair and replacement. Replacement of sheet metal panels by welding and chemical bonding is also included. Live work is

emphasized. Larger collision projects are incorporated in this course.

AT 1113 Directed Independent Study in Auto Body/Collision 1-3 Cr Hrs

Automotive Business Management

AB 1001 Introduction to Parts 1 Cr Hr

This 1 credit hour course will identify various terms and aspects of the automotive business field. A general survey of the automotive parts and service business environment and the operations of the automotive business world are examined. Attention is focused on the job opportunities, responsibilities, and benefits available and the impact of daily operations on the automotive business community.

AB 1002 Merchandising 2 Cr Hrs

This 2 credit hour course prepares individuals to possess the skills associated with direct promotion of products and services to potential customers. The course includes instruction in buyer behavior, principles of marketing research, pricing theory, marketing campaigns, and strategic planning related to specific products and markets.

AB 1003 Shipping & Receiving Merchandise 3 Cr Hrs

This 3 credit hour course is an in-depth survey of the shipping and receiving environment with a focus on the internal operations of a business. Attention is focused on the individual's ability to manage and coordinate logistical functions in an enterprise, ranging from acquisitions to receiving and handling of material to filling orders and processing shipments.

AB 1011 Workplace Safety 1 Cr Hr

This 1 credit hour course will identify various workplace safety issues relating to the automotive service and business environment. Students are provided with safety training that prepares them for their job responsibilities. The potential hazards associated with shop work are reviewed along with a variety of special safety considerations. These areas include OSHA safety requirements for hazardous materials and the proper use of Material Safety Data Sheets and their application to the automotive and business industry.

AB 1012 Automotive Products & Systems 2 Cr Hrs

This 2 credit hour course focuses on the development of knowledge relating to a variety of automotive service industry products. This course demonstrates proper use and application of petroleum products, tools and fasteners, auto body/collision consumable products and automotive industry chemicals.

AB 1013 Human Relations for Auto Business 3 Cr Hrs

This 3 credit hour course is designed for students to learn a human relations approach to automotive business management. Emphasis is placed on attitudes, customer relations, communication skills, critical thinking skills, and ethical behavior.

AB 1022 Sales Policies & Procedures I 2 Cr Hrs

This 2 credit hour course prepares students to possess the skills associated with direct promotion of products and services to customers and to function as independent sales representatives and managers. This course includes detailed instruction in counter management, purchasing merchandise, parts procurement logistics, and proper billing procedures. Emphasis is placed on customer relations, sales presentation, communication skills, records management, professional standards, and ethical behavior.

AB 1023 Math & Measurement for Automotive Industry 3 Cr Hrs

This 3 credit hour course is designed to teach the application of practical math and measurement to solve everyday problems in the automotive business and technical fields. Attention is focused on fractions, decimal fractions, percentages, ratios and proportions, metric measurements, and measuring instruments with an emphasis on career application.

AB 1032 Inventory Management I 2 Cr Hrs

This 2 credit hour course takes an in depth look at a management approach to inventory control. Attention is focused on the financing, managing, organizing, and analysis of a business functions. Lab instruction allows students to manage an actual business module controlling a live store inventory control system. Students monitor perpetual and physical inventories, storage and handling of stock, stock orders, managing customer and vendor accounts, data entry, and many other aspects of everyday business.

AB 1033 Auto-Bus Office & Bookkeeping Procedures 3 Cr Hrs

This 3 credit hour course serves as an introduction to records management. It is designed to develop skills in business office bookkeeping, shop accounts management, data entry, verbal and written communications, office machines, cashier and critical thinking. This course provides hands on computer based experience processing live work orders, payable and receivable accounts, and managing a variety of other automotive business office activities.

AB 1042 Inventory Management II 2 Cr Hrs

This 2 credit hour course is a continuation of Inventory Management I. It takes

an in depth look at a management approach to inventory control. Attention is focused on the financing, managing, organizing, and analysis of a business functions. Lab instruction allows students to manage an actual business module controlling a live store inventory control system. Students monitor perpetual and physical inventories, storage and handling of stock, stock orders, managing customer and vendor accounts, data entry, and many other aspects of everyday business.

AB 1043 Sales Policies & Procedures II 3 Cr Hrs

This 3 credit hour course is a continuation of Sales Policies & Procedures I. It prepares students to possess the skills associated with direct promotion of products and services to customers and to function as independent sales representatives and managers. This course includes detailed instruction in counter management, purchasing merchandise, parts procurement logistics, and proper billing procedures. Emphasis is placed on customer relations, sales presentation, communication skills, records management, professional standards, and ethical behavior.

AB 1053 Parts Cataloging I 3 Cr Hrs

This 3 credit hour course challenges the student using actual industry and electronic data systems for the procurement of automotive parts and supplies. This course of study utilizes current parts industry cataloging systems technologies. Student activities involve live lab assignments, which include, but are not limited to, assimilating information to produce estimates, filling parts orders, determining product specifications, and utilizing warranty information.

AB 1063 Vehicle Components/Parts Systems I 3 Cr Hrs

This 3 credit hour course is designed to provide instruction to prepare students to apply technical knowledge and skill to perform task and services that facilitate the movement and sale of replacement parts and materials. This course instructs students in the identification of the individual parts in each of the described automotive systems and provides an understanding as to the part's function and relationship to that system.

AB 1103 Auto Business Communication 3 Cr Hrs

This 3 credit hour course will study effective business communication in the workplace. Emphasis is placed upon effective oral and written communication, business letters, listening skills and other forms of office communications.

AB 1113 Automotive Business Management 3 Cr Hrs

This 3 credit hour course will take an advanced look at hierarchy of management, various management styles, and effective resource management. Adaptability has become synonymous with success and prosperity. This course looks at how the manager must adapt to this rapidly changing world with sufficient knowledge and flexibility to assure success.

AB 1123 Employability Skills for Auto Business 3 Cr Hrs

This 3 credit hour course focuses on the linkage between individual capabilities and needs, as related to the job market. This course prepares students through the development of workplace skills regarding professional development, self-marketing and job searches. Instruction includes opportunities in assessing one's own capabilities and skills; creating a resume, filling out an application, and conducting a job interview.

AB 1133 Directed Independent Study in Auto Bus Management 1-3 Cr Hrs

AB 1143 Parts Cataloging II 3 Cr Hrs

This 3 credit hour course is the continuation of Parts Cataloging I. It challenges the student using actual industry and electronic data systems for the procurement of automotive parts and supplies. This course of study utilizes current parts industry cataloging systems technologies. Student activities involve live lab assignments, which include, but are not limited to, assimilating information to produce estimates, filling parts orders, determining product specifications, and utilizing warranty information.

AB 1153 Vehicle Components/Parts Systems II 3 Cr Hrs

This 3 credit hour course is the continuation of Vehicle Components/Parts Systems I. It is designed to provide instruction to prepare students to apply technical knowledge and skill to perform task and services that facilitate the movement and sale of replacement parts and materials. This course instructs students in the identification of the individual parts in each of the described automotive systems and provides an understanding as to the part's function and relationship to that system.

Automotive Mechanics Technology

AU 1002 Auto Orientation & Safety 2 Cr Hrs

This unit of study includes automotive shop safety, care and use of automotive hand tools precision measuring, and shop policies and procedures.

AU 1009 Automotive Engine Performance 9 Cr Hrs

This course will include the latest in training for fuel injection systems, distributor less ignition systems, computerized engine control systems, as well as

the early ignition and fuel systems.

AU 1004 Automotive Brakes 4 Cr Hrs

Students will develop the skills and knowledge needed to diagnose and repair automotive brakes.

AU 1008 Auto Elect & Elect Systems 8 Cr Hrs

This 8 credit hr course allows a student to gain a basic understanding of electrical and electronic systems on today's automobile. The student will be expected to demonstrate an ability to understand the automotive systems and use various types of equipment to test, diagnose, and repair these systems.

AU 1012 Automotive Manual Transmission 2 Cr Hrs

This course will cover manual transmission / transaxle diagnosis, service and overhaul.

AU 1014 Auto Suspension, Steering & Alignment 4 Cr Hrs

Students will develop the skills needed to repair front and rear suspension, manual and power steering, perform computerized four wheel alignment and wheel balancing.

AU 1019 Automotive Engine Repair 9 Cr Hrs

Students develop skills needed for engine repair including diagnosis, measurement, disassembling, reassembly, cylinder head service, engine installation and cooling system service.

AU 1022 Automotive Drivetrain 2 Cr Hrs

This course will cover automotive drivetrain diagnosis, service and overhaul.

AU 1024 Automatic Transmission/Transaxles 4 Cr Hrs

This course will cover automatic transmission / transaxle service, diagnosis, and overhaul. Students will train with models and live vehicles.

AU 1104 Automotive Heating & A/C 4 Cr Hrs

Instruction in problem diagnosis, repair of manual and automatic air conditioning and heating systems.

AU 1113 Directed Independent Study in Auto Mechanics Tech 3 Cr Hrs

Business Administrative Technology

BT 1203 Advanced Keyboarding 3 Cr Hrs

This course is designed for the administrative professionals major. A high degree of proficiency in production work will be reached through various technical simulations. Both electronic typewriters and microcomputers will be used. Prerequisite: Intermediate Keyboarding, a word processing course, or permission of instructor.

BT 1112 Automated Accounting for Administrative Assistants 2 Cr Hrs

This course provides a hands-on approach to learning how computerized accounting systems function when analyzing transactions and applying accounting principles and practices.

BT 1003 Business English & Vocabulary Skills 3 Cr Hrs

A course designed to have students learn and apply the skills of English usage—the foundation communication skills that competent workers need in the workplace

BT 1233 Business/Technical Communications 3 Cr Hrs

This course covers the gathering and using of information in the work environment. Emphasis is placed upon written communication—business letters, other forms of office communications, and technical reports. Oral communications, nonverbal communications, and listening skills will be studied.

BT 1123 Directed Independent Study in Business Admin Tech 1-3 Cr Hrs

BT 1013 Electronic Calculator Applications 3 Cr Hrs

This course is designed to teach the students to use the touch method of operating the electronic calculator and to use common calculator features. The course emphasizes solving business problems using the calculator. The instructor introduces concepts and how to use the calculator effectively for each solution; the students do daily exercises, speed & technique drills, practice tests, and unit tests.

BT 1023 Intermediate Keyboarding 3 Cr Hrs

A continuation of Beginning Keyboarding. The course is designed to build strong document formatting skills. Students use features of Microsoft Word that build productivity skills that are widely used by administrative assistants. Emphasis is placed on speed building, document creation and formatting, and other specific production tasks. Prerequisite: A beginning keyboarding/type-writing course.

BT 1133 Introduction to Accounting 3 Cr Hrs

A course designed to present the basic concepts of the accounting cycle from recording business transactions in the books of original entry to the preparation of periodic financial reports for a service and merchandising enterprise. This course may be used to prepare for Financial Accounting I. This course will not transfer as an accounting course and cannot be substituted for Finan-

cial Accounting I.

BT 1033 Microcomputer Database Management Systems 3 Cr Hrs

This course is designed to acquaint the student with a software system for managing the storage and collection of data used and produced by a micro-computer.

BT 1032 Microsoft Access 2007 2 Cr Hrs

The course is designed to advance students to a mastery skill level for planning, structuring, and creating databases for efficient data access and retrieval using database software. Students move from early modeling instruction through project-based problems similar to situations encountered in the workplace and are required to use thinking and problem-solving skills. Students learn Office suite integration and open-ended, realistic chapter case studies. The course aligns with Microsoft Application Specialist certification exams and is designed to help students achieve a master-level competency and prepare for Microsoft certification.

BT 1063 Microsoft Excel 2007 3 Cr Hrs

The course is designed to advance students to a mastery skill level for processing, manipulating, and representing numeric data in spreadsheets. Students move from early modeling instruction through project-based problems similar to situations they will encounter in the workplace, and requires students to use their thinking and problem-solving skills. Designed to help students achieve a master-level competency and prepare for Microsoft certification Students learn Office suite integration and experience immediate productivity gains. Open-ended, realistic chapter case studies challenge students to solve authentic information problems.

BT 1001 Microsoft Outlook 2007 1 Cr Hr

The course provides instruction on integrated software that manages time and information, including email, tasks, calendars. Students learn to quickly search communications, organize work, and better share information with others. Students build technology skills in combination with working on realistic projects and critical-thinking assignments. It builds technology skills and reinforces writing and critical-thinking abilities, culminating assessments require software mastery and independent problem-solving.

BT 1043 Microsoft PowerPoint 2007 3 Cr Hrs

The course is designed to advance students to a mastery skill level for designing and creating informational and motivational slide shows that contain hyperlinks, tables, images, and animation. It moves students from early modeling instruction through project-based problems similar to situations they will encounter in the workplace, and requires students to use their thinking and problem-solving skills. The course aligns with prepares students for Microsoft Application Specialist certification exams.

BT 1053 Microsoft Publisher 2007 3 Cr Hrs

The course is designed to advance students to a mastery skill level for planning and creating professional looking publications and marketing material in house. Students move from early modeling instruction through project-based problems similar to situations encountered in the workplace and are required to use thinking and problem-solving skills. Students learn Office suite integration and open-ended, realistic chapter case studies.

BT 1004 Microsoft Word 2007 4 Cr Hrs

The course offers a graduated progression from guided tutorials to independent challenges for creating, designing, and producing professional documents using word processing software. Students learn and use the Word 2007 skills required in the job market. Students build technology skills in combination with working on realistic projects and critical-thinking assignments. The course aligns to the Microsoft Application Specialist certification exams. It builds technology skills and reinforces writing and critical-thinking abilities, culminating assessments require software mastery and independent problem-solving.

BT 1103 Office Procedures 3 Cr Hrs

The administrative professional role today is challenging due to the constant advances in technology, our global economy, and an increasingly diverse workplace. Office Procedures is a capstone course designed to prepare students for all levels of the office environment including customer satisfaction, technological changes, and time management. Emphasis is placed on telecommunications, records management, ethical behavior and critical thinking, presenting successfully, travel arrangements and mail procedures. Students will gain the knowledge and skills to become an asset to the administrative professional field. Prerequisite: Intermediate Keyboarding or the equivalent.

BT 1223 Records Management 3 Cr Hrs

This course serves as a basic introduction to the increasingly comprehensive field of records management. Principles and practices of effective records management for both manual and automated records systems are emphasized. A manual/computerized simulation allows hands-on instruction in the storing

and retrieving of information based upon updated ARMA Simplified Rules.

Business Administration

BA 1003 Spanish for Business 3 Cr Hrs

This course is designed to provide an authentic Spanish language and culture training program. The course is for the beginning level student with no previous Spanish language experience. It is also a good reinforcement course for an intermediate Spanish student. The course will include a comprehensive vocabulary study, focusing on easily mastered course expressions and brief dialogues. Students will practice various Spanish communication terms to enable them to utilize their Spanish in the workplace.

BA 1013 Introduction to Business 3 Cr Hrs

A general survey of the business environment and the internal operations of a business firm. Attention is focused on the financing, managing, organizing and marketing functions of a firm. The impact of a business firm on its community is examined.

BA 1021 Employability Skills 1 Cr Hr

This course is designed to assist in the development of the personal and professional skills necessary to get a job and also to keep it, advance in it, and possibly transfer from it.

BA 1122 Bus Management/Marketing Internship I 2 Cr Hrs

Work is done in selected training stations under supervision of the instructor. The student is required to complete a project relating to their training station and have weekly visitations with the instructor. The student may take the internship four times and may apply a total of eight credit hours toward graduation. Total clock hours required to receive two hours of credit is 136, which is an average of 9.1 hours per week.

BA 1132 Bus Management/Marketing Internship II 2 Cr Hrs

Work is done in selected training stations under supervision of the instructor. The student is required to complete a project relating to their training station and have weekly visitations with the instructor. The student may take the internship four times and may apply a total of eight credit hours toward graduation. Total clock hours required to receive two hours of credit is 136, which is an average of 9.1 hours per week.

BA 1142 Bus Management/Marketing Internship III 2 Cr Hrs

Work is done in selected training stations under supervision of the instructor. The student is required to complete a project relating to their training station and have weekly visitations with the instructor. The student may take the internship four times and may apply a total of eight credit hours toward graduation. Total clock hours required to receive two hours of credit is 136, which is an average of 9.1 hours per week.

BA 1152 Bus Management/Marketing Internship IV 2 Cr Hrs

Work is done in selected training stations under supervision of the instructor. The student is required to complete a project relating to their training station and have weekly visitations with the instructor. The student may take the internship four times and may apply a total of eight credit hours toward graduation. Total clock hours required to receive two hours of credit is 136, which is an average of 9.1 hours per week.

BA 1163 Electronic Calculator Applications 3 Cr Hrs

This course reviews the mathematical skills necessary for business applications. The ten-key touch method is introduced with emphasis placed on developing speed and accuracy. Included is instruction on electronic printing calculators as well as the computer. The individualized progress method of instruction is used.

BA 1171 Investment Planning 1 Cr Hr

This course is designed to give information about various investment areas available to the prospective investor. Some possible areas to be covered are insurance, real estate, stocks and bonds, mutual funds, annuities and other areas of investment that are current.

BA 1183 Personal Finance 3 Cr Hrs

This course is taught as a practical approach aimed at helping the student understand and implement personal money management principles so that they can more easily cope with financial necessities throughout life.

BA 1193 Retailing 3 Cr Hrs

This course is a study of the fundamental principles and practices of retail merchandising. The course is also a study of the types of retail outlets, policies, store locations, store layout, organization, buying and selling functions, profit planning and operation controls.

BA 1203 Directed Indep Studies Bus Management/Marketing 3 Cr Hrs

(On demand.) This course is an opportunity for the student to pursue special interest in business and management though guided independent study in a chosen area. Students must have permission of the instructor, advisor and divi-

sion chairperson in order to enroll in this course.

BA 1222 Business Management/Marketing Seminar I 2 Cr Hrs

This course is specifically designed to identify business students and provide the coordinator an opportunity to give vocational counseling and individual personal assistance. Special attention will be given to such units of instruction as Delta Epsilon Chi, the collegiate level of DECA (Distributive Education Clubs of America) and SIFE (Students In Free Enterprise), competitive entry preparation, on-the-job problems, current business practices and career planning. The student may take the seminar four times and apply a total of eight credit hours toward graduation.

BA 1232 Business Management/Marketing Seminar II 2 Cr Hrs

This course is specifically designed to identify business students and provide the coordinator an opportunity to give vocational counseling and individual personal assistance. Special attention will be given to such units of instruction as Delta Epsilon Chi, the collegiate level of DECA (Distributive Education Clubs of America) and SIFE (Students In Free Enterprise), competitive entry preparation, on-the-job problems, current business practices and career planning. The student may take the seminar four times and apply a total of eight credit hours toward graduation.

BA 1242 Business Management/Marketing Seminar III 2 Cr Hrs

This course is specifically designed to identify business students and provide the coordinator an opportunity to give vocational counseling and individual personal assistance. Special attention will be given to such units of instruction as Delta Epsilon Chi, the collegiate level of DECA (Distributive Education Clubs of America) and SIFE (Students In Free Enterprise), competitive entry preparation, on-the-job problems, current business practices and career planning. The student may take the seminar four times and apply a total of eight credit hours toward graduation.

BA 1252 Business Management/Marketing Seminar IV 2 Cr Hrs

This course is specifically designed to identify business students and provide the coordinator an opportunity to give vocational counseling and individual personal assistance. Special attention will be given to such units of instruction as Delta Epsilon Chi, the collegiate level of DECA (Distributive Education Clubs of America) and SIFE (Students In Free Enterprise), competitive entry preparation, on-the-job problems, current business practices and career planning. The student may take the seminar four times and apply a total of eight credit hours toward graduation.

BA 1263 Introduction to Marketing 3 Cr Hrs

This course is a study of the principles and practices of the marketing function. It also includes a study of consumer and industrial products, the channels through which they are distributed, and the promotion and pricing procedures followed by modern business.

BA 1273 E-Commerce: Marketing/Internet 3 Cr Hrs

This course is designed to provide competency-based instruction on the concepts of e-commerce and the promotion of a business on the Internet. Web page design and the techniques needed to create an effective web page will be explored. Data obtained from the web page will be merged onto a promotional brochure that is designed by the student. Software will include Microsoft FrontPage, and Publisher.

BA 1303 Business Mathematics 3 Cr Hrs

Basic principles of mathematics are reviewed throughout the course and then these principles are applied to practical problems in business, which include subjects such as checking accounts, interest, financial statements, retailing math, inventory, depreciation, stocks and bonds, taxes and statistics.

BA 1503 Human Relations 3 Cr Hrs

This course is designed to give the student an insight into human relations on the job. Emphasis is given to identification of those skills and abilities necessary to being an effectual leader. With that emphasis, this course will also cover communication skills, attitudes, methods of building self-esteem, identifying your motivations, learning to achieve emotional control, and developing positive first impressions.

BA 1603 Business Ethics 3 Cr Hrs

This course examines the ways in which people evaluate problems concerning human conduct and moral conflict. It explores the connection between personal conduct, work-related behavior, and the challenges of working relations in the marketplace and the business environment. Current business and ethical dilemmas will be presented.

BA 2103 Business & Economic Statistics 3 Cr Hrs

This course will introduce students to many of the important concepts and procedures needed to (1) evaluate such daily inputs as organizational reports, newspaper and magazine articles and radio and television commentaries, (2) improve their ability to make better decisions over a wide range of topics, and (3) improve their ability to measure and cope with changing conditions, both at

home and on the job. The emphasis will be on explaining statistical procedures and interpreting the resulting conclusions. The course will be augmented with a computer lab where students will perform statistical analysis using Microsoft Excel.

BA 2133 Advertising 3 Cr Hrs

This course is the study of the methods of creating demands of finding buyers. It deals with the various media, composition, purposes and mechanics of advertising. Emphasis is on practical application of techniques discussed; students follow in detail a complete advertising campaign.

BA 2203 Small Business Management 3 Cr Hrs

This course is designed for those individual seeking a management position in a small firm. The course covers the operations of small business firms. It emphasizes those aspects of management that are uniquely important to small business and attempts to develop understanding of the economic system and social environment in which the small firm operates today.

BA 2223 Entrepreneurship 3 Cr Hrs

A course designed to acquaint the prospective business owner with the background of business, characteristics of being an entrepreneur, and the rewards and penalties of owning your own business. A business plan to establish one's own business will be developed.

BA 2233 Supervision 3 Cr Hrs

(On demand.) The major objective of this course is to understand the behavior of people at work. The course emphasizes information essential to understanding the behavioral concepts such as motivation, importance of supervisory style, influence of job design on employee performance, effective introduction of change, improved decision-making, more effective communication and group relationships.

BA 2243 Business/Tech Communications 3 Cr Hrs

This course covers the gathering and using of information in the work environment. Emphasis is placed upon written communication-business letters, other forms of office communications and technical reports. Oral communications, non-verbal communications and listening skills will be studied.

BA 2273 Salesmanship 3 Cr Hrs

This course is a study of the general principles, theory, practice and techniques of selling, including analysis of customer personality, psychology of selling, and the development of sales personality.

BA 2283 Business Management 3 Cr Hrs

This course is designed to provide a basic understanding of the essential elements of management. The course provides an introduction to organizations and how individuals relate to the basic management functions of planning, organizing, leading and controlling. General subject areas include the background of modern management, the evolution of management theory, functions of the managerial process and applications in operational activities of a business firm.

BA 2293 Business Law I 3 Cr Hrs

This course covers the history of law, the United States legal system, Kansas court system, court procedures, contracts, agency relationships, and personal and real property.

BA 2303 Business Law II 3 Cr Hrs

(On demand.) This course is a continuation of BA 2293, Business Law I, and covers partnerships and corporations, with an in-depth study of commercial transactions.

BA 2323 Intro to Fashion Merchandising 3 Cr Hrs

This course is designed to expose the student to opportunities in fashion merchandising. The student is taught to consider fashion as a business governed by the marketing concept of answering needs and desires of the consumer. The various industries that compose the fashion world are explored and the student learns how merchandise and services of these industries use distribution principles to get to the point of purchases. Finally, the student learns to interpret customer motivation and the forces that create fashion.

BA 2333 Insurance 3 Cr Hrs

This course is designed to introduce students to life, accident and health insurance and related subjects. It includes an analysis of the concepts and principles of shared risks. Business and consumer applications are also considered.

BA 2401 Business Career Exploration 1 Cr Hr

This course is designed to give the student on-the-job experience in an instructor selected training station under the supervision of an employer and the coordinating instructor. The employer will file an evaluation report and keep a record of the time spent on the observation. The student must observe a total of 12.5 hours to receive the one-hour of credit. The student may have only one class of observation to count towards graduation. Permission from the instructor is required before enrollment in this course.

BA 2533 Human Resource Management 3 Cr Hrs

This course emphasizes the performance of the personnel function in non-business organizations, as well as business firms; it deals with the performance of employees in white-collar and service activities. Considerable emphasis is given to equal employment opportunities for women, minorities, other workers, the handicapped and veterans. Universal aspects of personnel administration are highlighted.

BA BU177 Human Relations 3 Cr Hrs

Included in this course are behavioral concepts and theories as they relate to management. Emphasis is placed on the human relations aspects of marketing and customer service.

Behavioral Science**BH 1001 First Year Seminar 1 Cr Hr**

This course is designed to support student learning and development in the critical first semester of college. Through a shared relationship with the course instructor and academic advisor, students explore the purposes of higher education and begin to develop the skills needed to utilize information technology and academic resources successfully in college. Using a strengths-based curriculum, the course also focuses on topics useful to college students including time management, teamwork, study skills, leadership, and education and career planning.

BH 1003 Death, Dying and Bereavement 3 Cr Hrs**BH 1011 Career Exploration & Development 1 Cr Hr**

One credit hour lecture. The student will be introduced to a comprehensive career development process, assisting in identifying strengths, abilities, and interests. Specific emphasis is placed upon the creation of an individualized career portfolio.

BH 1101 College Orientation - Science 1 Cr Hr

One credit hour. (One hour lecture). This course is designed to assist science, engineering, and math career oriented students as they adjust to college and acquaint them with college facilities, resources and programs that will make the adjustment to college a smoother process.

BH 1103 Substance Abuse Awareness 3 Cr Hrs

This course examines the use of alcohol and other drugs in our society in terms of the effect on the individual and the cost to society.

BH 1112 TRIO Enrichment Course 2 Cr Hrs

This introductory course is designed to support student learning and development in the critical first semester of college. Through a shared relationship with the course instructor and academic advisor, students explore the purposes of higher education and begin to develop the skills needed to utilize information technology and academic resources successfully in college. Using a strengths-based curriculum, the course also focuses on topics useful to college students including time management, team work, study skills, leadership, and education and career planning.

BH 1201 Outdoor Leadership 1 Cr Hr

The purpose of this class is to offer students the opportunity to participate in a series of activities involving mental and physical challenge and emotional risk-taking in an open, caring and safe environment to foster leadership skills.

BH 1202 Return to Learn 2 Cr Hrs

This course is dedicated to the adult returning student. The course deals with the challenges of returning skills, career development, orientation to college, personality inventories, and stress and relaxation techniques. A personal project will be due from each student dealing with an individual area of concern.

BH 1221 Parenting 1 Cr Hr

This course includes a process for understanding the child's behavior and emotions, use of encouragement instead of praise, improving communication and various other aspects of the parent-child relationship.

BH 1303 General Psychology 3 Cr Hrs

This course surveys areas of human behavior. The student will be introduced to the development and learning aspects of human behavior. Specific emphasis is placed on emotion, personality, perceptions, social interaction, adjustment and mental health.

BH 1403 Principles of Sociology 3 Cr Hrs

This course will study the factors in the social life of people. It will include the study of group behavior, culture, socialization and social groups, their nature of specific organizations of groups, their activities and the social influences that affect personalities, behavior and social change.

BH 1511 Strategies for Success 1 Cr Hr

This course is designed to assist students in developing successful skills in leadership, communication and involvement (their own as well as the new students). Instructor permission required.

BH 1603 Intro to Physical Anthropology 3 Cr Hrs

This course will be taught from a biocultural perspective combining the biological and social aspects of human existence. The student will introduce to the discipline of Anthropology, including, but not limited to, principles, definitions, terminology, concepts, theories and research techniques as applied to the study of human species, as well as a variety of interpretations and theories about the study of human origins.

BH 1613 Intro Cultural Anthropology 3 Cr Hrs

This course will introduce the student to the discipline of Anthropology, including, but not limited to, principles, definitions, terminology, concepts, theories and research techniques. Critical thinking will be facilitated by providing opportunities to apply anthropological perspectives to daily activities.

BH 1623 Native American Cultures 3 Cr Hrs**BH 2303 Human Growth & Development 3 Cr Hrs**

This course is the study of how and why people change over time, as well as how and why they remain the same, from conception to death. Attention is given to emotional, social, intellectual, physical, perceptual and psychological development.

BH 2313 Abnormal Psychology 3 Cr Hrs

Abnormal psychology is an introductory scientific study of behavior pathologies which, given the appropriate context, represents impaired functioning. The course examines the emotional, behavioral, and cognitive aspects of a wide range of behaviors. Emphasis is placed on the identification and diagnosis of symptoms; the biological, psychological, and sociological factors correlated with maladaptive behavior, as well as treatments available for specific disorders. Additionally, the course emphasizes the social, cultural, and legal outcomes of behaviors which differ from social norms and expectations. Further, the course examines the use of labels in describing individuals, myths and fallacies regarding specific maladaptive behaviors, and stresses respecting the dignity and worth of individuals afflicted with disorders.

BH 2403 Marriage and the Family 3 Cr Hrs

This course investigates the function of marriage and family in society, as well as the dynamics of each. Examining change over time and the consequences of this change for both society and the individual are emphasized.

BH PS276 Developmental Psychology 3 Cr Hrs

Developmental Psychology, from the life span perspective, tells the story of human development from conception to death. This class will convey up-to-date research in the biological, cognitive, and social processes in relation to each stage of life. Human development is relevant to current career and social issues that all adults face and is especially relevant to those who will work with children, adolescents, families, and the elderly. The overall goal of the class is to present development at every stage of life span from a growth perspective. Diversity is emphasized, as human experience is shaped by the particulars of an individual's culture, gender, and socioeconomic status.

Biology**BI 1015 Directed Independent Studies in Biology 5 Cr Hrs**

Projects in Biological Science is an independent of small group study for students to investigate topics of biological science outside of the regular curriculum offering.

BI 1103 River Ecology 3 Cr Hrs

This is a field course investigating the ecology and management of the Ozark river ways. Identified study sites will be sampled and data collected on invertebrate, vertebrate, plant and fungi species and water quality as students canoe 60 miles from headwaters of the Current River in south central Missouri. Hatchery tours, cave exploration and spring investigation will also be utilized as students explore the changes that occur in a river system and the management challenges associated with a National Park Service scenic river way.

BI 1113 Field Biology 3 Cr Hrs

This course is an intra-disciplinary exploration of the environment and the ways an individual perceives it, utilizing actual outdoor experiences, as well as readings and formal classroom instruction. Personal growth, understanding of the natural environment and awareness of varying land uses will be emphasized.

BI 1129 Emergency Medical Technician 12 Cr Hrs

This course is designed to teach a layperson the clinical signs and symptoms of a medical emergency. Specific types of injuries and sickness are categorized, and the proper manner and equipment used for treatment are identified. This course of study will provide the participant with opportunities to gain information, skills and attitudes necessary for certification and practice as an EMT in the State of Kansas.

BI 1305 Principles of Biology **5 Cr Hrs**

This course is a foundation emphasizing human interaction and place within all levels of the biosphere and the scientific process. The course will incorporate six unifying principles: (1) Evolution: Patterns and Products of Change; (2) Interaction and Interdependence; (3) Genetic Continuity and Reproduction; (4) Growth, Development, and Differentiation; (5) Energy, Matter and Organization; and (6) Maintenance of Dynamic Equilibrium. Inquiry-oriented investigations will be used to introduce, explore and expand on concepts discussed in the classroom. Students must meet placement requirements to enroll in this course.

BI 1403 Nutrition **3 Cr Hrs**

This course will survey normal nutrition, along with the physiological processes related to digestion, absorption and metabolism of nutrients. The relationship of energy balance, weight control and eating disorders will be examined. The nutritional requirements of mother, infant, child, teen and geriatric populations will be studied. This course is designed for the student entering health-related fields or those who have an interest in normal nutrition. This course will utilize computer technology to enhance student learning.

BI 1504 Cell Biology **4 Cr Hrs**

This course is designed to fulfill the needs of the pre-medical and pre-veterinarian biology student and student who is going to enter the fields of biological-related science, agriculture, physical education, or for the student who has a desire to learn more about the cell. The course will also cover a study of the cell structure and function. The course will deal with cellular organelles, cellular communication and experiments will supplement the theory of lectures.

BI 2114 Anatomy & Physiology I—Lecture/Lab **4 Cr Hrs**

This course introduces the integration of structure and function within the human body. An emphasis is placed on the correlation of gross and microscopic structure with functional maintenance of the following human organ systems: Integumentary, skeletal, muscular, and nervous. A holistic approach is used to encourage the student to develop an integrated understanding of the human body.

BI 2124 Anatomy & Physiology II—Lecture/Lab **4 Cr Hrs**

This course completes the second half of a two-semester sequence intended to provide the student with a basic understanding of anatomy and physiology by studying the structures and their functions and grasping the correlation between structure and function. The systems studied in this course are special senses, endocrine, circulatory, respiratory, digestive, urinary and reproductive. This course should improve the student's ability to use and understand the terms relating to the human body and encourage the development of a scientific attitude. This course is also designed to develop within the student a greater appreciation for the phenomena with which one comes in contact with on a daily basis.

BI 2304 Human Anatomy **4 Cr Hrs**

This course is designed to fulfill the requirements for two-year and/or four-year degrees pursued by students entering the fields of medical-related sciences, physical education and biological sciences. Structure of the human body on a cell, tissue, organ and system level will be covered. Laboratory work will supplement lectures.

BI 2314 Human Physiology **4 Cr Hrs**

This course is designed to fulfill the requirements for two-year and/or four-year degrees pursued by students entering the fields of medical-related sciences, physical educational and biological sciences. System functions of the human body and related diseases (pathophysiology) will be covered.

BI 2505 General Zoology **5 Cr Hrs**

This course consists of a structural, functional, ecological and evolution relationship study of the animal kingdom. For students with an adequate background in general biology.

BI 2515 General Botany **5 Cr Hrs**

This course will survey plants, their physiology and anatomy, the economic and ecological importance, some simple genetic aspects of plants, advances in biotechnology, genetic engineering of plants, and a survey of the major plant groups.

BI 2705 Microbiology **5 Cr Hrs**

This course is an introduction to the study of bacteria, viruses, protozoa, fungi and helminthes with focus on those responsible for human disease. Evolution is the unifying principle used to investigate the interaction of microbe, human and the environment. General microbiological concepts such as microbial structure, growth, metabolism, genetics and ecology are applied to such medically related topics as control and pathogenicity of microorganisms as well as to body defense mechanisms and the immune responses. The lab exercises stress basic clinical laboratory techniques such as staining, aseptic techniques and the biochemical and serological testing for microorganisms. Biotechnol-

ogy applications are also utilized. Both laboratory and lecture relate core microbiological principles to the understanding of infectious diseases.

Banking Management**BM 1103 Principles of Bank Operations** **3 Cr Hrs**

This course provides entry-level bankers with the information they need to provide effective service to their customers, thereby having an impact on bank profitability. This information includes how banks affect the economy, why they are in business, what services they provide, and how they provide them. Students will also get a basic understanding of the interrelationships among various departments within a bank.

BM 1202 Understand & Sell Bank Service **2 Cr Hrs**

A three-hour lecture course, which is an overview of selling bank products. Coverage includes retail and commercial banking products: checking accounts, certificates of deposit, debit and credit cards, loans, cash management, IRAs, trusts, and other miscellaneous services offered in banking.

BM 1203 Lending to Agricultural Entrepreneurship **3 Cr Hrs**

(On demand.) This course presents the dynamics of agriculture, capital structure and capital needs of agriculture, role of bank policy, loan analysis, legal instruments, livestock and poultry sources of credit, management of farm loan portfolio, public relations, business development, and sources and use of agricultural information.

BM 1303 Consumer Lending **3 Cr Hrs**

(On demand.) This course is designed to cover the techniques of installment lending. It emphasizes establishing credit, obtaining and checking information, servicing the loan and collections. Bank installment credit operations are studied, along with inventory financing, special loan programs, business development, advertising and public relations.

BM 2103 Money & Banking **3 Cr Hrs**

The primary focus of this course will be to present basic concepts and principles relating to money and banking. First, the course will explore the role of money and its relation to the U.S. economy. The concepts of how money evolved, its basic function(s), its use as a principal payment device, and its creation by commercial banks will be examined. Along with this, a broad overview of the business of banking, banking regulations and their key role in the nation's payments mechanism will be discussed.

BM 2202 Understand/Selling Bank Service **2 Cr Hrs**

This course is an overview of selling bank products. Coverage includes retail and commercial banking products: checking accounts, certificates of deposit, debit and credit cards, loans, cash management, IRAs, trusts, and other miscellaneous services offered in banking.

BM 2403 Supervised Concept & Practicum of Management **3 Cr Hrs**

(On demand.) A course designed to acquaint any level of bank management personnel with the practices of recruiting, training, labor relations, compensation, benefits and service, motivation and leadership.

BM 2503 Marketing for Bankers **3 Cr Hrs**

(On demand.) This course provides a thorough grounding in basic marketing principles and theory and their practical application to the banking industry.

BM 2603 Management of Comm Bank Funds **3 Cr Hrs**

(On demand.) This sophisticated treatment of a central bank function offers the student an overall treatment of funds management policies and practices conducive to liquidity, safe risks and profitability, with special focus on spread management. Emphasis is on how the banker can successfully apply basic funds management principles to an ever-changing financial environment.

BM 2703 Analyzing Financial Statements **3 Cr Hrs**

The course is a practical introduction to financial analysis from the viewpoint of the commercial loan analyst. The course provides an introduction and definition of financial analysis and explains its purpose within the loan process. The course provides analytical techniques for reviewing balance sheets, income statements and statements of cash flow. Students will also learn to calculate and interpret ratios, cash budgets and long-term forecast. Two detailed cash studies show how a comprehensive financial analysis would proceed step-by-step, using all the techniques explained in the book to reach sound judgment concerning a borrowing company's credit needs and its ability to repay loans.

BM 2803 Bank Investments **3 Cr Hrs**

(On demand.) This course explains the nature of bank investments and factors that affect investment strategies and decisions. It emphasizes basic principles, such as the nature of risk, liquidity and yield, how each is measured, and how they are related.

BM 2902 Banking Internship I **2 Cr Hrs**

(To enroll in Internship, a student must have completed BM 1103, Principles of Bank Operation, with a grade of B or better. Permission is required before

enrollment in this course.) This course is designed to give the student on-the-job training under the supervision of an employer and a coordinating instructor. Students may earn a maximum of four credit hours. A minimum of 68 clock hours is required for every credit hour.

BM 2912 Banking Internship II 2 Cr Hrs

(To enroll in Internship, a student must have completed BM 1103, Principles of Bank Operation, with a grade of B or better. Permission is required before enrollment in this course.) This course is designed to give the student on-the-job training under the supervision of an employer and a coordinating instructor. Students may earn a maximum of four credit hours. A minimum of 68 clock hours is required for every credit hour.

Early Childhood Education/Child Care

CD 1901 Current Issues in Early Childhood Education 1 Cr Hr

This course will provide a presentation of information to help persons currently employed in the Early Childhood Education field of those seeking immediate employment in the field provide better service and more developmentally appropriate activities for the children in their care. Topics include cultural diversity and young children, behavior management, serving children with special needs, health and safety, and working as a team with parents.

Chemistry

CH 1205 Introduction to Chemistry 5 Cr Hrs

Three hours lecture and four hours laboratory each week. It includes: chemical symbols and formulas, atomic theory, equation writing and balancing, chemical nomenclature, calculations involving chemical formula, heats of reactions, the chemistry of solutions: acids, bases and salts, and the brief introduction to organic chemistry, physical chemistry, analytical and biochemistry. This course is designed for students in specified allied health programs and science majors with no chemistry background needing a basic understanding prior to proceeding on to CH 1505 College Chemistry I. Students who have had high school chemistry and are in a science related degree of study should enroll in College Chemistry I.

CH 1505 College Chemistry I 5 Cr Hrs

Three hours lecture and four hours laboratory per week. The first part of a two-semester chemistry program designed to provide the foundation for more advanced work. The course includes atomic and molecular structure, nomenclature, total ionic and net ionic equations, stoichiometric calculations, qualitative and quantitative calculations, thermo-chemistry, valence shell hybridization, oxidation-reduction reactions, gases, colloids, basic chemical equilibrium, acid-base chemistry, ionic and covalent bonding, intermolecular forces and periodicity. This course is designed for specified allied health program, science majors, or students needing a physical science laboratory course who have had a course in high school chemistry.

CH 1515 College Chemistry II 5 Cr Hrs

Three hours of lecture and four hours of laboratory. This is a continuation of General Chemistry I. Contents include states of matter, solution chemistry, rates of reactions, chemical equilibrium, acid-base chemistry, thermodynamics, electrochemistry, organic chemistry and nuclear chemistry. Laboratory stress is on identification of anion and cations with some quantitative experiments. Analysis uses both wet procedures and some instrumentation.

CH 1602 Chemical Instrumentation 2 Cr Hrs

One credit hour of lecture-discussion and one credit hour of laboratory per week. This course is designed to survey theory and technique of operation, preventative maintenance and performance verification of instruments used in laboratories. The course also addresses specific instruments that employ each particular mode of analysis. Some of the instruments covered include those used for the separation of solutions, measurement of light emission and/or absorption, particle counters and electrochemical changes.

CH 1613 Basic Chemistry of Biological Reactions 3 Cr Hrs

An introduction to the chemistry of biological reactions as are applicable to health-related fields. The course is a brief study of organic chemistry, nomenclature of function groups, basic synthesis and reactions. The biochemical reactions involving the metabolism of lipids and proteins are discussed in conjunction with the enzymes, coenzymes, hormones and inhibitors needed to catalyze the various reactions, which occur in the human body.

CH 1705 General Organic Chemistry 5 Cr Hrs

(Second semester.) This course is an introduction on the structure nomenclature, preparation and reactions of carbon-containing compounds. The course focuses attention on the relationship between the structure and chemical behavior of compounds.

CH 1914 Directed Independent Studies in Chemistry 4 Cr Hrs

(On demand.) This course provides an opportunity for the student to pursue special interests in chemistry through guided independent study and/or research.

CH 2605 Organic Chemistry I 5 Cr Hrs

First semester of a two-semester course designed to meet the requirements of students needing either General Organic Chemistry or Organic Chemistry I. Course content will include a study of the basic principles of nomenclature, the reactions pertaining to aliphatic and arene compounds and the study of carbohydrates, fats and proteins.

CH 2615 Organic Chemistry II 5 Cr Hrs

Second semester of Organic Chemistry, with three hours of lecture and six hours of laboratory. This course is a continuation of Chemistry CH 2605. It includes a detailed study of alcohols reactions, infrared spectroscopy, mass spectroscopy, nuclear magnetic resonances, ethers and epoxides reactions, ultraviolet spectroscopy, aromatic compounds and their reactions.

CH 2625 Basic Biochemistry 5 Cr Hrs

(On demand) This course is an introduction to the chemistry of bio-systems, which includes a study of the metabolism of carbohydrates, lipids and proteins, the structure of amino acids, bioenergetics, thermo-chemistry and enzyme-catalyzed reactions.

Construction Trades Technology

CA 1001 Intro to Construction Trades Tech 1 Cr Hr

This course introduces the student to construction safety and first aid. It includes an orientation to the trades and familiarizes the student with building materials, fastening systems and adhesives. Basic rigging procedures are also reviewed and demonstrated.

CA 1002 Blueprints and Codes 2 Cr Hrs

This course introduces the student to reading blueprints. It includes an understanding of the meaning of all the various components that make up a blueprint and the knowledge to be able to use that information to build a structure. The course reviews current codes, where to find information about them and how they affect the construction industry.

CA 1003 Building Site Preparation 3 Cr Hrs

This course introduces the student to the principles, equipment, and methods used to perform the site layout tasks of distance measurement and differential leveling. Also covered are the site layout responsibilities of individuals on the site, understanding and using site plan drawings and methods of job site communication.

CA 1004 Framing Roofs 4 Cr Hrs

This course introduces the student to the methods and procedures used in roof framing. Standard "cut-in" and truss construction methods are included.

CA 1005 Tools 5 Cr Hrs

This course introduces the student to hand and power tools. It includes instruction in the use, care and properties of hand and power tools. Students will practice using all tools in a safe and appropriate manner.

CA 1012 Residential Concrete 2 Cr Hrs

This course introduces the student to the knowledge, skills and techniques used in the residential construction industry to prepare, place, and finish concrete. Topics include concrete and reinforcing materials, foundations and flat-work, concrete forms, reinforcing concrete, handling and placing concrete, and manufactured forms.

CA 1013 Framing Floors 3 Cr Hrs

This course covers framing basics as well as the procedures for laying out and constructing a wood floor using common lumber as well as engineered building materials.

CA 1014 Interior Finish - Trim 4 Cr Hrs

This course introduces the student to most aspect of interior finish trim for residential construction. It will include the installation of metal doors and related hardware in steel-framed, wood-framed, and masonry walls, along with their related hardware such as locksets and door closers. Also covered is the installation of wooden doors, folding doors, and pocket doors. The student will study the different types of trim used in finish work. Procedures covering the proper methods for selecting, cutting and fastening window, door, floor and ceiling trim are given in this course. Information is presented detailing the materials and procedures for construction of stairs. Included is an introduction to the tools, materials, and procedures used to layout, install, and maintain suspended ceilings.

CA 1016 Cabinet Making/Installation 6 Cr Hrs

This course provides the student an overview of cabinets, cabinet construction, and the various types of hardware used with cabinets. Detailed instructions for

the selection and installation of base and wall cabinets are also covered.

CA 1022 Interior Finish - Drywall 2 Cr Hrs

This course introduces the student to the materials, tools, and procedures used to install and finish gypsum drywall in walls and ceilings and to correct any drywall installation or finishing problems.

CA 1023 Framing Walls 3 Cr Hrs

This course introduces the student to the materials and general procedures used in wall and ceiling framing. Common lumber and steel components are both addressed.

CA 1032 Finishes 2 Cr Hrs

This course introduces the student to the methods and procedures used to apply various coverings to both exteriors and interiors of residential construction. Both decorative and protective coverings will be presented.

CA 1033 Exterior Finish - Roofing 3 Cr Hrs

This course introduces the student to the materials and installation techniques for a number of basic types of roofing.

CA 1042 Workplace Skills for Construction 2 Cr Hrs

This course provides the student with techniques for communicating effectively with co-workers and supervisors. It emphasizes the importance of verbal and written information and instructions on the job. It identifies the roles of individuals and companies in the construction industry. The student is introduced to critical thinking, problem solving skills and computer systems and their industry applications. The program also reviews effective relationship skills, effective self-presentation, and key workplace issues, such as sexual harassment, stress, and substance abuse.

CA 1043 Exterior Finish - Siding 3 Cr Hrs

This course introduces the student to materials and installation techniques used with various types of siding. Also presented to the student are the installation procedures and basic requirements insulation, moisture control, and ventilation.

CA 1053 Ext Finish-Windows/Doors/Trim 3 Cr Hrs

This course introduces the student to methods and procedures used in the selection and installation of residential windows and exterior doors. Methods and procedures for the installation of exterior trim are also presented as a part of this course.

CA 1113 Directed Independent Study in Construction Trades 1-3 Cr Hrs

Criminal Justice

CJ 1101 Defensive Driving 1 Cr Hr

Defensive Driving provides students with knowledge and techniques to avoid accidents. The course also attempts to influence and challenge students to change their behind the wheel behaviors and attitudes so that they will choose to drive safely, responsibly and lawfully.

CJ 1153 Civil Liability in Criminal Justice 3 Cr Hrs

Three credit hour lecture. A comprehensive examination and analysis of the growing importance of issues related to civil liability as it pertains to the criminal justice practitioner. Emphasis is placed on an understanding of appropriate responses to street and instructional level situations. Special attention will be paid to policy and procedure issues, training issues, and individual officer and administrative duties.

CJ 1163 Multiculturalism in Law Enforcement 3 Cr Hrs

This course provides the student with a new, innovative and effective understanding of the persuasive influences of culture, race, and ethnicity in the workplace and in multicultural communities.

CJ 1173 Interview and Interrogation 3 Cr Hrs

This course provides the student with new, innovative and effective techniques for obtaining information and detecting deception.

CJ 1183 Report Writing 3 Cr Hrs

This course is designed to fulfill the needs of those students who are entering into the field of criminal justice or in-service officers. The class will focus on the skills needed to write a report that is complete, clear, accurate and convincing. The actual writing of reports will be a major component of the course.

CJ 1193 Principles of Police Patrol 3 Cr Hrs

This course is designed to include the problems most frequently encountered by patrol officers, some general principles for the solution of these problems, and some specific practices and techniques that have proved effective in perplexing or hazardous patrol incidents. Also an overview of the background, functioning, and objectives of the patrol force is provided to delineate the scope of the individual officer's patrol function and the legal restraints placed on them.

CJ 1201 Firearms Safety & Marksmanship 1 Cr Hr

A firearms course for students wanting to learn the safe handling of their hand-

gun and to practice marksmanship skills. The course will provide training in gun safety rules for field stripping and cleaning the weapon and proper shooting techniques.

CJ 1203 Introduction to Criminal Justice 3 Cr Hrs

This course is an introduction to the philosophy and history of law enforcement, identifying multiple facets of the criminal justice system, including the police, the courts, the correctional agencies, and the offender.

CJ 1211 Special Topics in Criminal Justice 3 Cr Hrs

This course is specifically designed to provide the criminal justice students as well as current criminal justice practitioners an opportunity to attend various seminars dealing with special topics in the criminal justice field. This course will give the student specialized instruction in various areas of the criminal justice field. These areas include but are not limited to: (a) Spanish criminal justice personnel, (b) interview and interrogation techniques, (c) sear and seizure seminars, as well as (d) officer field training.

CJ 1212 Police Firearms I 2 Cr Hrs

A firearms course for criminal justice majors. Emphasis will be placed on firearms safety and marksmanship in preparation for firearms competition.

CJ 1213 Ethics in Criminal Justice 3 Cr Hrs

This course introduces the student to the theories of ethics and its application within the criminal justice professions. The students will address moral issues and concerns of our justice process in personal, social, and criminal justice contexts. The student will explore and apply ethical principles to a wide range of criminal and social justice issues using a philosophical foundation.

CJ 1222 Criminal Justice Seminar I 2 Cr Hrs

This course is specifically designed to identify criminal justice students and provide the coordinator/instructor an opportunity to give vocational counseling and individual personal assistance. This course will give the student specialized instruction in areas which are covered by the Lambda Alpha Epsilon Society of the American Criminal Justice Association. These areas are Criminal Law, Professional Physical Agility, Criminal Investigations, Law Enforcement Principles, Corrections and Police Firearms.

CJ 1223 Court Systems and Practices 3 Cr Hrs

This course will allow the students to have a basic understanding of the criminal justice court structure. It include the judiciary in the criminal justice system, structure of the American court system, prosecution, right to counsel, pre-trial release, grand juries, adjudication process, types and rules of evidence and sentencing.

CJ 1232 Criminal Justice Seminar II 2 Cr Hrs

This course is specifically designed to identify criminal justice students and provide the coordinator/instructor an opportunity to give vocational counseling and individual personal assistance. This course will give the student specialized instruction in areas which are covered by the Lambda Alpha Epsilon Society of the American Criminal Justice Association. These areas are Criminal Law, Professional Physical Agility, Criminal Investigations, Law Enforcement Principles, Corrections and Police Firearms.

CJ 1262 CJ Internship I 2 Cr Hrs

This course is designed to increase the student's understanding of criminal justice administration and operation. A minimum of 90 clock hours of on-the-job experience is required for two hours credit. The internship is initiated by the school in any cooperative agency. This course is repeatable for a maximum of eight hours.

CJ 1272 CJ Internship II 2 Cr Hrs

This course is designed to increase the student's understanding of criminal justice administration and operation. A minimum of 90 clock hours of on-the-job experience is required for two hours credit. The internship is initiated by the school in any cooperative agency. This course is repeatable for a maximum of eight hours.

CJ 1403 Criminal Investigations 3 Cr Hrs

This course is designed to examine the methods, techniques, tools and precepts employed by the criminal investigator from the time a crime is reported through case disposition. Topics include legal aspects, crime scene management, interview and interrogation techniques, documentation, and evidence collection and preservation.

CJ 1503 Intro to Law Enforcement 3 Cr Hrs

This course introduces the student to the history and major functions of law enforcement agencies. Emphasis is placed on police interactions with society and within law enforcement agencies.

CJ 1513 Constitutional Law 3 Cr Hrs

This course is designed to provide students with an overview of the United States Constitution and its influence on the criminal justice system, placing emphasis on the 4th, 5th, 6th and 8th Amendments.

CJ 1523 Criminal Procedure 3 Cr Hrs

This course covers criminal procedures and courtroom practices most commonly confronting law enforcement officers in the administration of criminal law, such as inquests, indictments, warrants, appeals, search and seizure, use of force, and evidence.

CJ 1602 Defensive Tactics 2 Cr Hrs

This course covers a system of defense and control techniques based upon established principles of hand-to-hand combat. Defensive and aggressive physical maneuvers, armed and unarmed opponents, club maneuvers and other techniques using proper and reasonable use of force and effective communication skills will be emphasized.

CJ 1703 Traffic Accident Investigation 3 Cr Hrs

This course is designed to allow the students to develop basic investigation skills. An emphasis is placed on interviewing techniques, collecting evidence, and properly and accurately completing reports for traffic accidents.

CJ 1803 Crime in America 3 Cr Hrs

This course will allow students to have a basic understanding of the complexities of criminology, crime causation, and reaction to offenders. Some of the topics included are a historical perspective of American crime problems, social and public factors affecting crime, crime patterns, social characteristics of specific crimes, and crime control strategies.

CJ 2113 Agency Administration 3 Cr Hrs

Agency Administration provides criminal justice majors an overview of motivational and management theories, current trends, and fiscal accountability presented through projects designed to incorporate understanding and content analysis. This course provides an opportunity to explore and apply creative thought processes, leadership and team-work, self-motivation and responsibility which are essential for successful criminal justice career professionals.

CJ 2142 Criminal Justice Seminar III 2 Cr Hrs

This course is specifically designed to identify criminal justice students and provide the coordinator/instructor an opportunity to give vocational counseling and individual personal assistance. This course will give the student specialized instruction in areas which are covered by the Lambda Alpha Epsilon Society of the American Criminal Justice Association. These areas are Criminal Law, Professional Physical Agility, Criminal Investigations, Law Enforcement Principles, Corrections and Police Firearms.

CJ 2152 Criminal Justice Seminar IV 2 Cr Hrs

This course is specifically designed to identify criminal justice students and provide the coordinator/instructor an opportunity to give vocational counseling and individual personal assistance. This course will give the student specialized instruction in areas which are covered by the Lambda Alpha Epsilon Society of the American Criminal Justice Association. These areas are Criminal Law, Professional Physical Agility, Criminal Investigations, Law Enforcement Principles, Corrections and Police Firearms.

CJ 2222 Police Firearms II 2 Cr Hrs

A firearms course for the criminal justice majors. To enroll in this course, the students must have taken Firearms I or have permission from the instructor. Emphasis will be placed on safety and use of the firearm in law enforcement situations.

CJ 2232 Police Firearms III (SemiAuto) 2 Cr Hrs

This is an advanced firearms course for criminal justice majors. To enroll in this course, the student must be a criminal justice major who has completed Firearms II or who has permission from the instructor.

CJ 2262 CJ Internship III 2 Cr Hrs

This course is designed to increase the student's understanding of criminal justice administration and operation. A minimum of 90 clock hours of on-the-job experience is required for two hours credit. The internship is initiated by the school in any cooperative agency.

CJ 2272 CJ Internship IV 2 Cr Hrs

This course is designed to increase the student's understanding of criminal justice administration and operation. A minimum of 90 clock hours of on-the-job experience is required for two hours credit. The internship is initiated by the school in any cooperative agency. This course is repeatable for a maximum of eight hours.

CJ 2303 Introduction to Corrections 3 Cr Hrs

An introduction to philosophy and history of corrections and identifying multiple facets of the correctional system, including jails and detention facilities, probation, intermediate sanctions, imprisonment and parole. This course focuses on how today's correctional subsystems function within a larger criminal justice system and covers correctional systems as they apply to the individual and to society.

CJ 2313 Juvenile Justice 3 Cr Hrs

A comprehensive look at youth crime and the process of juvenile justice, in-

cluding theories of delinquency, application of law, and practices of law enforcement, courts, and corrections.

CJ 2333 Probation and Parole System 3 Cr Hrs

(On demand.) This course is a study of the Probation and Parole System as it works within the Criminal Justice System, from the history of probation and parole up to the present, and the complex workings of the system as it deals with individual lives. The critical issue of decision-making by the courts, case-workers and probationers or parolees is explored.

CJ 2413 Criminal Investigation II 3 Cr Hrs

An in-depth study of advanced methods of the investigation of crimes; scientific aids available to law enforcement officers, including forensic chemistry, physics and micro analysis; and investigative procedures, from crime scenes through laboratory analysis to court presentations.

CJ 2533 Criminal Law 3 Cr Hrs

This course examines the history, scope and nature of laws, parties to crime, classification of offenses, capacity to commit crime and defenses to criminal acts.

CJ 2613 Advanced Police Defensive Tactics 3 Cr Hrs

Oleoresin Capsicum Aerosol Instructor Training. (OCAT) is an eight hour certification program designed for professionals who are involved in human service work, such as law enforcement, public safety, correctional, security, public service, environmental protection, military, and state and federal officers. Upon successful completion of the testing criteria, the student will be certified as an instructor for three years, which will allow them to train, certify and recertify other in the proper use of the OC aerosol sprays.

CJ 2703 Offender Management 3 Cr Hrs

This course is designed to provide the student with an understanding of offenders and their problems and how to effectively interface with them. This course is intended for students who have or will find themselves supervising and counseling the offender on the front lines as a result of employment in the criminal justice system.

CJ 2803 Community Based Corrections 3 Cr Hrs

This course will focus on the procedures, practices and personnel within probation, parole, and other community-based correctional problems.

CJ 2903 Problems in the CJ System I 3 Cr Hrs

Study of a specific problem in a specialized area in the criminal justice system. Emphasis will be placed on practical experience with criminal justice principles, practices and administrative methods required for effective results in contemporary society. Permission of the instructor is required.

CJ 2913 Problems in the CJ System II 3 Cr Hrs

Study of a specific problem in a specialized area in the criminal justice system. Emphasis will be placed on practical experience with criminal justice principles, practices and administrative methods required for effective results in contemporary society. Permission of the instructor is required.

CJ 2993 Directed Independent Studies in CJ 3 Cr Hrs

(On demand.) This course provides an opportunity for the student to pursue special interests in Criminal Justice through guided independent study in a chosen area. The student must have the permission of the course instructor, advisor and division chairperson before enrollment.

CJ SO123 Criminology 3 Cr Hrs

An introduction to the history, philosophy, and theory of crime and deviance. This course will explore the complexities and causation of crime and deviance. Students will focus on the sociological factors that influence deviance and popular approaches to understanding and responding to these behaviors. The course will explain the different types of crime: violent crime, property crime, white-collar crime, victimless crime, political crime, and organized crime. The course will also cover mass killers and terrorism.

CJ SO177 Juvenile Delinquency 3 Cr Hrs

Students will learn about such topics as teen suicide, gangs, school violence, bullies, child abuse, and how we deal with these problems in American society. The course will also deal with the Psychological, Sociological, and Biological causes of Juvenile Delinquency. The course will also cover the Juvenile Court, Juvenile police, social service agencies, and juvenile detention facilities.

Cosmetology**CO 1001 Nail Tech Orientation 1 Cr Hr****CO 1101 Boot Camp for Cosmetology 1 Cr Hr**

Students will receive an orientation over the program of cosmetology. The rules and regulations of the program and college will be introduced. Students will learn skills in attendance and performance record keeping. Cosmetology and nail technology kits will be distributed.

CO 1111 Cosmetology I 11 Cr Hr

Students will receive at least 350 clock hours of classroom theory and practical training pertaining to professional development, Kansas State Board of Cosmetology regulations, salon ecology, trichology, hairstyling, chemical texturizing, hair coloring and the study of nails. The remaining 25 hours will include performing hands-on training in the same areas.

CO 1211 Cosmetology II 11 Cr Hr

Students will receive 375 clock hours of classroom theory and practical training pertaining to salon business, design decisions, haircutting, and the study of skin, wigs and hair additions, anatomy and physiology and design decisions. Demonstration and hands-on skills will be performed on clientele in the school clinic.

CO 1311 Cosmetology III 11 Cr Hr

Students will receive 375 clock hours of classroom theory and practical training pertaining to electricity, chemistry, and salon success. Final exams will be taken to prepare for the 1000 hour written state board exam. Students will observe a licensed cosmetologist at a salon environment. Demonstration and hands-on skills will be performed on clientele in the school clinic.

CO 1411 Cosmetology IV 11 Cr Hr

Students will receive 375 clock hours of advanced practical training to enhance their cosmetology skills. They will meet client, retail, pre-book and referral requirements to prepare them for the cosmetology profession and an assigned presentation will be completed. Practice to prepare for the cosmetology state board practical exam will be performed and hands-on skills will be performed on clientele in the school clinic. Upon completion of the program, the students will have the basic training in the profession of cosmetology.

CO 1510 Independent Studies - Cosmetology 11 Cr Hr

This class is to allow students to satisfy the previously unmet requirements of a cosmetology class.

CO 2119 Cosmetology Instructor 13 Cr Hrs

The cosmetology instructor program is designed for any licensed cosmetologist who wishes to advance their cosmetology career. A cosmetologist having less than one year of cosmetology experience will require 450 clock hours of instruction. More than one year of experience in the cosmetology field requires 300 clock hours. Each program will include clinical and classroom job related skills that will enable the instructor-in-training to meet and pass the Kansas State Board of Cosmetology requirements.

Computer Information Systems**CS 1103 Microcomputer Operating System 3 Cr Hrs**

An introduction to the fundamental strategies and techniques involved in managing the windows environment. The strategies and techniques include becoming familiar with the Program Manager, File Manager, Control Panel, and accessory programs such as Clipboard, Paintbrush, Write, Notepad, and Calendar. Learn the uses for PIF files and INI files, Memory Management, and Object Linking.

CS 1203 Intro to Computer Concepts/App 3 Cr Hrs

This course will introduce the beginning computer user to basic computer concepts and applications thus providing an overview of computer information systems. Students will explore various topics such as computer hardware components, operating systems software, applications software, computer network basics, ethical issues in information technology, the Internet, and email. Students will gain hands-on experience in the following areas: basic computer operations, basic operating system applications, Internet and email applications, word processing applications, spreadsheet applications, database management applications, and presentation applications.

CS 1303 Programming Logic and Design 3 Cr Hrs

This course is an introduction to programming concepts that emphasizes good style and logical thinking. General programming concepts are introduced and key concepts of structure are defined. Students will learn to recognize programming concepts and will learn the importance and the advantages of writing structured programs. Students will learn to recognize looping structures, decision making structures, control breaks and arrays and will learn fundamentals in developing programs that include these structures.

CS 1353 Visual BASIC I 3 Cr Hrs

This course is designed to teach the basic elements of creating Windows programs using Visual Basic. Emphasis is placed on event-driven programming to include the selection of the proper objects for the program, the use of the Visual Basic design tools, and the coding of the associated procedures. Pre-Requisite: CS1303 Programming Logic & Design

CS 1363 Visual Basic II 3 Cr Hrs

This course is designed to review the basic elements of creating Window based programs with Visual Basic that students learned in Visual Basic I. This

course will build upon those skills and enable students to develop programs with menus to access sequential files and random access files. Students will learn design of dialog boxes and will develop error-trapping routines for applications created using Visual Basic. Visual Basic techniques dealing with programming variable arrays and accessing databases will be included, as will learning to integrate Visual Basic programs with other Windows applications using DDE, Dynamic Data Exchange, and OLE, Object Linking and Embedding. Pre-Requisite: CS1353 Visual Basic I with grade of C or higher

CS 1503 Desktop Publishing I 3 Cr Hrs

Desktop Publishing I will present an overview of the desktop publishing concept, where an individual through the right equipment and software can manipulate existing material or prepare new material for printing. This course will concentrate on basic layout and design, and practical applications of word processing, graphics and pagination programs important to creating more attractive and effective documents at a lower cost than traditional printing methods.

CS 1523 Basic Web Page Design 3 Cr Hrs

This course is designed to examine and apply the skills, tools, and information necessary to create and publish a basic Web site using WYSIWYG environment.

CS 1603 Microcomputer Software Suites 3 Cr Hrs

This course is designed to provide the student with an overview of microcomputer applications in Microsoft Windows, Office XP, Word, Excel, Access, PowerPoint, Outlook, OLE, and Web page creation. The students will be challenged to create and integrate the applications of Office XP. This course will utilize the projects approach to learning. Pre-Requisite: AP1113 Basic Keyboarding or equivalent

CS 1613 Advanced Microcomputer Software Suite 3 Cr Hrs

This course is designed to extend the student's basic knowledge of an office suites productivity package that includes word processing, spreadsheets, database management and business presentations. Students will be challenged to create more advanced documents, databases, and presentations. This course will utilize the projects approach to learning. Pre-Requisite: CS1603 Microcomputer Software Suites

CS 1701 Microcomputer Applicationscations 1 Cr Hr

This course is designed to provide competency-based instruction in a wide assortment of application software in a hands-on environment. Students must have taken MCA/Basic Computer Fundamentals or show a general knowledge of computers and the Internet.

CS 1803 Microcomputer Business Present 3 Cr Hrs

The course is designed to acquaint the student with in-depth knowledge of graphics presentation software for a microcomputer. Intended for both majors and non-majors, the course features extensive hands-on use of the computer. Pre-Requisite: CS1203 Intro to Computer Concepts and Applicationscations

CS 1853 Multimedia Authoring 3 Cr Hrs

This course will explain the basic concepts of multimedia, examine the technology used to provide multimedia over the Internet, and examine the software used for multimedia authoring and virtual reality. Applications of methods will include presentations, computer games and interactive job training.

CS 1863 Advanced Multimedia Authoring 3 Cr Hrs

This course will be a continuation of the Multimedia Authoring (CS 1853) course. Students will explore deeper into the authoring of multimedia using Director 8 along with other programs. More emphasis will be placed on color changes, advanced Lingo/scripting, advanced navigation, implementation of digital video and audio, and presentation to the Web. Pre-Requisite: CS1853 Multimedia Authoring with grade of C or higher

CS 1903 Information Systems Security 3 Cr Hrs

This course will introduce the fundamentals of information security. Students will learn about the need for secure computer information systems in our society and will explore strategies for securing those systems. This course will include coverage of topics both managerial and technical and will include real-world examples of need for security and results of faulty security as it applies to computer information systems.

CS 2013 Intro to PC Hardware/Software 3 Cr Hrs

This course is designed to teach the fundamentals of troubleshooting, upgrading and repairing personal computer systems. Pre-Requisite: CS1203 Intro to Computer Concepts and Applicationscations

CS 2103 Adv. Computer Concepts & Apps 3 Cr Hrs

This course will guide the intermediate computer user through more advanced computer concepts and applications. Students will explore various topics such as how computer hardware components work, operating systems and utility programs, advanced software applications, communications and networks, information management systems, program development and programming

languages, computer careers and certification. Students will gain hands-on experience in the following areas of application: operating systems, word processing, spreadsheets, database management, web authoring, and presentation. Pre-Requisite: Successful completion of CS1203 Introduction to Computer Concepts and Applications or score of 80% or higher on the Computer Concepts and Applications competency exam.

CS 2113 Intro to Management Info Systems 3 Cr Hrs

This course is designed to introduce the student to the management basics for information systems in today's competitive business environment.

CS 2123 Digital Photography for Computer Graphics 3 Cr Hrs

This course is designed to teach students how to shoot, edit and compose images that are intended to be used for another project such as a web page, photo composition, texture in game art, or other computer graphic media.

CS 2253 Computer Networking 3 Cr Hrs

This course is designed to provide the student with basic information and understanding about networking technologies including descriptions, specific terminology, the OSI model for networked communications, components of networks, analysis and design of computer networking systems, including security and management of networks.

CS 2255 Cisco Networking I 5 Cr Hrs

This is the first of four semester courses designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment or further education and training in the networking field. A task analysis of current industry standards and occupational analysis was used to develop the content. Instruction includes, but is not limited to, safety, networking, network terminology and protocols, network standards, local-area networks (LANs), wide-area networks (WANs), Open System Interconnection (OSI) models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. Particular emphasis is given to the use of decision-making and problem-solving techniques in applying science, mathematics, communication, and social study concepts to solve networking problems. In addition, instruction and training are provided in the proper care, maintenance, and use of networking software, tools and equipment and all local, state, and federal safety, building, and environmental codes and regulations. (Students may find the following helpful: A+ Certification; introductory programming or multimedia courses; introductory electronics)

CS 2265 Cisco Networking II 5 Cr Hrs

This Cisco Networking Academy Program consists of four semesters. The program is designed to teach students the skills they will need to design, build and maintain small to medium sized networks. This provides them with the opportunity to enter the workforce and/or further their education and training in the computer networking field. (Students may find the following helpful: A+ Certification; Microsoft Office Skills; introductory programming or multimedia courses; introductory electronics; relevant work experience). Pre-Requisite: Successful completion of CNAP Semester 1 Helpful: A+ Certification; Microsoft Office Skills; introductory programming or multimedia courses; introductory electronics; relevant work experience.

CS 2275 Cisco Networking III 5 Cr Hrs

This is the third semester of four semester courses designed to teach students the skills they will need to design, build, and maintain small to medium sized networks. This provides them with the opportunity to enter the workforce and/or further their education and training in the computer networking field. (Students may find the following helpful: A+ Certification; Microsoft Office Skills; introductory programming or multimedia courses; introductory electronics; relevant work experience). Pre-Requisite: Successful completion of CNAP Semester 2. Helpful: A+ Certification; Microsoft Office Skills; introductory programming or multimedia courses; introductory electronics; relevant work experience.

CS 2285 CISCO Networking IV 5 Cr Hrs

This is the fourth semester of four semester courses designed to teach students the skills they will need to design, build, and maintain small to medium sized network. This provides them an opportunity to enter the workforce and/or further their education and training in the computer networking field. (Students may find the following helpful: A+ Certification; Microsoft Office Skills; introductory programming or multimedia courses; introductory electronics; relevant work experience). Pre-Requisite: Successful completion of CNAP Semester 3. Helpful: A+ Certification; Microsoft Office Skills; introductory programming or multimedia courses; introductory electronics; relevant work experience.

CS 2303 Computer Based Spreadsheets 3 Cr Hrs

A course designed to acquaint the student with computer-based spreadsheets as used with microcomputers. This program is structured to be used as a tool

for solving everyday financial or business problems for all types of businesses. Pre-Requisite: CS1203 Intro to Computer Concepts and Applications

CS 2313 Microcomputer Database Management Systems 3 Cr Hrs

This course is designed to acquaint the student with a software system for managing the storage and collection of data used and produced by a micro-computer. Pre-Requisite: CS1203 Intro to Computer Concepts and Applications

CS 2403 Intro to Java Programming 3 Cr Hrs

This course introduces object-oriented programming concepts along with Java syntax used to implement these concepts. Students will learn to use Java programming fundamentals to create functional programs for a variety of business applications including e-commerce. Pre-Requisite: CS1353 Visual Basic I

CS 2413 Advanced Java Programming 3 Cr Hrs

This course will expand upon the basics of object-oriented programming through mastering Java data types and controlling structures using Java graphical user interfaces, events, classes, inheritance, exceptions, error handling, and multimedia. Pre-Requisite: CS2403 Intro to Java Programming

CS 2453 Programming Language C 3 Cr Hrs

This course is designed to teach students how to write programs in the C programming language. Students will gain a clear understanding of this language, which is the foundation for many object-oriented programming languages such as C++, Objective-C, C# and Java. Emphasis will be placed on learning both the language fundamentals and good programming practices. Pre-Requisite: CS1303 Programming Logic and Design

CS 2503 Web Page Design I 3 Cr Hrs

This introductory course is designed to examine and apply the skills, tools, and information necessary for Web page creations and design. Students will learn to create and publish Web pages using a variety of Web technology tools including a WYSIWYG Web authoring program and image editing program. Successful completion of this course will prepare students to take the Web Page Design II course.

CS 2513 Digital Image Editing 3 Cr Hrs

This course is designed to examine and apply the skills, tools and information necessary to edit images/graphics using a PC. With image-editing software, students will create and produce high-quality digital images which can be used with a variety of documents.

CS 2523 Computer Illustration 3 Cr Hrs

This course is designed to introduce the student to the basics of computer illustration techniques. Students will be able to create artwork for print, presentations and the Web.

CS 2533 3D Modeling I 3 Cr Hrs

This course is designed to introduce the skill of computerized animation to the student. Students will be able to plan and execute successful animation, implement good design techniques, and grasp the technique of preparing a sequence of images for animation.

CS 2543 Desktop Digital Video Editing 3 Cr Hrs

This course is designed to examine and apply the skills, tools and information necessary to edit digital video using a PC. Students will review the current state of this growing technology to understand where it is going, which technologies hold the most promise and which technologies represent the best choices for various applications. As a project, students will incorporate these skills into development of an on-campus multimedia production.

CS 2553 Web Page Design II 3 Cr Hrs

This advanced level course is designed to bring together all the Web technology tools available to create high quality Web sites. This course will give the student the opportunity to incorporate all the Web technologies learned in the Web Page Design I and II courses along with an in-depth study of the available multimedia design tools. Student Web sites will incorporate the use of a WYSIWYG Web authoring tool, Web coding and programming tools, database development tools, graphic creation and editing tools, and animation, video and audio development tools. Pre-Requisite: CS2503 Web Page Design I

CS 2573 Web Animation I 3 Cr Hrs

This course is intended to teach students how to create professional-looking interactive experiences, primarily by using animation. Along with the special animation tool, students will also gain knowledge of various tools such as special drawing tools, tools for creating interactive controls, and publishing tools. Learning this technology will allow student to create a variety of animated projects for the Internet.

CS 2583 Digital Design Studio Suite 3 Cr Hrs

This course is designed to allow students to use a state of the art digital design studio package to develop Web pages/sites, animate objects, edit images, and

integrate all these tools. This will definitely help students to have more marketable skills and complete a project to enhance their personal portfolios.

CS 2593 3D Modeling II 3 Cr Hrs

This course is designed to further enhance the skills of students who have successfully completed the 3D Modeling I course. Students will be able to create more dynamic 3D projects by incorporating more advanced modeling skills, revolving and rotating surfaces, and learning how to use controlled mesh and advanced rendering techniques such as environment maps and depth of field. There will be a variety of projects to refine these skills. Pre-Requisite: Successful completion of CS2533 3D Modeling I

CS 2663 3D Game Texturing 3 Cr Hrs

This course is designed to introduce the skill of building textures for scenes in a 3D game. Students will think like an artist, researching and planning the process of building the appropriate textures for various 3D game settings.

CS 2673 Typographic Design 3 Cr Hrs

This course will introduce the fundamental of typographic design. Students will learn various concepts in typography-how the letterform has the power to communicate meaning and mood. The course will focus on improving design by learning to see type differently and choosing type that's appropriate for a given job and setting it in creative, attractive and effective compositions.

CS 2753 System Analysis Methods 3 Cr Hrs

This course is designed to provide an overview of the system development life cycle. Emphasis is placed on the work of modern systems analyst in developing or modifying systems using both the traditional approach for modeling system requirements and the object-oriented approach. Students will learn how to generate and evaluate alternative models. Pre-Requisite: CS1303 Programming Logic & Design

CS 2803 Computer Info Systems Internship I 3 Cr Hrs

Work is done in selected training stations under the supervision of the instructor. The student is to complete a project related to their training station. The student is required to complete weekly time sheets and visitations with the instructor. The student may take CIS Internship two times and may apply a total of six (6) hours maximum toward graduation. The student may take CIS Internship starting their third semester at SCCC. The Student-Learner must work a minimum of 135 clock hours during the semester to receive 3 hours of credit. Pre-Requisite: Permission of CIS Coordinator

CS 2813 Computer Info Systems Internship II 3 Cr Hrs

Work is done in selected training stations under the supervision of the instructor. The student is to complete a project related to their training station. The student is required to complete weekly time sheets and visitations with the instructor. The student may take CIS Internship two times and may apply a total of six (6) hours maximum toward graduation. The student may take CIS Internship starting their third semester at SCCC. The Student-Learner must work a minimum of 135 clock hours during the semester to receive 3 hours of credit. Pre-Requisite: CS2803 Computer Information Systems Internship I

CS 2822 Current Issues in Information Technology I 2 Cr Hrs

This course is designed to examine current issues and trends in information technology. Students will become informed of new issues and participate in class discussions as to how these issues affect society in general and their career in the information technology field. Membership and participation in the CIS student organization will be mandatory and further enhance the student's knowledge of current IT issues. Designed for Computer Information Systems and Computer Science Majors/Minors.

CS 2832 Current Issues in Information Technology II 2 Cr Hrs

This course is designed to examine current issues and trends in information technology. Students will become informed of new issues and participate in class discussions as to how these issues affect society in general and their career in the information technology field. Membership and participation in the CIS student organization will be mandatory and further enhance the student's knowledge of current IT issues. Designed for Computer Information Systems and Computer Science Majors/Minors.

CS 2842 Current Issues in Information Technology III 2 Cr Hrs

This course is designed to examine current issues and trends in information technology. Students will become informed of new issues and participate in class discussions as to how these issues affect society in general and their career in the information technology field. Membership and participation in the CIS student organization will be mandatory and further enhance the student's knowledge of current IT issues. Designed for Computer Information Systems and Computer Science Majors/Minors.

CS 2852 Current Issues in Information Technology IV 2 Cr Hrs

This course is designed to examine current issues and trends in information technology. Students will become informed of new issues and participate in class discussions as to how these issues affect society in general and their career

in the information technology field. Membership and participation in the CIS student organization will be mandatory and further enhance the student's knowledge of current IT issues. Designed for Computer Information Systems and Computer Science Majors/Minors.

CS 2853 Directed Independent Studies in CIS 3 Cr Hrs

(On demand.) This course is designed to enable students to work at their own speed and travel to achieve a predetermined objectives. Students must have completed six hours of Computer Information Systems courses and have the consent of the instructor, advisor and division chairperson.

CS B1701 MCA / Web Animation Basics 1 Cr Hr

This course is designed to give students the opportunity to learn the basics of creating graphics, animation and interactivity using Flash. Students will see how this program can be used to develop expressive, creative, and exciting Web sites.

CS D1701 MCA / Database 1 Cr Hr

This course is designed to provide competency based-instruction in a wide assortment of application software in a hands-on environment. This particular course will acquaint the student with the basic principles of using Microsoft Access for database activities.

CS E1701 Basics of Web Page Design 1 Cr Hr

This course will give students the tools needed to how to build a Web site. Concentration will be on learning the parts of a Web site, how to build a Web site, and how to incorporate good design principles into the site.

CS E1711 MCA/Dreamweaver I 1 Cr Hr

This beginning course will give students the tools needed to start designing effective Web sites using Dreamweaver 8. Concentration will be on learning the parts of a Web site, how to build a Web site, and how to incorporate good design principles into the site.

CS E1721 MCA/Dreamweaver II 1 Cr Hr

This intermediate course will give students the tools needed to continue designing effective Web sites using Dreamweaver 8. Concentration will be on expanding their knowledge of Dreamweaver's design tools.

CS E1731 MCA/Dreamweaver III 1 Cr Hr

This advanced course will give students the tools needed to continue designing effective Web sites using Dreamweaver 8. Concentration will be on expanding their knowledge of Dreamweaver's design tools.

CS F1701 MCA / Basic Computer Fund. 1 Cr Hr

This course is designed for individuals who have limited knowledge of a computer and how it works. It will introduce students to how a computer accepts input, processes data, stores data and produces output through a discussion of hardware, software, processors, memory and input/output devices. This course will also investigate how e-mail and the Internet work today.

CS G1701 MCA / Beginning Programming 1 Cr Hr

This course is designed for individuals who have no programming experience but who want an introduction to it. It will explore the evolution of programming from its beginnings, learning about programming structures, data types, decision making and analysis of problems. It will investigate features of different languages, but will not be learning any specific language. It will also explore the business of computer programming in today's competitive business environment.

CS H1701 MCA / Intro to Digital Photo. 1 Cr Hr

This course is designed to introduce students to digital photography. Topics covered will include choosing the right camera and sources for learning the features of that camera, how to take better shots, offloading and storing images from the camera, basic digital editing of photos, e-mailing the photos, and making the best prints.

CS K1701 MCA / Desktop Publishing Basics 1 Cr Hr

This course is designed to teach students the basics of creating professional-quality business publications for print--advertisements, brochures, newsletters, business cards, etc.

CS O1701 MCA / Operating Systems 1 Cr Hr

This course is designed to provide competency based-instruction in a wide assortment of application software in a hands-on environment. This particular course will acquaint the student with the basic principles of using Microsoft Windows for operating systems activities.

CS P1701 MCA / Presentation 1 Cr Hr

This course is designed to provide competency-based instruction in a wide assortment of application software in a hands-on environment. This particular course will acquaint the student with the basic principles of using Microsoft PowerPoint for presentation activities.

CS R1701 Strategies / Internet Research 1 Cr Hr

This course is designed to assist students in effectively researching informa-

tion on the Internet by correctly defining the search topic, identifying and using the proper search tools, evaluating the search results, and refining the search if necessary.

CS S1701 MCA/Spreadsheets 1 Cr Hr

This course is designed to provide competency-based instruction in a wide assortment of application software in a hands-on environment. This particular course will acquaint the student with the basic principles of using Microsoft Excel for spreadsheet activities.

CS T1701 Photoshop Basics 1 Cr Hr

This course is designed to give students the opportunity to learn the basics of one of the most popular image editing programs - Photoshop. Students will be using the program to make changes to photographic images and will explore the tremendous capabilities of the program.

CS W1701 MCA/Word Processors 1 Cr Hr

This course is designed to provide competency-based instruction in a wide assortment of application software in a hands-on environment. This particular course will acquaint the student with the basic principles of using Microsoft Word for word processing activities.

CS X1701 Exploring Issues/Info Tech 1 Cr Hr

This course is designed to examine issues and trends in information technology. Students will learn about new issues and identify how these issues affect society. Students should know the basics of using a computer and searching the Internet for information.

Diesel Technology

DI 1001 Orientation & Safety for Diesel Tech 1 Cr Hr

One credit hours of general shop and safety operating procedures of the equipment that is used in the diesel industry. Topics covered will include state and federal rules and regulations, policies, procedures and first aid.

DI 1003 Preventive Maintenance 3 Cr Hrs

Three credit hours in the introduction of the service and preventive maintenance practices commonly found in the trucking industry. Topics covered will be over truck inspection, different types of fluids, and electrical systems.

DI 1004 Brakes 4 Cr Hrs

Four credit hours of basic hydraulic and air brake system service and repair.

DI 1011 Diesel Parts Management 1 Cr Hr

One credit hour course in managing parts. Upon successful completion of this course, the student should be able to demonstrate good communication and basic math skills. Ordering and maintaining correct inventory, as well as displaying and selling automotive parts for a fair profit, will be studied. Lectures will be supported by parts specialists in the industry.

DI 1013 Electrical II 3 Cr Hrs

Three credit hours of digital computers, networking and communications, vehicle computer systems, electronic service tools, electrical wiring, and multiplexing that is used in the diesel industry.

DI 1023 Hydraulics 3 Cr Hrs

Course covers basic hydraulic systems operation, component part identification, diagnosis and repair.

DI 1014 Electrical I 4 Cr Hrs

Four credit hours of basic electrical theory; instrument usage and operation; battery, starting systems, charging systems, lighting systems that is used in the diesel industry.

DI 1103 Engines II 3 Cr Hrs

Three credit hours in the field of mechanical and Electronic fuel control systems along with all other computer controlled parts of an engine. It also includes the study of noxious emissions and the methods used to test and control them in diesel engines today.

DI 1104 Engines I 4 Cr Hrs

Four credit hours in the introduction of basic engine terminology with comprehensive definitions and usage. The student will understand and use the engines mechanical components to disassemble, inspect, measure, rebuild an engine, and tune up the engine and demonstrate it to the class.

DI 1113 Drive Trains I 3 Cr Hrs

Three credit hours of basic drive train components including; Clutches, standard transmissions, drive shafts, and heavy duty axles.

DI 1114 Steering & Alignment 4 Cr Hrs

Four credit hours in the fundamentals of service and theory in basic steering and alignment of heavy duty trucks.

DI 1123 Drive Trains II 3 Cr Hrs

Three credit hours of basic drive train components including; automated mechanical transmissions, torque converters and fluid drives, automatic/power shift transmissions, agriculture and industrial final drives, and auxiliary

drives.

DI 1124 Frames & Suspension 4 Cr Hrs

Four credit hours in the fundamentals of service and theory of heavy duty truck suspension systems including spring, equalizing beam, torsion bar and air spring. The function of the chassis frame and how they are used will also be covered.

DI 1133 Directed Independent Study Diesel Tech 1-3 Cr Hrs

DI 1134 Heating, Ventilation & A/C 4 Cr Hrs

Four credit hours in the fundamentals of service and theory of operation for the air conditioning systems in off-road vehicles, trucks, and automobiles. Prerequisites are DT 100 orientation and safety

DI 1144 Diagnosis & Failure Analysis 4 Cr Hrs

Four credit hours in the study of managing failure analysis, metallurgy, principles of fractures, principles of wear, and visual examination.

Drafting & Design Technology

DF 1002 Technical Drafting 2 Cr Hrs

This course introduces the student to the Drafting profession and is designed to acquaint him or her with the techniques and skills utilized by industry. Topics include Types of Drafting, Basic Tools and Lines, Supplies and Equipment, Lettering, Media, Drafting Standards, Drawing Reproduction, and Introduction to CAD (Computer Aided Drafting).

DF 1003 Intro to Computer Aided Drafting 3 Cr Hrs

Computer Aided Drafting is the universal drawing tool in the production of Engineering, Architectural, Manufacturing, Mapping, and Civil Engineering and Construction drawings. This course is a beginning course in the operational practices of computer aided drawing construction. Students will learn basic draw and edit commands and will create simple engineering drawings. Topics will include drawing format, Cartesian Coordinate System, View manipulation, Draw commands, Edit commands, basic system variables, and how to query the CAD data base. Prerequisite: DF-1002 or EN-1202

DF 1005 Scales and Measurements 3 Cr Hrs

Measuring and layout are key skills in design, fabrication, and manufacturing. This course trains the student in the use of the various scales and measurement systems used by Engineering and Architectural Drafting. Included in this course are Carpenter's rulers, Machinist's rulers, architects, civil engineers, and metric drawing scales, Precision Measurement using machinist's precision measuring devices, Land measurement (surveying) and Legal Land descriptions. Prerequisite: DF-1002

DF 1007 Descriptive Geometry 7 Cr Hrs

All traditional drafting and CAD techniques are based on the construction of simple geometric elements used to create complex forms and shapes. This course is the study of plane geometry and its application to Drafting. Topics include angular measurement, circles and arcs, triangles and polygons, areas and volumes of geometric figures. Manual and CAD drawing assignments will be completed using geometric construction principles. Prerequisite: DF-1003

DF 1013 Orthographic Views/Projections 3 Cr Hrs

Understanding the correct placement of the views of an object on a drawing is the key to assurance that no ambiguity exists between the drafter's intent and the reader's interpretation. This course is the study of required views necessary for shape description. Topics include planes of projection, surface orientation, height, width, and depth dimensions, visible and hidden lines, normal, inclined, and oblique lines and planes, and folding or miter lines to create new views. Prerequisite: DF-1007

DF 1015 Civil Engineering Drafting 5 Cr Hrs

Civil Engineering is anything that has to do with the design of land for construction projects. This course will instruct the student to prepare drawings and maps for this field of Engineering and Construction. Students will also learn Surveying principals, distance and elevation measurement, location and direction, and legal land descriptions. Prerequisite: DF-1043

DF 1017 Architectural Drafting 7 Cr Hrs

The world of Architecture is all around us. Architectural drafters need a keen eye for design, knowledge of construction materials and processes, and skillful drawing techniques. This course trains students in architectural drawing skills, basic residential design concepts, and material and methods of construction. Prerequisite: DRF-1013

DF 1023 Auxiliary Views 3 Cr Hrs

Many objects are shaped such that their principal surfaces are not parallel to principal planes of projection. A parallel or perpendicular line-of-sight view must be created to describe these inclined or oblique planes. This course instructs the drafting student in the creation of drawing views of inclined and

oblique lines and planes. Topics include planes of projection, projection lines, measurement procedures for auxiliary views, primary and secondary auxiliary views, and developments. Prerequisite: DF-1013

DF 1033 Section Views 3 Cr Hrs

Section views are used by industry to improve the clarity of complex objects and assemblies. This course instructs students in the drawing construction methods necessary to draw cutaway views. Material identification and manufacturing processes are key elements of this course. Prerequisite: DF-1013

DF 1043 Dimensioning Procedures 3 Cr Hrs

Dimensions are used to numerically or verbally describe the shape, size and character of the drawn product. Dimensions are given in linear distances, angles, or notes. This course teaches the student the proper technique of dimensioning, the placement of dimensions, and the choice of dimensions. The content of this course complies with ANSI/ASME standard Y-14.5M-1994. Prerequisite: DF-1013

DF 1053 Pictorial Drawings 3 Cr Hrs

While Multiview drawings accurately represent complex forms, it is often necessary to prepare accurate and scientifically correct drawings that can be understood by persons without technical drafting training. This course instructs students how to create Pictorial Drawings to enhance engineering drawings or to illustrate the actual appearance of an object. Prerequisite: DF-1033

DF 1112 Drafting/Design Internship I

DF 1113 Directed Independent Study Drafting/Design

DF 1122 Drafting/Design Internship II

Drama

DR 1102 Stagecraft I 2 Cr Hrs

A course which emphasizes the basic principles of set construction, stage equipment, painting, lighting techniques and equipment.

DR 1112 Stagecraft II 2 Cr Hrs

A course which emphasizes the basic principles of set construction, stage lighting and making properties and costumes for productions given by the drama department.

DR 1203 Acting I 3 Cr Hrs

A basic course in the practical experiences of acting in both classroom and major productions. There is extensive work in characterization, fundamental techniques of acting, body language, pantomime and effective stage speech.

DR 1213 Acting II 3 Cr Hrs

A course designed to expand the student's knowledge of the techniques and principles used in Acting I.

DR 1503 Introduction to Cinema 3 Cr Hrs

This course is a survey of the motion picture as an art form—its history, its technique, its formal genres and its influence on our culture.

DR 1611 Dramatic Participation I 1 Cr Hr

(Both semesters.) A maximum of four hours credit may be earned. Dramatic participation provides the student an opportunity for individual study in the areas of theatrical arts. Individual projects are required.

DR 1621 Dramatic Participation II 1 Cr Hr

(Both semesters.) A maximum of four hours credit may be earned. Dramatic participation provides the student an opportunity for individual study in the areas of theatrical arts. Individual projects are required.

DR 1631 Dramatic Participation III 1 Cr Hr

(Both semesters.) A maximum of four hours credit may be earned. Dramatic participation provides the student an opportunity for individual study in the areas of theatrical arts. Individual projects are required.

DR 1641 Dramatic Participation IV 1 Cr Hr

(Both semesters.) A maximum of four hours credit may be earned. Dramatic participation provides the student an opportunity for individual study in the areas of theatrical arts. Individual projects are required.

DR 2103 Costume History 3 Cr Hrs

This course surveys the cultural, historical, political, and fashion scene with major emphasis on American 20th Century Societies as well as some Western World influences that have affected our culture views. Some emphasis is placed upon live theater and the motion picture industry. American fashion magazines are analyzed and examined in class studies.

DR 2203 Theater Appreciation 3 Cr Hrs

A basic Humanities course designed to introduce students to the realm of the live theater. The principal components of the theater will be examined in relation to their application to the performing arts. Selected plays may be discussed and analyzed from a theatrical and literary view.

Economics

EC 2213 Principles of Macroeconomics 3 Cr Hrs

Macro-Economics. An introductory analysis of the American economic system and its place in the world economy. Topics of the course will include the core concepts of scarcity, opportunity costs and production possibilities; price determination through demand and supply analysis; economic functions of government; economic growth; unemployment, inflation and deflation; national income accounting; theory of modern aggregate demand and supply analysis; macro-economic models; fiscal policy; money creation and the banking system; monetary policy; stabilization of the economy through fiscal and monetary policies; global economic growth.

EC 2223 Principles of Microeconomics 3 Cr Hrs

This course will cover the basic facts, principles and problems of economics, including the study of the determination of prices by supply and demand, determination of wages, rent, interest, profit, theory of the firm; contemporary economic problems, including competition, income distribution, poverty, pollution and the underdeveloped world.

Education

ED 1001 Issues in Education PPST-math 1 Cr Hr

This course is for education majors preparing for the PPST in math. The course is a review of fractions, decimals, ratios and proportions, percents, geometry, basic statistics, integers, exponent rules and algebra applications. Testing and problem solving strategies will be addressed as well. This is a Pass/Fail course and does not count toward graduation.

ED 1003 Directed Independent Studies in Education 3 Cr Hrs

ED 1103 Introduction to Education 3 Cr Hrs

This lecture course provides an examination of the principles and purposes of the American education system. It is designed to acquaint students with teaching as a career.

ED 1112 Intro to Education Field Experience 2 Cr Hrs

An internship course intended primarily to give teachers the opportunity to consider seriously their suitability for a career in education.

ED 1203 Art in the Elementary School 3 Cr Hrs

This is a fundamental course designed to familiarize students with appropriate art media and techniques used in teaching children. The basic for the course is that art is an integral part of the elementary curriculum and that the study of art is composed of four areas: art production, aesthetics, art criticism and art history.

ED 1302 Principles of Peer Tutoring 2 Cr Hrs

This course is designed to educate the students about the techniques, learning modes, diagnosis, and styles of peer tutoring. This course is designed for those students who are interested in continuing their studies in the field of education or who are interested in a career that involves working with people.

ED 1311 Tutor Practicum 1 Cr Hr

This course provides supervised, hands-on experience in tutoring directly with peers. This class is held in the Academic Achievement Center at SCCC. May be repeated for a total of four (4) credit hours.

ED 1403 Elementary School Music 3 Cr Hrs

This course is for students planning to teach in the elementary level, including practices, trends and philosophy of music education. All factors affecting the student's musical growth and development of skills and understandings are considered.

ED 1503 Children's Literature 3 Cr Hrs

This course is designed to acquaint students with the award winning literature, authors and illustrators of literature for kindergarten through 8th grade levels. It explores the psychology and educational theories used in elementary school education with special emphasis on reading programs.

ED 1511 Storytelling 1 Cr Hr

This course is designed for prospective education majors or childcare majors. It will focus on the importance of the oral tradition of storytelling and the art of storytelling in light of its current revival. Stories from a wide variety of cultures will be presented. Practical applications for the classroom will be emphasized on reading programs.

ED 1703 Elementary School PE 3 Cr Hrs

This course is a study of the elementary school child with methods and practice of teaching appropriate games, rhythmic activities, stunts and relays for each grade level, as well as health awareness with an emphasis on nutrition, risk behaviors, hygiene and methods of teaching health.

ED 1803 Beginning Sign Language 3 Cr Hrs

This course is designed to provide the student with basic skills in sign language. The student will become familiar with the history of signs, sign lan-

guage principles, basic hand shapes, manual alphabet and basic vocabulary. In addition, the student will gain a better understanding of the hearing impaired and an awareness of problems they face.

ED 1813 Intermediate Sign Language 3 Cr Hrs

This course is designed to provide the student with additional skills in sign language. The student will become familiar with history of signs, reviewing manual alphabet and advanced vocabulary.

ED 1823 Advanced Sign Language 3 Cr Hrs

This course is designed to build the sign language vocabulary of the student and improve technique in fluency and recall. Emphasis will be placed on the conversational experiences, body language and other nonverbal communication.

English

EG 0103 English as Second Language I 3 Cr Hrs

This course is designed to improve basic listening, speaking, reading and writing skills of a student whose native language is not English. Language skills will focus on basic sentence writing and comprehension. Special emphasis will be given to life and study skills, along with cultural studies of the United States and the local community. (THIS COURSE WILL NOT COUNT FOR GRADUATION.)

EG 0203 English as Second Language II 3 Cr Hrs

This course is designed to improve basic listening, speaking, reading and writing skills of a student whose native language is not English. Language skills will focus on basic sentence writing and comprehension. Special emphasis will be given to life and study skills, along with cultural studies of the United States and the local community. (THIS COURSE WILL NOT COUNT FOR GRADUATION.)

EG 0303 Writing Skills I 3 Cr Hrs

This course emphasizes the foundations of standard English through a focus on basic grammar and writing paragraphs and essays. (THIS COURSE WILL NOT COUNT FOR GRADUATION)

EG 0403 Writing Skills II 3 Cr Hrs

This course emphasizes the foundations of standard English through a focus on basic grammar and writing paragraphs and essays. (THIS COURSE WILL NOT COUNT FOR GRADUATION)

EG 0503 Writing Skills III 3 Cr Hrs

This course emphasizes writing thesis statements and the process of writing effective essays in preparation for English Composition I. (THIS COURSE WILL NOT COUNT FOR GRADUATION)

EG 0603 Writing Skill IV 3 Cr Hrs

This course emphasizes writing thesis statements and the process of writing effective essays in preparation for English Composition I. (THIS COURSE WILL NOT COUNT FOR GRADUATION)

EG 1103 English Composition I 3 Cr Hrs

The class emphasizes essentials of composition and selected readings, as well as practice in critical thinking and expository writing.

EG 1113 English Composition II 3 Cr Hrs

This course is an extension of English Composition I and emphasizes diction, style, persuasive writing and a research project.

EG 1203 Business English 3 Cr Hrs

This class is recommended for students wishing to review grammar, punctuation, and spelling rules. This intensive college-level course provides a strong base for business or traditional composition course. This course does not replace English Composition I.

EG 1303 Introduction to Literature 3 Cr Hrs

This class is an introductory study of the short story, drama, poetry and the novel. It is designed to increase understanding and appreciation through analysis of representative writers.

EG 1763 World Literature 3 Cr Hrs

This course is a study of literature from around the world in English, with emphasis upon the diverse historical, geographical and cultural contexts of human values and social orders. Selections will include prose, fiction, poetry and drama from different time periods and regions of the world.

EG 2103 Creative Writing 3 Cr Hrs

This is an introductory course designed of the beginner who is curious about self-expression in writing. Since students in a college creative writing class vary widely in interests and abilities, the course will be flexible enough to serve whoever enrolls through the workshop peer-evaluation approach.

EG 2303 English Literature I 3 Cr Hrs

This course is a chronological survey of English literature from the Anglo-Saxon period through the Restoration. Emphasis is on the literature; however,

social and political forces have great influence on literature and will also be considered.

EG 2313 English Literature II 3 Cr Hrs

Emphasizing major writers and influences, this course provides a general survey of English literature from the middle of the Eighteenth Century to the present.

EG 2403 American Literature I 3 Cr Hrs

This course emphasizes major writers and influences from Colonial times to the beginning of the Romantic Era.

EG 2413 American Literature II 3 Cr Hrs

Major authors and literary developments are studied in this chronological survey of American literature from and after the Civil War to the present.

EG 2903 Directed Independent Studies in English 3 Cr Hrs

This class provides students with the opportunity to pursue special interests in English through guided independent study in a chosen area.

Engineering

EN 1014 Directed Directed Study in Engineering 4 Cr Hrs

This course is an independent or small group study of one to four credit hours for students to investigate topics of engineering outside of the regular curriculum offering.

EN 1102 Introduction to Engineering 2 Cr Hrs

(On demand.) A beginning course to acquaint the pre-engineering student with the various disciplines of the engineering field and introduce them to the basic tasks of engineering work.

EN 1202 Engineering Graphics I 2 Cr Hrs

The program is designed to prepare either men or woman in the basics of engineering drafting. The core curriculum is competency based, with each unit developed for specific knowledge and skill to be performed. Draftsmen's activities primarily involve the translation of ideas, rough sketches, specifications, calculations and proposals of engineers, architects, designers and manufacturers into complete detailed and accurate working drawings for using engineering, research, manufacturing, construction and the building trades. Engineering Graphics I is the course competency based curriculum to introduce students to problem-solving situations and teaching them the fundamentals of drafting.

EN 1212 Engineering Graphics II 2 Cr Hrs

The program is designed to prepare either men or women for more advanced drafting room practices in the drafting field over and beyond that offered in Engineering Graphics I. Draftsmen's activities primarily involve the translation of ideas, rough sketches, specifications, calculations and proposals of engineers, architects and designers into complete and accurate working plans for use in the engineering, research, construction, manufacturing or building trades. Engineering Graphics II is an individualized study of advanced basic drafting techniques used to communicate ideas from a designer to the finished product. The study is performed to develop the student as a continuing process of more advanced drafting practices used in problem-solving situations with drafting drawings as the media for communications.

EN 2202 Computer Aided Drafting 2 Cr Hrs

(On demand.) Four hours of laboratory per week. A beginning course in the principles and practices of computer-aided drafting. The course is designed to work through the basics of CAD and its applications. During the semester students will be assigned elementary and advanced drawings to train them in the use of CAD. Specific problems will be presented to make the student aware of CAD applications in civil, mechanical and architectural drafting.

Geography

GE 1103 World Regional Geography 3 Cr Hrs

This course is a study of geography that will examine cultural, economic, physical, and political aspects of the world from a social science perspective. Emphasis will be placed on this topical approach, as will human interaction with the earth in more and lesser-developed settings.

GE 2213 Intro to GIS 3 Cr Hrs

This course will introduce students to the principles of Geographic Information Systems (GIS). Students will become familiar with the four aspects of a GIS: Data collection, database structure, data analysis and data display. Students will explore the applications of GIS in problem solving, as well as the analysis and presentation of spatial data.

Heating, Ventilaiton, Air Conditioning and Refrigeration

AI 1002 HVACR Orientation to Tools & Safety

This course contains a brief instruction on the general and specialized tools

and equipment used in the HVAC industry.

AI 1003 Electric Motors

This course will include the basic operating principles of an electric motor. The technician must understand which motor is suitable for each job so that effective troubleshooting can be accomplished and, if necessary, the motor replaced by the proper type.

AI 1005 Diagnosing and Problem Solving 5 Cr Hrs

This course will include troubleshooting mechanical and electrical systems.

AI 1006 Equipment Operation – Cooling 6 Cr Hrs

This course contains instruction on servicing and replacing components in the cooling system.

AI 1007 Equipment Operation – Heating 7 Cr Hrs

This course will include basic principles of gas and electrical heat.

AI 1008 Electrical Controls 8 Cr Hrs

The heating, air-conditioning, ventilation and refrigeration field requires many types and designs of automatic controls to stop or start equipment. Controls provide protection to people and equipment.

AI 1010 Basics of Refrigeration 10 Cr Hrs

This course contains instruction on basic refrigeration cycles.

AI 1011 Tubing and Pipe Work 1 Cr Hr

The use of correct tubing, piping, and fitting along with the proper installation is necessary for a refrigeration or air conditioning system to operate correctly.

AI 1012 Electrical Theory 2 Cr Hrs

This course includes basic electrical theory as it applies to Heating, Ventilation, Air-conditioning, and Refrigeration.

AI 1021 Equipment Selection 1 Cr Hrs

This course will include system sizing and efficiency and correct applications.

AI 1022 Sheet Metal Fabrication 2 Cr Hrs

This course contains a brief instruction on sheet metal tools and sheet metal fabrication.

AI 1031 HVACR Workplace Skills 1 Cr Hr

This course will include proper customer communication, decision making, and problem solving.

AI 1113 Directed Independent Study in HVAC/R 1-3 Cr Hrs

History

HS 1101 History of SW Kansas 1 Cr Hr

This course is designed for the person interested in the history of Southwest Kansas. The course will include major events from Coronado's Passage through the era to the present.

HS 1303 American History I 1492-1877 3 Cr Hrs

This course will cover the social, political and economic events that have shaped America from 1492 to 1877. The course will survey major events in an interpretative nature to help give some insights in understanding the American Nation.

HS 1313 American History II 1877-Pres. 3 Cr Hrs

This course will cover the social, political and economic events that have shaped America from 1877 to the present. This course will survey major events in an interpretative nature to help give insights in understanding the American Nation.

HS 1423 Recent History 3 Cr Hrs

This course will cover the social, political and economic events that have shaped America from 1941 to the present. The course will survey major events in an interpretative nature to help give some insights as to the underlying reasons for events that are taking place today.

HS 1503 Survey of Western Civilization I 3 Cr Hrs

A course designed to examine the social, political and economical events that have shaped western society from the rise of Mesopotamian civilizations to the Reformation. The course will emphasize the unique nature of each civilization and its contributions to the western world.

HS 1513 Survey of Western Civilization II 3 Cr Hrs

This course is an examination of the social, political and economical events that have shaped western society from the Age of Discovery to the present. Special attention will be given to those events which have had a major impact on the development of modern western civilization.

HS 1603 World Civilization I 3 Cr Hrs

World Civilization I is a course designed to examine the social, political, economic, and technological events that have shaped world societies from pre-history to the 17th century. The course will emphasize the unique nature of each civilization and its contributions to the global community, as well as the

interactions between these civilizations.

HS 1613 World Civilization II 3 Cr Hrs

World Civilization II is a course designed to examine the social, political, economic, and technological events that have shaped world societies the 17th century to the present. The course will emphasize those events which have had a major impact on the development of the modern world.

HS 1803 The Indian in American History 3 Cr Hrs

This is a survey course of North American Indian history from prehistoric times up to the present. The course will discuss selected Native American Indian groups, their migrations, developments and prominent leaders, as a means of illustrating the course of their history. The course will also discuss related topics such as religion, kinship, economics, warfare and culture change, to emphasize the history and heritage of the American Indian as an active participant in the creation of American History. The relationship between Indian groups and Euro-Americans from contact to the present, including removal and Federal Indian policy, will be presented in an unbiased manner. Research will be presented from the fields of anthropology, sociology, social psychology, as well as from history, to create a broader, richer history of the American Indian.

Journalism

JN 1103 Digital Color Photography 3 Cr Hrs

This course covers essential digital photography techniques for photojournalism. Students will be taught a range of topics surrounding digital photography, including camera technology, advice for photographic composition, how to cover a photojournalism assignment and tips and techniques for preparing images for output in print and on the Web.

JN 1203 News Writing I 3 Cr Hrs

This course covers the development of journalistic style and practice in the objective handling of news events. Students will be taught media trends, Associated Press news style, lead writing, how to organize and develop a news story, interviewing techniques, various writing and assignment styles, and an introduction to media law and ethics.

JN 1213 News Writing II 3 Cr Hrs

This course advances the news writing style learned in News Writing I with more in depth writing assignments. The course continues to expand Associated Press news style, how to improve lead writing and organizational skills in areas of news, features, sports, reviews, and column/editorial writing. News Writing II will include a continuing discussion of media law and ethics. Prerequisite: JN 1203

JN 1313 Newspaper Practicum I 3 Cr Hrs

Newspaper Practicum is an instructional writing and design course combined with a lab format that includes hands-on writing and design techniques. Practical skills in design, interviewing, news writing styles, editing, photography, advertising, and Web site design will be taught during the actual production and distribution of the student newspaper, the Crusader, and maintenance of the student Web site, CrusaderNews.com. Students will develop a portfolio project notebook during the course.

JN 1323 Newspaper Practicum II 3 Cr Hrs

Newspaper Practicum is an instructional writing and design course combined with a lab format that includes hands-on writing and design techniques. Practical skills in design, interviewing, news writing styles, editing, photography, advertising, and Web site design will be taught during the actual production and distribution of the student newspaper, the Crusader, and maintenance of the student Web site, CrusaderNews.com. Students will develop a portfolio project notebook during the course.

JN 1333 Newspaper Practicum III 3 Cr Hrs

Newspaper Practicum is an instructional writing and design course combined with a lab format that includes hands-on writing and design techniques. Practical skills in design, interviewing, news writing styles, editing, photography, advertising, and Web site design will be taught during the actual production and distribution of the student newspaper, the Crusader, and maintenance of the student Web site, CrusaderNews.com. Students will develop a portfolio project notebook during the course.

JN 1343 Newspaper Practicum IV 3 Cr Hrs

Newspaper Practicum is a two hour lecture course with a one hour lab format. Practical news writing, interviewing, editing, news budgeting, photography, advertising, ad design and pagination layout procedures will be practiced in the actual production and distribution of the college newspaper, the Crusader.

JN 1603 Intro to Mass Communications 3 Cr Hrs

This course introduces the history, values, and structure of mass communications and discusses the enormous impact of mass media on society and culture.

Mass media considered include advertising, books, newspapers, magazines, radio, television, movies, the Internet, and public relations.

JN 1903 Directed Independent Studies in Journalism 3 Cr Hrs

This course will give students the opportunity to pursue special interests in journalism through guided independent study in a chosen area of journalism. It is designed to increase each student's knowledge of the journalistic field.

Library Science

LS 1102 Introduction to Library 2 Cr Hrs

This course is designed to acquaint the students with the college Library and the way it can be used by them during their college career. It encourages them to broaden their backgrounds and to learn beyond the textbook by introducing them to the resources of the library.

LS 1203 Library Internship I 3 Cr Hrs

(By arrangement for 3,375 minutes.) This course is designed to give the student experience in actually working in a library. Practical experience at the circulation desk, shelving books and simple library procedures are emphasized. Constant stress is placed upon the fact that the library worker should be service oriented. This work experience is gained in the college Library under the supervision of the director and the LIBRARY technicians.

LS 1213 Library Internship II 3 Cr Hrs

This course is designed as an extension of Library Internship I. The student will gain practical experience by working six hours per week in either a public or school library under the supervision of a qualified librarian.

Machine Tool Technology

MC 1001 Professional Development for Machinists 1 Cr Hr

This 1 credit hour course is designed to strengthen the student's employability skills in the manufacturing sector.

MC 1002 Orientation & Introduction to Mach Tool Technology 2 Cr Hrs

This 2 credit hour course is designed to familiarize and orient students to safe workplace practices in material handling, machine tool identification, machine tool operations and safeguarding, handling of tooling, handling and application of cutting fluids and lubricants, personal precautions and the use of personal protective equipment (PPE).

MC 1003 Precision Measurement 3 Cr Hrs

This 3 credit hour course is designed to introduce and orient the student to the science of dimensional metrology and its applications.

MC 1005 Vertical Milling Machine 5 Cr Hrs

This 5 credit hour course is designed to introduce and orient the student to setups and operations of the vertical spindle milling machine.

MC 1006 Engine Lathe 6 Cr Hrs

This 6 credit hour course is designed to introduce and orient the student to setups and operations of the engine lathe.

MC 1009 CNC Vertical Machining Center 9 Cr Hrs

This 9 credit hour course is designed to introduce and orient the student to setups and operations of the CNC Vertical Machining Center.

MC 1012 Blue Print Reading 2 Cr Hrs

In this 2 credit hour course the student will learn to read and interpret shop prints and engineering drawings based on the latest ANSI standards. The student will learn to identify specific line types and their purpose as well as dimensioning and tolerancing practices through sketching techniques. The student will also gain knowledge in geometric dimensioning and tolerancing known as GDT.

MC 1015 Computer Aided Manufacturing 5 Cr Hrs

This 5 credit hour course is designed to introduce and orient the student to utilizing programming software to enhance CNC programming and machining.

MC 1019 CNC Horizontal Turning Center 9 Cr Hrs

This 9 credit hour course is designed to introduce and orient the student to setups and operations of the CNC Horizontal Turning Center.

MC 1022 Math for Machine Tool Technology 2 Cr Hrs

This 2 credit hour course is designed to enhance and demonstrate the need for mathematical skills in the manufacturing trade.

MC 1032 Manual Operations: Bench work/Layout 2 Cr Hrs

This 2 credit hour course is designed to orient students to the correct care and use of bench tools (cutting and non-cutting), as well as layout techniques.

MC 1042 Drill Press 2 Cr Hrs

This 2 credit hour course is designed to introduce and orient the student to setups and operations of the drilling machine.

MC 1113 Directed Independent Study in Machine Tool 1-3 Cr Hrs

Mathematics

MA 0013 Basic Arithmetic 3 Cr Hrs

This course provides an opportunity for students to develop basic math skill operation and receive individual basic math skill operation and receive individual help to acquire beginning skills in basic operations and practical applications. (THIS COURSE WILL NOT COUNT FOR GRADUATION.)

MA 0033 Advanced Arithmetic 3 Cr Hrs

This course is for the college student whose grasp of arithmetic skills is currently weak or marginal. Competency at the college level in addition, subtraction, multiplication and division of whole numbers, integers, decimals and fractions, as well as ratio, percent and simple equations will be emphasized. THIS COURSE DOES NOT COUNT TOWARD GRADUATION.

MA 0043 Beginning Algebra 3 Cr Hrs

This course is for the college student who has not had an algebra course previously or for the student who needs a refresher course in the basic algebra concepts. Successful completion of this course should prepare the student for Intermediate Algebra. THIS COURSE DOES NOT COUNT TOWARD GRADUATION.

MA 0113 Basic Applications Math 3 Cr Hrs

This course is for the student whose basic skills is weak and is designed to help develop college level skills in Addition, Subtraction, Multiplication, and Division. Emphasis will be on Integers, Prime Numbers, Common and Decimal Fractions, as well as ratios and percent problems.

MA 1103 Intermediate Algebra 3 Cr Hrs

This course is a study of basic algebra, beginning with signed numbers and continuing through quadratic equations. Coverage includes a brief review of basic definitions, properties and operations of signed numbers and algebraic expressions; linear equations and inequalities in one variable; rectangular coordinates, functions and graphs; slope and graphs of linear equations; polynomials and factoring; rational expressions; radicals and complex numbers; quadratic equations, inequalities and graphs; and systems of equations, inequalities and graphs; and systems of equations and inequalities.

MA 1173 College Algebra 3 Cr Hrs

This is the first course in the college mathematics curriculum for mathematics and allied majors. Success in college level mathematics courses begins with a good understanding of algebra and the goal of this course is to help the student develop that understanding. It may be taken simultaneously with Trigonometry and serves as a prerequisite to Analytic Geometry and Calculus I. Many other programs recommended College Algebra or its level of competency for continued study learning to a related field.

MA 1183 Trigonometry 3 Cr Hrs

This course is a study moving from triangular to analytical trigonometry. The course further serves as necessary background for the calculus sequence in mathematics and for a study of physics.

MA 2103 Elementary Statistics 3 Cr Hrs

This course will introduce students to many of the important concepts and procedures needed to (1) evaluate such daily inputs as organizations reports, newspaper and magazine articles, and radio and television commentaries, (2) improve their ability to make better decisions over a wide range of topics, and (3) improve their ability to measure and cope with changing conditions, both at home and on the job. The emphasis will be on explaining statistical procedures and interpreting the resulting conclusions.

MA 2304 Business Calculus 4 Cr Hrs

This course is an introduction to calculus and the methods of calculus, with applications to business, economics, the social and behavioral sciences, life sciences as an ecology, health, agricultural and other fields. For the non-mathematics majors needing some calculus skills.

MA 2605 Analytic Geometry/Calculus I 5 Cr Hrs

Calculus is the study of variables and functions with emphasis on the changing, dynamic properties of relationships that can be described mathematically. This course is to provide students majoring in mathematics, science, computer programming, engineering and many non-science fields an opportunity to begin a study of analysis. The tools of calculus, including differentiation and integration of functions, are studied and used in geometric and various applied problems.

MA 2615 Analytic Geometry/Calculus II 5 Cr Hrs

This course is a continuation of MA 2605, Analytic Geometry/Calculus I, in which the tools of single variable differential and integral calculus are further developed. Applications of these mathematical tools are investigated. Polar coordinates and vectors in two dimensions are studied.

MA 2625 Calculus III 5 Cr Hrs

This course is a continuation of MA2615 in which the tools of differential and integral calculus are further developed. Study includes three dimensional vectors, partial differentiation, and multiple integration.

MA 2703 Linear Algebra 3 Cr Hrs

This course is a study of matrix algebra, determinants, linear equations, vectors and vector spaces, and linear transformations.

MA 2903 Differential Equations 3 Cr Hrs

A differential equation is an equation that contains derivatives or differentials of one or more functions. In this course, we will study Ordinary Differential Equations; that is, differential equations in which the unknown factor in the equation depends upon only one independent variable. We will consider First Order Differential Equations, Higher Order Differential Equations, Linear Differential Equations (both Homogeneous and Non-Homogeneous), Laplace Transforms, Inverse Laplace Transforms, Solutions by Infinite Series, and Solutions to Linear Systems of Differential Equations, with many applications. This course is designed for those majoring in Mathematics, Mathematical Sciences and Engineering.

Medical Assistant**ME 1001 Healthcare Provider CPR & First Aid 1 Cr Hr**

This course certifies Medical Assistant students in Healthcare provider level CPR and First Aid. The curriculum is based on American Heart Association standards. Students will be expected to perform basic tasks with manikins in this course and take the standard American Heart Association exam.

ME 1002 Medical Office Administrative Aspects I 2 Cr Hrs

This course contains the administrative skills of the health care team member. These skills include effective telephone techniques, scheduling patients for appointments, management of facilities, records management, and use of office equipment.

ME 1003 Medical Terminology for Medical Assistants 3 Cr Hrs

The content of this course focuses on the introduction to medical terminology. Vocabulary is explored to structure of word, prefixes, suffixes and root words. Emphasis is on proper usage, pronunciation, spelling and definition of each of the structures commonly used in the medical field.

ME 1011 Healthcare Nutrition 1 Cr Hr

This course is for the Medical Assistant program. It focuses on the major aspects of nutrition, disease processes, and specialized diets. The role of vitamins and herbal medications are also discussed.

ME 1012 Medical Office Administrative Aspects II 2 Cr Hrs

Prerequisite: Medical Office Administrative Aspects I. This course will focus on the Medical Assistant as a human resource and office manager. Basic transcription, employment laws and guidelines, managerial styles, and employment strategies will be presented.

ME 1013 Professionalism for the Medical Assistant 3 Cr Hrs

This course focuses on the basic concept of professional practice of medicine and the role and function of the medical assistant. Students discuss the personal and professional characteristics and legal and ethical standards for medical assistants, explore professional and personal therapeutic communication, and address time management and goal setting.

ME 1021 Healthcare Psychology 1 Cr Hr

This course is designed to apply therapeutic communication skills in interacting with patients and families in healthcare. Topics of ethical behavior in the healthcare setting, therapeutic approach with patients in various stages of disease, death and the dying process are presented.

ME 1022 Insurance Billing & Coding 2 Cr Hrs

Designed to educate the healthcare team member with the mechanics of submission of electronic/paper insurance claim forms and current industry coding for medical office treatments and procedures.

ME 1023 Anatomy for Medical Assistants 3 Cr Hrs

This course focuses on basic anatomy for Medical Assistants. General body systems with their structure and functions are focused on. Spelling and use of medical terminology are required.

ME 1032 X-Ray Safety & Basic Procedure 2 Cr Hrs

This course involves the basic client positioning techniques, equipment set-up, and film processing for assisting with X-Rays in a medical office. Prerequisite: Anatomy

ME 1103 Patient Care I 3 Cr Hrs

Students will receive an overview of the healthcare field and healthcare team. Emphasis will be placed on medical asepsis, vital signs, emergency procedures, and documentation. At the conclusion of the course the student will be expected to take the Kansas State Nursing Assistant exam.

ME 1104 Patient Care II 4 Cr Hrs

This course focuses on the Medical Assistant in the clinical area. Office surgery, therapeutic exercise and body mechanics, laboratory procedures and laws are presented. Prerequisite: Patient Care I

ME 1113 Externship 3 Cr Hrs

This is a clinical externship in a doctor's office. 240 clock hours is required. No monetary compensation is to be earned during this time. Prerequisite: All other Fall and Spring Medical Assistant courses.

ME 1114 Pharmacology for Medical Asst 4 Cr Hrs

The student will identify sources, schedules and classes of drugs. They will identify and interpret actions of drugs commonly used in the physician office, accurately calculate drug dosage, and identify appropriate administration routes. The student will follow the written, verbal, or standing physician orders and properly prepare and administer medications using aseptic technique as required. Prerequisite: Patient C

ME 1123 Directed Independent Study in Medical Assistant 1-3 Cr Hrs**ME 1124 Clinical Laboratory Procedures for Medical Assistants 4 Cr Hrs**

This course addresses the role and function of the professional in the clinical laboratory setting. Topics include safety, Clinical Laboratory Improvement Act of 1988 (CLIA) government regulations, and quality assurance in the laboratory. Students learn concepts and perform procedures in the different departments of the laboratory, including specimen collection, and performance of Clinical Laboratory Improvement Act of 1988 (CLIA) low-and/or moderate-complexity testing. Students demonstrate competency in a wide variety of techniques used to collect, process and test specimens. Prerequisite: All Fall Medical Assistant Courses.

Modern Languages**ML 1102 Conversational Spanish I 2 Cr Hrs**

The primary focus of this class is to create the ability to understand basic native spoken and written Spanish and to increase the skill of expressing every-day situations. The student may anticipate a limited ability to speak and understand Spanish upon completing this course.

ML 1112 Conversational Spanish II 2 Cr Hrs

This course is a continuation of Conversational Spanish I, and will provide the student with a basis for communication in the workplace and business with an emphasis on practical "Command Spanish."

ML 1205 Elementary Spanish I 5 Cr Hrs

This course develops fundamental skills in pronunciation and comprehension of practical phrases, with minimum essentials of grammar. The course further develops basic skills in reading simple Spanish prose and an appreciation of Latin American life and culture.

ML 1215 Elementary Spanish II 5 Cr Hrs

This course develops fundamental skills in pronunciation and comprehension of practical phrases with minimum essentials of grammar. The course further develops basic skills in reading simple Spanish prose and an appreciation of Latin American life and culture. (Not recommended to students with credit in high school Spanish.)

ML 1302 Conversational French I 2 Cr Hrs

This class is designed to help the student gain an insight into speaking the French language. The student will learn to make basic statements, ask simple questions and build a vocabulary of French words.

ML 1405 Elementary French I 5 Cr Hrs

This course is an integrated introduction to beginning French. Students develop fundamental skills in speaking, comprehension, reading, and writing of the French language.

ML 1415 Elementary French II 5 Cr Hrs

This course is a continuation of Elementary French I, with the completion of the basic structure of Modern French. Equal emphasis is placed on the spoken language, reading, writing, comprehension and cultural awareness.

ML 1602 Conversational German I 2 Cr Hrs

This course is designed to help the student gain an insight into speaking and understanding the German language. Elementary conversation and a rudimentary emphasis on translations and reading will be stressed.

ML 1612 Conversational German II 2 Cr Hrs

This course is a continuation of Conversational German I and is designed to help the student gain a further insight into speaking and understanding the German language. Elementary conversation and a rudimentary emphasis on translation and reading will be stressed.

ML 2203 Selected Spanish Readings 3 Cr Hrs

(On demand.) This class is conducted in Spanish with minimum English instruction and focuses on readings of Spanish and Latin American literature.

ML 2213 Spanish Composition **3 Cr Hrs**
(On demand.) The course is designed to develop the students' abilities to express their thoughts in correct, well-structured Spanish and to provide them, regardless of level, with an independent study meeting their own needs and interests.

ML 2903 Directed Independent Study in Mod Lang **3 Cr Hrs**
This course provides students with the opportunity to pursue special interests in Modern Languages through a guided independent study in a chosen area.

Medical Laboratory Technology

MT 1102 Medical Terminology **3 Cr Hrs**
This course introduces Latin and Greek root words, prefixes and suffixes, and is designed to give the student a working vocabulary for science and health occupation courses.

MT 1203 Intro to Medical Technology **3 Cr Hrs**
A two credit hours lecture and one credit hour laboratory course designed to acquaint the student with the wide variety of procedures performed in a clinical laboratory. Laboratory skills involving measurement and instrumentation are introduced. Topics to be covered include safety, medical terminology, basic mathematics, specimen collection, microscope use, staining procedures, professional behavior, ethics, use of general lab equipment, introductory procedures in serology, urinalysis, chemistry, hematology, blood banking, and microbiology. The laboratory time will enhance the knowledge gained in the lecture by allowing the student to work in the simulation of the laboratory at the Epworth Allied Health Center. This course will utilize computer technology to enhance student learning.

MT 1302 Phlebotomy for the Multi-skilled Practitioner **2 Cr Hrs**
This course is designed to teach phlebotomy skills for the multi-skilled practitioner. The course will consist of lecture and laboratory sessions. Participants will obtain phlebotomy skills to proficiently obtain blood specimens by venipuncture and dermal techniques.

MT 1903 Basic Immunology **3 Cr Hrs**
A survey of basic immunological principles is presented for the student to provide a general orientation to immunology. Certain concepts and the major effectors of immune responses are introduced and more detailed discussions are held later in the course. Central aspects of humeral and cellular immune responses, both specific and non-specific are covered. Exploration of special topics in immunology such as autoimmunity and immunodeficiency is held. Immunologic principles of laboratory diagnosis of human disease are emphasized. This course utilizes computer technology to enhance student learning.

MT 2205 Hematology / Coagulation **5 Cr Hrs**
The student will study the formed cell elements in the blood which will include their formation, morphology and function in normal and pathologic processes. A study of hemostasis and coagulation in normal and disease processes will be explored. Identification of significant cellular changes is stressed. The student, with the aid of the MLT student laboratory and/or clinical affiliate site, will be able to enhance the knowledge gained in lecture and to develop competency in blood cell counting, performance of normal and abnormal blood smear differentials, staining, and special hematological procedures common in clinical laboratories. Association of common pathological states with histograms and common cytochemical stains will be provided. Blood coagulation function testing and coagulation lab will be studies, performed and evaluated. Prescribed safety practices will be reviewed and followed. This course will utilize computer technology to enhance student learning.

MT 2305 Pathogenic Microbiology **5 Cr Hrs**
This three credit hour lecture and two credit hour laboratory course will survey microbiology as it is applicable to a clinical laboratory. Procedures for routine specimen collection will be discussed and practiced. Normal flora and possible pathogenic bacteria will be identified by morphology, staining characteristics, colonial morphology, growth on selective media, biochemical testing and serological methods. Basic theory in antimicrobial susceptibility testing will be covered. Principles of all tests will be studied. Study of viruses and Chlamydia will be limited to the processing and handling of specimens for consultant referral and principles of serological testing. Normal and pathogenic parasites and fungal elements will be identified and procedures utilized for proper identification will be discussed. This course will utilize computer technology to enhance student learning.

MT 2405 Clinical Chemistry **5 Cr Hrs**
PREREQUISITE: Admission to the MLT program. This three credit hour lecture and two credit hour laboratory course will cover the physiology of the body and the biochemical reactions that are necessary for a healthy existence. The human condition is evaluated by biochemical shifts in different systems that maintain homeostasis during healthful periods. Basic interpretation of bio-

chemistry and the concentration of enzymes, carbohydrates, lipids, proteins, electrolytes and blood gases will be discussed. The need for drug testing and evaluation will also be a part of this curriculum. The student will perform routine clinical tests on biological fluids, maintain quality assurance records, and perform preventative maintenance on instrumentation. This course will utilize computer technology to enhance student learning.

MT 2505 Blood Bank / Serology **5 Cr Hrs**
This course is a study of the immunology of blood, including those principles and practices that are known collectively as blood banking. An overview of blood component collection and component preparation is presented. Basic concepts of genetics, immunology and antiglobulin testing are included as a foundation for the understanding of the blood group systems and antibody detection and identification. Current transfusion practices are discussed. An in-depth overview of various clinical conditions with related blood banking practices is provided. An introduction to HLA systems, testing methods and applications is presented. A comprehensive overview of the concept of quality assurance, safety and regulatory issues is covered. Also included are principles and procedures used in the serological identification of disease states. This course will utilize computer technology to enhance student learning.

MT 2601 Clinical Practicum Hematology/Coagulation **1 Cr Hr**
The student will perform procedures in the clinical affiliate student lab working as an independent laboratorian, with specimens set up from each major course area the student had completed, with emphasis in hematology and coagulation analyses. Normal work flow with stats and difficult problem solving situations interspersed will be handled by the student. This course will utilize computer technology to enhance student learning.

MT 2611 Clinical Practicum Path Microbiology **1 Cr Hr**
One credit hour laboratory session. The student will perform procedures in the clinical affiliate lab working as an independent laboratorian, with specimens set up from each major course area the student has completed, with emphasis in microbiology. Normal work flow with stats and difficult problem solving situations interspersed will be handled by the student. This course will utilize computer technology to enhance student learning.

MT 2621 Clinical Practicum Blood Bank/Serology **1 Cr Hr**
The student will perform procedures in the clinical affiliate lab working as an independent laboratorian, with specimens set up from each major course area the student has completed, with emphasis in blood banking and serology analyses. Normal work flow with stats and difficult problem solving situations interspersed will be handled by the student. This course will utilize computer technology to enhance student learning.

MT 2631 Clinical Practicum Clinical Chemistry **1 Cr Hr**
The student will perform procedures in the clinical affiliate lab working as an independent laboratorian, with specimens set up from each major course area the student has completed, with emphasis in clinical chemistry. Normal work flow with stats and difficult program solving situations interspersed will be handled by the student. This course will utilize computer technology to enhance student learning.

MT 2703 Body Fluids **3 Cr Hrs**
This two credit hour lecture and one credit hour laboratory course will provide the student with in-depth knowledge of the function of the kidney, urine formation, and the procedures utilized in performing routine urinalysis and body fluid analysis. Correlation of abnormal findings and disease states will be discussed. Other body fluids covered in this course include: feces, seminal, amniotic, cerebrospinal, pleural, pericardial, and peritoneal. Discrimination between normal and abnormal findings and relating this knowledge to disease states will be included in the course material. This course will utilize computer technology to enhance student learning.

MT 2883 Basic Spanish Medical Personnel I **3 Cr Hrs**
This course teaches fundamentals of the pronunciation and structure of the Spanish language, together with practice in listening, speaking and very basic reading and writing in Spanish, with strong emphasis on vocabulary related to medical situations. Many aspects of Hispanic culture will be studied, especially those which relate specifically to health care. The course is designed for students planning careers in health-related professions.

MT 2907 Advanced Clinical Practicum **7 Cr Hrs**
Students will work one-on-one with clinical instructors to refine clinical laboratory skills within a designated clinical affiliate laboratory. This rotation will include 480 hours of clinical practicum experience. This course will integrate knowledge gained in all MLT courses with practical experience in coagulation, chemistry, microbiology, hematology, blood banking, serology and urinalysis.

Music

- MU 1101 Chorus IV** 1 Cr Hr
Open admission to college students. Focus on correct vocal technique and choral style. Performance of sacred and secular music literature representing all style periods. Several public programs and one concert each semester.
- MU 1201 Rock Band IV** 1 Cr Hr
Study through performance of music for rock band. Development of fundamentals appropriate to a performing group. Performs two concerts each semester (fall and spring). Community performances are also possible.
- MU 1203 Introduction to Music** 3 Cr Hrs
This course is an overview of music through the ages, its place in society, its language and its masterworks. An elective designed to provide the student with additional breadth and enjoyment through listening and discussion of selected works.
- MU 1303 Theory I** 3 Cr Hrs
(First semester.) A study of major and minor scales, intervals, primary and secondary triads, cadences and part-writing exercises. Applications at the piano of harmonic progressions and principles in this course.
- MU 1313 Theory II** 3 Cr Hrs
(Second semester.) This course is a continuation of Music Theory I, including the dominant seventh and supertonic seventh chords, modulation and non-harmonic tones. Applications at the piano of principles and techniques presented in this course.
- MU 1323 Theory III** 3 Cr Hrs
This course is a continuation of Music Theory II, including seventh chords, altered chords, advanced modulation and voice leadings.
- MU 1333 Theory IV** 3 Cr Hrs
This course is a continuation of Music Theory III and includes the study of the harmonic practices of the late 19th Century and into the 20th Century, and application of principles through performance and written exercises.
- MU 1402 Sight Singing & Ear Train I** 2 Cr Hrs
(First semester.) This course includes harmonic and melodic dictation, applying principles and techniques presented in Music Theory I, along with development of sight reading skills.
- MU 1403 Multi-Track and Midi Recording** 3 Cr Hrs
This course is an introduction to studio recording. Each student will become familiar with the use of a mixer board. Multi-track recording from 2 track to 8 track recording will be discussed. A variety of hands-on opportunities will be available.
- MU 1412 Sight Singing & Ear Train II** 2 Cr Hrs
(Second semester.) This course includes harmonic and melodic dictation, and applying principles and techniques presented in Music Theory II.
- MU 1413 Finale I: Intro/Music Notation** 3 Cr Hrs
This course is to provide instruction in the use of Finale music notation software.
- MU 1501 Select Choral Ensemble** 1 Cr Hr
A small select group (12-16) of singers chosen by audition. Emphasis is on music of all styles, including secular, jazz, spirituals, pop and music theater/broadway. Choreography and dancing. Audition required.
- MU 1701 Class Piano I** 1 Cr Hr
Private instruction in the area of classical piano. *Class piano I: Little or no piano experience. *Class Piano II: Continuation of Class Piano I. *Class Piano III: Continuation of Class Piano Class II. *Class Piano IV: Continuation of Class Piano III.
- MU 1711 Class Piano II** 1 Cr Hr
Private instruction in the area of class piano. *Class Piano I: Little or no piano experience. *Class Piano II: Continuation of Class Piano I. *Class Piano III: Continuation of Class Piano II. *Class Piano IV: Continuation of Class Piano III.
- MU 1803 Introduction to Jazz/Jazz Rock** 3 Cr Hrs
History of jazz from its beginning to the present rock styles which utilize jazz. The appreciation of the art form will be studied through the elements that make up all music. Special emphasis will be given to the development of jazz and its contribution to the American culture.
- MU 2002 Music Literature I** 2 Cr Hrs
This course is an introduction to music from Classical Greece through the Baroque Era (800 B.C.-1750) and is designed for the music major transferring to four-year institutions.
- MU 2012 Music Literature II** 2 Cr Hrs
This course is a continuation of Music Literature I and includes music from the classical era to modern (1770-present) and is designed for the music major transferring to four-year institutions.

- MU 2202 Introduction to Conducting** 3 Cr Hrs
An introduction into vocal and instrumental conducting, starting with basic beat patterns and progressing into more advanced rhythms. Besides having a chance to conduct in class, the student will have a chance to conduct in front of the choir or wind ensemble. This should enhance the appreciation and apprehension of being in front of an ensemble.
- MU 2402 Sight Singing & Ear Train III** 2 Cr Hrs
This course consists of harmonic and melodic dictation, and applying principles and techniques presented in Music Theory III, together with further development of sight reading skills, including all major and minor keys and simple part singing.
- MU 2412 Sight Singing & Ear Train IV** 2 Cr Hrs
This course included harmonic and melodic dictation and applying principles and techniques presented in Music Theory IV.
- MU 2501 Saints Brass and Wind HV** 1 Cr Hr
Selected group of students who will perform for all home basketball games. Emphasis is on performance and enjoyment of instrumental music.
- MU 2701 Class Piano III** 1 Cr Hr
Private instructions in the area of classical piano. *Class Piano I: Little or no piano experience. *Class Piano II: Continuation of Class Piano I. *Class Piano III: Continuation of Class Piano II. *Class Piano IV: Continuation of Class Piano III.
- MU 2711 Class Piano IV** 1 Cr Hr
Private instructions in the area of classical piano*. Class Piano I: Little or no piano experience. *Class Piano II: Continuation of Class Piano I. *Class Piano III: Continuation of Class Piano II. *Class Piano IV: Continuation of Class Piano III.
- MU 2811 Wind Ensemble HV** 1 Cr Hr
Study through performance of music for wind band. Development of fundamentals appropriate to a performing group. Performs two concerts each semester (Fall & Spring). Community performances are possible.
- MU 2903 Directed Independent Studies in Music** 3 Cr Hrs
This course is designed for those students who wish to pursue special interests in music.
- MU G1602 Applications Music HV Guitar** 2 Cr Hrs
One credit hours for private instruction in the area of guitar. Student recital performance is required. Two hours credit for music majors only by permission of instructor.
- MU I1602 Applications Music HV Instrument** 2 Cr Hrs
One credit hour for private instruction in the area of instrument. Student recital performance is required. Two hours credit for music majors only by permission of instructor.
- MU P1602 Applications Music HV Piano** 2 Cr Hrs
One credit hour for private instruction in the area of piano. Student recital performance is required. Two hours credit for music majors only by permission of instructor.
- MU S1602 Applications Music HV Strings** 2 Cr Hrs
One credit hour for private instruction in the area of string instruments. Student recital performance is required. Two hours credit for music majors only by permission of instructor.
- MU V1602 Applications Music HV Voice** 2 Cr Hrs
One credit hour for private instruction in the area of voice. Student recital performance is required. Two hours credit for music majors only by permission of instructor.

Nursing

- NR 1101 Home Health Aide** 1 Cr Hr
One credit hour lecture course. This is a two day seminar course with course description to be determined by topic covered.
- NR 1103 Basic Pharmacology** 3 Cr Hrs
A theory course designed to introduce the student to basic pharmacologic concepts. Areas of emphasis include legal issues, drug actions and drug classifications.
- NR 1106 Medication Aide** 6 Cr Hrs
This course is designed to provide the student with a basic knowledge of oral medications and their safe administration. It covers the systems of the body and the effect of medications on these systems. Special emphasis is given to the aging process and what this does to the drug utilization by the body.
- NR 1109 Nursing Home Aide (CNA)** 9 Cr Hrs
This course is designed to enhance basic care-giving skills, human understanding, and attitude, all of which are necessary to render services to residents of an adult care facility. Emphasis is placed on the normal needs of the geriatric

resident and specific individual physical, psychosocial environmental, and spiritual needs. This course prepares students to sit for the state examination to gain certification as a Nurse Aide.

NR 1111 Continuing Education Nursing 1 Cr Hr

One credit hour lecture course. This is a two day seminar course with course description to be determined by topic covered.

NR 1113 IV Therapy for the LPN 3 Cr Hrs

A classroom and clinical course designed to prepare the licensed practical nurse to perform limited and expanded administration of IV therapy under the supervision of a registered professional nurse. Prerequisite: To be eligible to enroll in the IV fluid therapy course, the individual shall be a nurse with a current Kansas license.

NR 1115 Fundamentals of Nursing 5 Cr Hrs

A three credit hour theory and two credit hour clinical course designed to provide the student with a knowledge base of the fundamentals of nursing practice. The nursing process is utilized as the framework to introduce students to the development of nursing diagnosis based on actual or potential health problems, human responses and to the nursing roles of provider of care and member within the discipline of nursing. Included is introductory information concerning nursing skills, ethical/legal aspects of nursing, techniques of interpersonal communication, critical thinking, and pharmacology. The clinical component of this course requires the student to care for clients in both acute and long-term care facilities. Prerequisite: Admission to the Practical Nursing program.

NR 1202 Gerontological Nursing 2 Cr Hrs

A one credit hour theory and one credit hour clinical course designed to provide the student with nursing principles as relevant to the care of the geriatric patient. The nursing roles of provider of care and member within the discipline of nursing are emphasized as they apply to gerontological nursing. The nursing process serves as a guide for implementing nursing care and evaluating human response to actual or potential health problems of the geriatric population. Included is a development of a knowledge base in the areas of physiological, sociological, psychological, and emotional changes which occur with the aging process. Integrated throughout the course are concepts relating to illness prevalent in the geriatric populace as well as therapeutic regimes. Curriculum threads of pharmacology, communication, critical thinking, and client teaching are integrated throughout the course. Prerequisite: Admission to the Practical Nursing program.

NR 1507 Medical/Surgical Nursing 7 Cr Hrs

Seven credit hours. A five credit hour theory and two credit hour clinical course. Through classroom and laboratory experiences the student is provided with a knowledge base of appropriate nursing interventions employed when providing care for adults exhibiting a human response to actual or potential health problems. Nursing care is delivered through the application of the nursing process. The nursing roles of provider of care and member within the discipline of nursing are emphasized throughout the course. Included are common diagnostic, therapeutic and nursing care measures relevant to these medical-surgical entities. Curriculum threads of critical thinking, pharmacology, communication, and client teaching are woven throughout the course. Prerequisite: Admission to the Practical Nursing program.

NR 1605 Maternal Child Health 5 Cr Hrs

This course emphasizes utilization of the nursing process to meet the human responses of child-bearing families and children from infancy through adolescence with actual or potential health problems. The practical nurse's role will allow the student to function as provider of care and member within the discipline of nursing as these roles relate to maternal child nursing. Curriculum threads of pharmacology, communication, critical thinking, and client teaching are integrated throughout the course. Prerequisite: Successful completion of all other courses within the Practical Nursing curriculum.

NR 1705 Role Develop/Practicum Nursing 5 Cr Hrs

This is a three credit hour theory and two credit hour clinical course focusing on understanding the role of the practical nurse as a manager and provider of care under direct supervision. The practical nurses function as a member within the discipline of nursing is emphasized. Curriculum threads of pharmacology, communication, client teaching, and critical thinking are utilized while providing care for a group of patients in an acute or long term care health care facility. Utilizing the nursing process, the student identifies human responses to actual or potential health problems to determine appropriate nursing care. The clinical experience utilizes eight hour shifts to enhance the student's educational experience.

NR 2101 From LPN to ADN 1 Cr Hr

One credit hour. The content of this theory course is to orient the practical nurse (LPN, LVN) returning to school for an associate degree in nursing to

the curriculum. Content will be individualized based on student experiences and needs. Role changes from LPN to RN are discussed in relation to SCCC's nursing philosophy and conceptual framework. Emphasis will be placed on use of critical thinking, communication, medication calculations, and the nursing process as integral tools of nursing practice. The student will have an opportunity to socialize into the student role before integrating into a classroom of generic students. Pre-requisite: Graduate from LPN/LVN program.

NR 2103 Integration Seminar 3 Cr Hrs

Three credit hours. This required elective theory seminar course provides an opportunity for students to integrate their nursing educational experiences, applying concepts, principles, and critical thinking to solve problems and make decisions in simulated client care situations which include communication, pharmacology, and client teaching. This course is designed to facilitate successful entry into nursing practice and is required for those students who achieve a NCLEX-RN probability success score of below 850 on the initial HESI comprehensive exit exam. Prerequisite: Admission to the ADN program or previously completed a professional nursing program.

NR 2111 Neonatal Resuscitation 1 Cr Hr

One credit hour theory with a practicum mock code at the finish of the course. This is a course in which focus is on assisting persons involved in neonatal resuscitation in the hospital and delivery setting. Those newborns exhibiting an actual or potential health problem requiring resuscitation will be emphasized utilizing the American Heart Association and American Academy of Pediatrics material published for Neonatal Resuscitation. Students who successfully complete the theory portion of the course qualify for the mock code, which when successfully completed results in certification for Neonatal Resuscitation.

NR 2113 Applications Nutrition for Health 3 Cr Hrs

Three credit hour lecture course. This course is an introduction to the interrelationships among nutrition, food, and the environment as they impact health status. The effect of nutrition and diet on the promotion and maintenance of health and wellness, and in the prevention and management of various diseases, illnesses and disorders in individuals is addressed.

NR 2121 Prep for NCLEX-RN 1 Cr Hr

The focus of this theory course is to allow the student to identify areas of nursing knowledge that require further enhancement for practice application. The student will accept responsibility for contributing to knowledge acquisition and analysis of individual strengths and areas of improvement.

NR 2131 Anxiety Disorders 1 Cr Hr

This is a two-day seminar course with the first day dealing with anxiety disorders and the second day dealing with long-term care culture issues.

NR 2201 Diabetes Update 1 Cr Hr

This seminar course will discuss issues related to the disease process of Diabetes Mellitus with emphasis on prevention and treatment of diabetic wounds.

NR 2404 Adult and Child Care I 4 Cr Hrs

Four credit hours. A two credit hour theory and two credit hour clinical course. The classroom and clinical are designed to assist the student to integrate the nursing process in caring for clients responses to actual or potential health problems across the lifespan. Students are challenged to think critically as they inter-relate the client's physiological systems, growth & development, family, mental & spiritual aspects, culture, lab values, medications and their impact on client teaching, planning of care, and communication. The roles of the associate degree nurse as provider and manager of care and member within the discipline of nursing are emphasized. Prerequisite: Admission to the ADN program.

NR 2414 Adult and Child Care II 4 Cr Hrs

Four credit hours. A three credit hour theory and one credit hour clinical course designed to assist students in integrating the nursing process into nursing practice. The student utilizes the roles of provider and manager of care and member within the discipline of nursing to provide nursing care based on client responses to actual or potential health problems across the life span. Students are challenged to think critically as they inter-relate the client's physiological systems, growth & development, family, mental and spiritual aspects, lab values, medications and their impact on client teaching, communication, and planning of care. Prerequisite: Successful completion of Adult and Child Care I and all academic requirements with a grade of C or above

NR 2503 Mental Health Nursing 3 Cr Hrs

Three credit hours. Two credit hour theory and one credit hour clinical course. The nursing process serves as a framework for studying behavior along a continuum, ranging from mental health to mental illness. The role of the ADN is enhanced as both a provider and manager of care as the student learns to recognize actual and potential behavior patterns and the human responses in adults, children (pediatrics), and families. Clinical experience will provide an oppor-

tunity to increase skills and knowledge of communication, psychotherapeutic medications, client teaching, and function as a member within the discipline of nursing. The student will apply the nursing process and utilize critical thinking in providing and managing care for clients and families in the community. Pre-requisite: Admission to the ADN program.

NR 2603 Maternity Nursing 3 Cr Hrs

Three credit hours. A two credit hour theory and one credit hour clinical course. Maternity nursing is a course where the focus continues to be on the family-centered approach to nursing care, with a greater depth for understanding the previously acquired knowledge and skills. Those clients exhibiting a human response to an actual or potential health problem will be emphasized by utilizing the nursing process. This opportunity for further integration in a variety of settings will increase the nurse's responsibilities as a provider of care, manager of care, and member within the discipline of nursing, all which assist the client to progress toward wholeness. Curriculum threads of client teaching, critical thinking, communication, and pharmacology are included. Pre-requisite: Admission to the ADN program.

NR 2703 Client Care Nursing 3 Cr Hrs

Three credit hours. This one credit hour theory and two credit hour clinical course emphasizes the nursing roles of provider of care, manager of care, and member within the discipline of nursing. The nursing process serves as a framework for studying management principles utilized in the health care environment. Management principles will be applied in prioritizing and delegating nursing care for a group of patients based on their responses to actual or potential health problems. Curriculum threads of critical thinking, pharmacology, communication, and client teaching are emphasized. Pre-requisite: Admission to the ADN program.

Physical Education

PE 1001 Individual Health and Conditioning 1 Cr Hr

Emphasis on individual appropriate exercise program, proper exercise form, and exposure to various equipment. This course does not fulfill general physical education requirements.

PE 1011 Personal Wellness I-IV 1 Cr Hr

Emphasis on fitness assessment, appropriate exercise program, proper exercise from exposure to various exercise equipment. This class fulfills general education physical education requirements.

PE 1061 Active Living Everyday 1 Cr Hr

A variety of behavior change strategies will be discussed to help fit physical activity into a busy schedule. The class addresses the root causes of physical inactivity and focuses on the skills needed to establish a lifelong habit of physical activity.

PE 1071 Healthy Eating 1 Cr Hr

A variety of behavior change strategies will be discussed to help choose a balanced diet. Addresses the root causes of poor eating habits and focuses on the skills needed to establish a lifelong habit of eating better.

PE 1081 Zumba 1 Cr Hr

Zumba is a fitness program inspired by Latin dance. Zumba combines Latin rhythms with cardiovascular exercise to create an aerobic routine that is fun and easy to follow.

PE 1112 Outdoor Challenge Ropes Course 1 Cr Hr

The purpose of this class is to offer students the opportunity to participate in a series of activities involving mental and physical challenges and emotional risk-taking in an open, caring and safe environment.

PE 1141 Beginning Tech. Rock Climbing 1 Cr Hr

This one credit hour course introduces students to the skills and safety systems associated with beginning rock climbing (top rope climbing, rappelling, bouldering) and the management of rock climbing sites in outdoor education and recreation programs.

PE 1181 Yoga Pretzels 1 Cr Hr

This is a user-friendly fitness style with Yoga activities for children and adults. The focus of the class is to breathe, stretch and have fun.

PE 1191 Yoga Strength 1 Cr Hr

This is a combination of strength-training and Yoga suitable for the general and athletic population.

PE 1201 Yoga HV 1 Cr Hr

This is a user-friendly fitness style of yoga suitable for the general and athletic population. This class will demonstrate new ways to move, breathe, stretch, and feel. Traditional yoga postures will be linked with flowing fitness moves. Students will breathe better, move easier, and be more comfortable.

PE 1211 Weight Training I 1 Cr Hr

This class is a graduated program of weight lifting designed to improve flex-

ibility and muscle tone through the use of weight training with universal machines. This course is designed for the beginning weight lifter.

PE 1220 Circuit Training 1 Cr Hr

This course is designed to improve cardiovascular endurance, muscle tone (including abdominal strength), and improve flexibility. Students will learn to utilize the cardiovascular and nautilus equipment in a safe manner.

PE 1221 Weight Training II 1 Cr Hr

This course is a graduated program of weight lifting designed to improve flexibility, muscular strength and muscular endurance through the use of weight training with universal machines. This course is designed for the intermediate weight lifter.

PE 1231 Weight Training III 1 Cr Hr

This course is a graduated program of weight lifting designed to improve muscle strength and power.

PE 1241 Weight Training IV 1 Cr Hr

This one credit hour course is a graduated program of weight lifting designed to improve flexibility, muscular strength, and power through free weight training, power lifting and plyometrics. This course is designed for advanced weight lifters.

PE 1251 Swimming I 1 Cr Hr

This course is designed for the non-swimmer or one with limited swimming skills. Basic strokes are taught along with elementary forms of rescues and personal safety.

PE 1261 Swimming II 1 Cr Hr

The purpose of this course is to improve basic swimming strokes and learn some advanced strokes. In addition, learning Community Water Safety will be a significant part of the class.

PE 1271 PE Boot Camp 1 Cr Hr

This course is designed to improve cardiovascular endurance, muscle tone (including abdominal strength), and improve flexibility. Students will learn benefits of resistance training, cardiovascular exercise, and a variety of fitness exercises and concepts including swimming, Pilates, yoga step aerobics, core, plyometrics, and strengths training.

PE 1281 Tai Chi 1 Cr Hr

One credit hour and two hours of lab per week. Tai Chi consists of a series of slow, continuous movements designed to relax and develop the whole body. Increased balance, body awareness, muscle tone, flexibility, digestion and reduced stress are all part of Tai Chi. One of its great attractions is that, no matter what your age, you can practice its full range of movements.

PE 1291 Intermediate Tai Chi 1 Cr Hr

Tai Chi consists of a series of slow, continuous movements designed to relax and develop the whole body. Increased balance, body awareness, muscle tone, flexibility, digestion and reduced stress are all part of Tai Chi. One of its great attractions is that no matter what your age, you can practice its full range of movements.

PE 1301 Slimnastics 1 Cr Hr

This one credit hour course is designed to acquaint students with the values of physical fitness, figure improvement, dieting & maintaining "ideal weight".

PE 1311 Aquarobics I-IV 1 Cr Hr

This course is a variety of basic aerobic exercises and wall toning in the water to improve muscle strength, muscle endurance, flexibility, cardiovascular endurance and body composition. This course is designed as an introduction to Aquarobics.

PE 1351 Aquarobics HV 1 Cr Hr

This course is a variety of basic aerobic exercises and wall toning in the water to improve muscle strength, muscle endurance, flexibility, cardiovascular endurance and body composition. This is an arranged course designed for senior citizens.

PE 1352 Scuba Diving 2 Cr Hrs

20 hours of classroom instruction and 20 hours of pool instruction. This class includes scuba theory, design, physics, physiology and safety.

PE 1362 Advanced Open Water Rescue 2 Cr Hrs

This course includes 20 hours of classroom instruction and 20 hours of pool instruction. The class includes development of CPR, first aid, rescue, and search and recovery.

PE 1371 Beginning Pilates 1 Cr Hr

This is a user-friendly fitness style of Pilates suitable for the general athletic population. The emphasis on Pilates focuses on developing the deep stabilizing muscles of the torso and strengthening core abdominal and back muscles. The non-impact resistance eliminates stress on joints, realigns muscle imbalances and focuses on maintaining neutral pelvic and spinal alignment.

PE 1381 Jogging 1 Cr Hr

This course is for the individual who has an interest in walking and/or jogging for cardiovascular fitness. Students will develop and execute a personal walking or running program. Progress will be monitored throughout the semester. Students will learn the benefits of walking or running as a stress reduction activity.

PE 1391 Yogalates 1 Cr Hr

This is a user-friendly fitness style of yoga and pilates suitable for the general and athletic population. The emphasis on pilates focuses on developing the deep stabilizing muscles of the torso and strengthening core abdominal and back muscles. The focus of yoga is to breathe, stretch and feel. The non-impact resistance eliminates stress on joints, realigns muscle imbalances and focuses on maintaining neutral pelvic and spinal alignment.

PE 1401 Core Strength Aerobics 1 Cr Hr

This aerobics course is designed to improve coordination, cardiovascular endurance, muscle tone (including abdominal strength), and improve flexibility. Students will learn to utilize stability balls as well as the equipment.

PE 1411 Self Defense I 1 Cr Hr

This course teaches basic self-defense techniques of twisting, throwing, striking and counter-holding effective against grabs, pick pocketing, assaults with weapons and other threatening attacks.

PE 1421 Self Defense II 1 Cr Hr

In this course, students will learn the basics of ground fighting/grappling, the most important, yet most neglected aspect of real fighting. Most real fights end on the ground.

PE 1441 Intermediate Self Defense 1 Cr Hr

This is a course teaching the basics of TAE KWON DO "The Art of Kicking and Punching". TAE KWON DO is a method of self-defense without weapons. This course will teach the practitioner kicks, punches and forms.

PE 1451 Country & Western Dance HV 1 Cr Hr

A course designed to teach beginner students the basic skills of the most widely used country western dance steps.

PE 1491 Ballroom Dance 1 Cr Hr

This class includes basic steps in current ballroom dances and knowledge of ballroom etiquette.

PE 1501 Fly Fishing 1 Cr Hr

One credit hour course introduces students to actual fishing experiences. It provides both a challenge and opportunity for the student to experience the recreational sport of fly fishing. Instruction is provided in gear selection, casting, fly selection, etc. The fisherman is challenged to develop a plan to catch fish in an effective manner.

PE 1503 Concepts of Exercise Science 3 Cr Hr

This course is designed to explore the principles and practices which will provide the foundation for the health and fitness discipline.

PE 1511 Camp Skills 1 Cr Hr

The course introduces students to actual field experiences. It provides both a challenge and opportunity for the student to live comfortably in a wilderness environment. Instruction is provided in trip planning, gear selection, outdoor-living techniques, cooking, etc. The voyager is challenged to solve diverse problems with a limited number of resources.

PE 1521 Hiking and Backpacking 1 Cr Hr

This course introduces students to actual field experiences. It provides both a challenge and opportunity for the student to live comfortably in a wilderness environment. Instruction is provided in trip planning, gear selection (packs, boots, etc.), technique in basic hiking and some minor rock climbing, general rules for environmental friendliness, outdoor-living techniques, etc. The student is challenged to assess, analyze and solve a variety of situations with limited resources. The student must also be able to hike at altitude with a pack for up to 10 miles per day.

PE 1531 Canoeing 1 Cr Hr

This course will cover the techniques and principles of canoeing during a 10-day trip on the Current River in Missouri. Canoe safety, strokes, white-water canoeing and canoe camping will be included.

PE 1541 Alpine Skiing 1 Cr Hr

This course introduces students to the skills of Alpine Skiing.

PE 1551 Cheerleading HV 1 Cr Hr

These four courses are designed to impact knowledge and practical experience of progressive sophistication and difficulty of cheerleading skills, coordination, crowd motivation, gymnastic skills and practical experience in field-expedient physical and mental conditioning. Each course emphasizes techniques of leadership, teamwork, physical coordination, improvement of muscle strength, flexibility, cardiovascular endurance, muscle endurance and safety.

PE 1561 Dance Team HV 1 Cr Hr

These courses are designed to impart knowledge and practical experience in progressive sophistication and difficulty of dance skills, coordination, crowd motivation, gymnastic skills, and practical experience in field-expedient physical and mental conditioning. Each course emphasizes techniques of leadership, teamwork, physical coordination, improvement of muscle strength, flexibility, cardiovascular endurance, muscle endurance and safety.

PE 1601 Racquetball HI 1 Cr Hr

This course will consist of instruction and practice in the fundamental skills, rules and game strategy of racquetball.

PE 1611 Racket Sports/Badminton/Tennis 1 Cr Hr

This course will consist of the skills, techniques, rules, etiquette and strategies involved in the games of the badminton and tennis.

PE 1651 Weight Training and Jogging 1 Cr Hr

A graduated program of weight lifting and jogging designed to improve flexibility, muscle tone and cardiovascular efficiency.

PE 1661 Golf and Bowling 1 Cr Hr

This class emphasizes the fundamentals of bowling and golf, with attention given to skills, rules, history, strategy and etiquette of the games.

PE 1671 Skeet and Trap Shooting 1 Cr Hr

This class is designed to introduce students to trap shooting, gun and ammunition selection, and discussion of gun safety and trap shooting etiquette.

PE 1731 Archery 1 Cr Hr

This class emphasizes techniques, safety, rules, scoring and terminology of target archery, shuffleboard and table tennis.

PE 1751 Aerobic Dance HV 1 Cr Hr

A class in which simple dance steps, exercise and jogging to music are incorporated for non-dancing students. Each student should participate in the experience and should progress at his/her own rate through the walking, jogging, and running levels of performance.

PE 1761 Lifestyle Management 1 Cr Hr

Lifestyle Management is an introductory course to physical fitness and wellness. The focus is on altering a person's present lifestyle to include exercise. Students will learn the basic concepts of an exercise program, develop a program and participate in the program (independently). Self-motivation will play an important role in completing the individual exercise program. Taught via EduKan.

PE 2101 Advanced Tai Chi 1 Cr Hr

Two hours of lab. Tai Chi consists of a series of slow, continuous movements designed to relax and develop the whole body. Increased balance, body awareness, muscle tone, flexibility, digestion and reduced stress are all part of Tai Chi. One of its great attractions is that no matter what your age, you can practice its full range of movements.

PE 2112 Community 1st Aid & Safety 2 Cr Hrs

This course is designed to prepare students to respond to emergency situations with the confidence to perform the necessary.

PE 2133 Advanced 1st Aid & Emergency Care 3 Cr Hrs

This course will meet all requirements set forth by the American Red Cross for completion of training of Advanced First Aid. Cardiopulmonary Resuscitation class required.

PE 2213 Personal & Community Health 3 Cr Hrs

This course involves a study of basic health problems, hazards and changes. It is geared strictly for the college student and the changing outlooks of today.

PE 2222 Healthy Lifestyles 2 Cr Hrs

This course will stress the interrelationship of health care, nutrition, stress management and physical fitness and its impact on overall health. Students will self assess their current level in each of these components, recognizing their own capabilities and resources, and setting goals to achieve each component. In addition, a number of topics will be covered to give the student a better understanding of what it takes to have a healthy lifestyle.

PE 2233 Nutrition for Fitness & Sports 3 Cr Hrs

This class emphasizes nutrition for the physically active individual, athletes and/or those working with athletes; examines the scientific basis for nutrition in exercise and sport; and covers the effects of nutritional requirements. Topics covered include physical fitness, weight control, nutrient metabolism during exercise and athletic performance, sound nutritional practices for the athlete, and special nutrient needs of exercise participants.

PE 2312 Theory of Coaching Basketball 2 Cr Hrs

This course is designed to present different ideas on teaching and coaching the game of basketball. This course will also cover fundamentals, as well as philosophies, of offense and defense, and styles of individual and team play.

PE 2322 Theory of Coaching Baseball 2 Cr Hrs

This course is taught as a practical approach at helping the student understand and implement coaching baseball in a way that can help both the student and the players under him or her.

PE 2332 Rules & Officiating II 2 Cr Hrs

This course teaches rules and techniques involved in officiating the sports of volleyball and basketball OR football and basketball.

PE 2413 Intro to Health, PE, and Rec 3 Cr Hrs

This class is an introductory course designed for men and women entering the field of Physical Education and related areas.

PE 2612 Sports Safety Training 2 Cr Hrs

This two credit hour course provides course participants with the knowledge and skills necessary to help provide a safe environment for athletes while they are participating in sports, and in an emergency, to help sustain life and minimize the consequences of injury or sudden illness until medical help arrives.

PE 2613 Care & Prevention of Athletic Injury 3 Cr Hrs

This course discusses the principles, practices and techniques involved in prevention and care of athletic injuries.

PE 2621 Sports Medicine Practicum I 1 Cr Hr

This course is the first of two required courses in the athletic training curriculum. Increasing knowledge and practical applications required of athletic trainers is a primary purpose in each practicum. Basic skills from previous practicum will be repeated in the day-to-day operation of the training room. The content of this course is the concentration of basic first aid skills, preventative measures and the basic use of modalities in the training room.

PE 2631 Sports Medicine Practicum II 1 Cr Hr

This is the second of two required courses in the athletic training curriculum. Increasing knowledge and practical applications required of athletic trainers is a primary purpose in each practicum. Basic skills previous practicum will be repeated in the day-to-day operation of the training room. The content of this course is the concentration of basic first aid skills, preventative measures and the basic use of modalities in the training room.

PE 2641 Sports Medicine Practicum III 1 Cr Hr

This is the third level in a sequence of four levels. This course is designed to increase knowledge and practical applications for the student trainer to allow him/her to gain the skills necessary to become a successful trainer candidate. Basic skills from previous practicum will be repeated in the day-to-day operation for the training room.

PE 2651 Sports Medicine Practicum IV 1 Cr Hr

This is the fourth level on a sequence of four levels. This course is designed to increase knowledge and practical applications for the student trainer to allow him/her to gain the skills necessary to become a successful trainer candidate. Basic skills from previous practicum will be repeated in the day-to-day operation for the training room.

PE 2712 Lifeguard Training 2 Cr Hrs

This course is designed to provide individuals with the basic knowledge and skills to recognize an aquatic emergency and take the appropriate action. Participants will also receive knowledge on pool sanitation, record keeping, training of staff, water rescues and special concerns.

PE 2722 Water Safety Instructor 2 Cr Hrs

This course is designed to explore scientific principles, methodologies and research applied to exercise and physical fitness. Emphasis is on physiological responses and adaptation to exercise. The basic elements of exercise physiology, Kinesiology and motor learning will be addressed.

PE 2732 Directed Independent Study in Recreation 2 Cr Hrs

PE B1101 Athletic Conditioning I-V Baseball 1 Cr Hr

This course physically prepares the student/athlete to participate at the varsity level of collegiate athletics (baseball). This preparation will be accomplished through intensive weight training, swimming, conditioning program and polymeric.

PE B1151 Varsity Athletics I-V Baseball 1 Cr Hr

Inter-school competition between varsity level players. This course represents credit given to any student enrolled who intends to participate on the Varsity Baseball Team. This credit is based on the student's active participation in daily practice sessions and any other activities assigned by the head coach. Game participation is not considered evaluation criteria due to the nature of the sport (playing time, red-shirt participation, injuries, etc.) Practice and other activity participation can be held on any day of the week and may have varying starting and ending times.

PE K1101 Athletic Conditioning I-V Basketball 1 Cr Hr

This course physically prepares the student/athlete to participate at the varsity level of collegiate athletics (basketball). This preparation will be accom-

plished through intensive weight training, swimming, conditioning program and polymeric.

PE K1151 Varsity Athletic I-V Basketball 1 Cr Hr

Inter-school competition between varsity level players. This course represents credit given to any student enrolled who intends to participate on Varsity Basketball Team. This credit is based on the student's active participation in daily practice sessions and any other activities assigned by the head coach. Game participation is not considered evaluation criteria due to the nature of the sport (playing time, red-shirt participation, injuries, etc.) Practice and other activity participation can be held on any day of the week and may have varying starting and ending times.

PE S1101 Athletic Conditioning I-V Softball 1 Cr Hr

This course physically prepares the student/athlete to participate at the varsity level of collegiate athletics (softball). This preparation will be accomplished through intensive weight training, swimming, conditioning program and polymeric.

PE S1151 Varsity Athletics I-V Softball 1 Cr Hr

Inter-school competition between varsity level players. This course represents credit given to any student enrolled who intends to participate on Varsity Softball Team. This credit is based on the student's active participation in daily practice sessions and any other activities assigned by the head coach. Game participation is not considered evaluation criteria due to the nature of the sport (playing time, red-shirt participation, injuries, etc.) Practice and other activity participation can be held on any day of the week and may have varying starting and ending times.

PE T1101 Athletic Conditioning I-V Tennis 1 Cr Hr

This course physically prepares the student/athlete to participate at the varsity level of collegiate athletics (tennis). This preparation will be accomplished through intensive weight training, swimming, conditioning program and polymeric.

PE T1151 Varsity Athletic I-V Tennis 1 Cr Hr

Inter-school competition between varsity level players. This course represents credit given to any student enrolled who intends to participate on Varsity Tennis Team. This credit is based on the student's active participation in daily practice sessions and any other activities assigned by the head coach. Game participation is not considered evaluation criteria due to the nature of the sport (playing time, red-shirt participation, injuries, etc.) Practice and other activity participation can be held on any day of the week and may have varying starting and ending times.

PE V1101 Athletic Conditioning I-V Volleyball 1 Cr Hr

This course physically prepares the student/athlete to participate at the varsity level of collegiate athletics (volleyball). This preparation will be accomplished through intensive weight training, swimming, conditioning program and polymeric.

PE V1151 Varsity Athletics I-V Volleyball 1 Cr Hr

Inter-school competition between varsity level players. This course represents credit given to any student enrolled who intends to participate on Varsity Volleyball Team. This credit is based on the student's active participation in daily practice sessions and any other activities assigned by the head coach. Game participation is not considered evaluation criteria due to the nature of the sport (playing time, red-shirt participation, injuries, etc.) Practice and other activity participation can be held on any day of the week and may have varying starting and ending times.

Philosophy

PH 1303 Intro to the Old Testament 3 Cr Hrs

Introduction to the Old Testament will enable students to become familiar with the historical, literary, and theological backgrounds of the Old Testament. The course will be an objective study, utilizing the best in biblical and archaeological scholarship.

PH 1313 Intro to the New Testament 3 Cr Hrs

This course will provide students with an overview of the New Testament as a literary text, focusing attention upon its oral, rhetorical, contextual and documentary natures. As the semester unfolds participants will become acquainted with the written traditions of those who belonged to a community of faith, whose writings and stories attempted to proclaim a message of hope to themselves and the world.

PH 1323 Survey of World Religions 3 Cr Hrs

Survey of World Religions will provide students with an overview of the history, beliefs, practices, and evolution of Hinduism, Buddhism, Judaism, Christianity, and Islam, as well as various indigenous religions and modern religious movements. The intent of the class is not to engage in a judgmental approach,

but to foster religious pluralism and interfaith dialogue.

PH 2103 Introduction to Ethics 3 Cr Hrs

This course will provide an opportunity to encounter the ethical theories of some of the great thinkers of the Western world. These theories will provide a basis for study of contemporary ethical issues.

PH 2203 Introduction to Philosophy 3 Cr Hrs

This course will acquaint students with some of the great Western philosophers and their thoughts on reality, knowledge, religion, identity, freedom ethics, the state and beauty. The course will also provide students an opportunity to encounter Eastern philosophy in matters of religion and self-identity.

Physical Science

PS 1014 Directed Independent Studies in Physical Science 4 Cr Hrs

This course will provide an opportunity to encounter the ethical theories of some of the great thinkers of the Western world. These theories will provide a basis for study of contemporary ethical issues.

PS 1103 Environmental Perceptions 3 Cr Hrs

This course is an interdisciplinary exploration of the environment and the ways individuals perceive it, utilizing actual outdoor experiences, as well as readings. Personal growth, understanding of the natural environment and awareness of varying land uses will be emphasized.

PS 1114 Physical Science 4 Cr Hrs

A general survey course and lab with topics in physics, astronomy, and chemistry, with emphasis on basic universal laws. Included are topics chosen in measurement, motion, gravitation, energy, electricity and magnetism, atomic structure, chemical change, nuclear change, light and waves, solar system and stars. This course is intended for the non-physical science major.

PS 1115 Physical Science 5 Cr Hrs

Physical Science is an introductory survey course for those students who are not science majors and whose backgrounds are not strong in the physical sciences. Studies include most of the areas of science that are not directly related to living organisms. Some knowledge of mathematics related to each area will be explained as the area is introduced. Much emphasis is placed on the principles and processes of the physical to the various disciplines and everyday life.

PS 1313 Introduction to Astronomy 3 Cr Hrs

A general survey course in astronomy intended for the student with little or no background in the physical sciences. The course will be composed of a study of the solar system, stellar astronomy, galaxies and cosmology. The course will include the motions of the earth and the measurement of time, as well as the planets and other bodies of the solar system. Also covered is stellar characteristic and evolution. Telescopes will be introduced and some observations taken.

PS 1775 Intro to Geology / with Lab 5 Cr Hrs

This is a one semester survey course that will introduce students to the study of the earth, its processes and materials. It is designed to be for non-science majors, as well as students that need an introductory course before starting a program of study requiring several semesters of science.

PS 2205 General Physics I 5 Cr Hrs

This course covers the basic principles of mechanics, heat, and thermodynamics, wave motion and sound from a non-calculus point of view.

PS 2215 General Physics II 5 Cr Hrs

Three hours lecture and two hours laboratory each week. The course covers the basic principles of light, electricity, magnetism and modern physics from a non-calculus point of view.

PS 2505 Engineering Physics I 5 Cr Hrs

Three hours of lecture and four hours of laboratory each week. This course covers the basic principles of mechanics, heat and thermodynamics, wave motion and sound. Calculus is used as a tool in this course for discovering the laws of physics.

PS 2515 Engineering Physics II 5 Cr Hrs

This course covers the basic principles of electricity and magnetism, and light using calculus as a tool. A laboratory is a part of the course.

Reading

RD 0103 Reading Skills I 3 Cr Hrs

This course provides systematic instruction in the development of crucial reading skills necessary for college success. Emphasis is on beginning vocabulary development and reading comprehension improvement. (THIS COURSE WILL NOT COUNT FOR GRADUATION.)

RD 0203 Reading Skills II 3 Cr Hrs

This course provides systematic instruction in the development of crucial reading skills necessary for college success. Emphasis is on advanced vocabulary development and reading comprehension improvement. (THIS COURSE WILL NOT COUNT FOR GRADUATION.)

RD 0301 Study Skills 1 Cr Hr

This course is designed to orient the student to college life and provide instruction for improvement in vocabulary, reading, study and test-taking skills that are essential for academic success.

Respiratory Therapy

RT 1102 Intro to Clinical Practicum 2 Cr Hrs

This course is designed to provide the student with practical application of respiratory therapy procedures in the lab and clinical setting. The student will learn to perform general patient assessment, administer oxygen and humidity therapy, IPPB therapy, delivery of aerosol medication CPT, incentive spirometry, MDI and safe handling of compressed gas cylinders. The student will also assemble, check for proper function and identify malfunctioning equipment. Pre-requisite: Must be accepted to the Respiratory Therapy program.

RT 1104 Respiratory Physiology 4 Cr Hrs

Comprehensive study of respiratory anatomy and physiology. To understand the structures of cardiopulmonary and related to the clinical aspects of respiratory care. The circulatory system in conjunction with the heart and lungs on how they function and understand their function in oxygen and carbon dioxide transport. Content will include ABG, pulmonary functions in depth and renal physiology with acid base balance.

RT 1113 Respiratory Diseases 3 Cr Hrs

This three hour course is designed to provide the student with the basic knowledge in the etiology, diagnosis, pathophysiology and treatment of pulmonary related diseases and disorders.

RT 1124 RT Procedures I 4 Cr Hrs

Four credit hours. This is a three hour theory course presented in the classroom and online with a one hour lab. The online portion of the course requires the student to have the following software on their personal computers or access to: Microsoft Word; Microsoft Excel; and Microsoft PowerPoint. Each student will need access to the Internet. The course is designed to acquaint the student with fundamental patient assessment, theory of equipment operation, indications and hazards of clinical application. Content includes therapeutic gas administration, humidity and aerosol therapy, hyperinflation therapy, and chest physiotherapy. Laboratory sections are used to familiarize the student with equipment operation, safety, and how to assemble and disassemble various pieces of equipment. Pre-requisite: Must be accepted to the Respiratory Therapy program.

RT 1137 RT Procedures II 7 Cr Hrs

Seven credit hours. This is a four-hour theory, one-hour laboratory, and two-hour clinical course. Through classroom discussion and laboratory/clinical experiences, the student will develop an appropriate knowledge base of respiratory care protocols utilized when providing care to critically ill patients. Respiratory care is delivered through the application of the respiratory care process. Course content includes arterial blood gases, airway management, suctioning, intubation, extubation, and IPPB therapy. This course has a theory, laboratory and clinical component. The clinical component and laboratory is graded pass/fail and the theory with a letter grade. If either component is failed, the concurrent component is also failed. Prerequisite: Admission to the Respiratory Therapy Program and successful completion of Respiratory Therapy Procedures I.

RT 1201 Pediatric Respiratory Care 1 Cr Hr

This is a one credit hour, which is presented online and is designed to acquaint the student with the unique pathophysiology of the more common pediatric pulmonary disorders and the application of respiratory care modalities used in the diagnosis and treatment of patients in this age group. Course content includes patient assessment, the etiology, clinical signs and symptoms, and methods of diagnosing of the most common diseases affecting the pediatric patient. Treatment approaches will include oxygen therapy, medication delivery and mechanical ventilatory support. Pre-requisite: Must be accepted to the Respiratory Therapy program.

RT 1502 Pharmacology I 2 Cr Hrs

This course is designed to cover general principles of pharmacology, basic terminology, drug reaction, dosage, adverse reactions and drug toxicity. Sympathomimetics, parasympathomimetics, mucokinetic substances and anesthetic preparations are included.

RT 2014 RT Clinical Practicum II 4 Cr Hrs

This is a two-hour theory and two-hour clinical course. This course is a con-

tinuation of Critical Care and General Clinical Practicum course. The student acquires more critical care experience along with electrocardiograms, pulmonary function testing, stress testing, chest x-rays, physician rounds, blood analysis and routine respiratory care procedures at each clinical site used. The classroom portion of this course introduces the student to advanced practices that include: fiber optic bronchoscopy, thoracentesis, chest tube management, and advanced ventilation techniques.

RT 2034 RT Procedures III 4 Cr Hrs

This is a three hour lecture course presented in the classroom and online with a one hour laboratory section. This course is designed to provide the student with the knowledge base required to initiate and manage mechanical ventilators. Course content include indications for mechanical ventilation, classification of mechanical ventilators, modes of ventilation, patient weaning, and discontinued ventilatory support. Prerequisite: Admission to the RT program and successful completion of RT procedures I and II.

RT 2251 Clinical Simulation and Review 1 Cr Hr

This course emphasizes the critical thinking skills required for an advanced respiratory care practitioner. The course content includes extensive use of computer-based respiratory care clinical scenarios, which require the student to assemble patient data, analyze the data, and make therapeutic and diagnostic recommendations.

RT 2314 RT Clinical Practicum III 4 Cr Hrs

Four credit hours. This two-hour lecture and two-hour clinical course emphasizes the respiratory therapist role in management of neonatal patients with respiratory diseases. The course also includes the study of hemodynamics to include placement of catheters to monitor CVP, PAP, and PCWP. Course content includes fetal and neonatal assessment, application of respiratory care protocols, airway management, mechanical ventilator application and management, and study of the more common diseases affecting this age group. Prerequisite: Admission to the Associate Degree Respiratory Therapy Program.

RT 2501 Pharmacology II 1 Cr Hr

This course uses cognitive and psychomotor skills with a systematic approach of thinking for treating adults and pediatric patients experiencing cardiopulmonary emergency or sudden death. Medications pertaining to the cardiovascular system in situations of arrest, acute myocardial infarction and arrhythmias are discussed. Identification of drugs needed, the drug reaction, dosage, adverse reactions and drug toxicity in specific clinical situations are presented. Basic EKG interpretation of arrhythmias and heart blocks are included in the course.

RT 2522 Electrocardiography 2 Cr Hrs

This is an introductory course to introduce the student to the study of electrocardiography. The course is designed to acquaint the student with the fundamental process of interpretation of cardiac arrhythmias. Course content includes cardiac anatomy, electrophysiology, electrical conduction system, electrode placement and identification of common dysrhythmias.

RT 2533 Clinical Simulation and Review 3 Cr Hrs

This course emphasizes the critical thinking skills required for an advanced respiratory care practitioner. The course content includes extensive use of computer-based respiratory care clinical scenarios, which require the student to assemble patient data, analyze the data, and make therapeutic and diagnostic recommendations.

RT 2601 RT Seminar III 1 Cr Hr

This course includes topics in management of respiratory care departments and methods of pulmonary rehabilitation. Basic leadership qualities and supervisory techniques needed in management will be discussed. Pulmonary rehabilitation objectives, methods and expected results will be presented and discussed.

RT 2605 RT Critical Care/General Clinical Practicum 5 Cr Hrs

Course content is designed to acquaint the student with respiratory care procedures utilized in the management/treatment of critically ill adult, pediatric, and neonatal patients. Each student will acquire practical experience in critical care procedures at the affiliated hospitals. The student will be exposed to diagnostic procedures used to identify pulmonary disorders. The student will also gain experience in bedside patient clinical status and make recommendations in therapy. Also, it is a continuation of practical application of theories previously presented in oxygen therapy, aerosol and humidity therapy, hyperinflation therapy, infection control and emergency procedures. Pre-requisites: Must be accepted to the Respiratory Therapy program.

Speech, Communications, Broadcasting

SP 1103 Interpersonal Communications 3 Cr Hrs

A special oral and non-verbal communications course which places special emphasis on communication tactics between and among individuals, small

groups and speaker audience relationships. Interpersonal Communications probes the various genres of communication interactions.

SP 1203 Public Speaking 3 Cr Hrs

A basic oral communications course with emphasis on discovering the basics of human interaction in communication. The speaker-audience relationship is practiced in theory and exercises. However, a small emphasis is placed on the dynamics of Interpersonal Communications. A selected variety of speeches are practiced by the students.

SP 1503 Introduction to Broadcasting 3 Cr Hrs

(On demand.) This is a survey course of the mass media in our society, with practice in understanding its historical background and governmental regulations.

Social Science

SS 1201 Citz, Rights, & Responsibility 1 Cr Hr

A course designed to be of assistance to the individual desiring to become more familiar with national, state and local codes of law, involving statutory as well as informal codes of conduct.

SS 1211 Practical Politics in Action 1 Cr Hr

A course designed to initiate the student into some practical application of social sciences in the nature of serving on the Student Government Association for one year. The student will be in a position that forces them to resolve conflicts that come before the association. In short, the student will learn what the beginnings of governmental processes are. The students are required to attend all SGA meetings and participate in such activities that SGA sponsors. The SGA helps the college administration by handling student input and presenting it to the proper people, approving campus club activities and administering governmental related activities involving students of the college.

SS 1213 Intro to Leadership 3 Cr Hrs

This lab/lecture course is designed to immerse the student in the understanding and practical application of leadership principles. Leadership topics including goal vision, personal leadership philosophy, decision-making, team building, delegating, initiating change, managing conflict, ethics, and leadership through service will be discussed and experienced. Instruction will center around active participation, written assignments, quizzes and a leadership project.

SS 1252 Interdisciplinary Approach to Culture 2 Cr Hrs

This survey course provides the student with an opportunity to explore the varied areas of educational endeavor. The subjects covered include humanities, social and political science, physical science, biological science, behavioral science and business. The effort to integrate varied subjects and disciplines into a cohesive framework should enhance the student's understanding of the world and of themselves. The course also serves to promote education as an on-going, life-long process. The student may take this course four times and apply a total of eight credit hours toward graduation.

SS 1403 American Natl Government 3 Cr Hrs

This lecture course will cover the origin and adoption of the American Constitution, structure of the national government, the process of popular control and the basic principles of the American Constitutional System.

SS 1413 State and Local Government 3 Cr Hrs

This course shall analyze the workings of state and local governments and also attempt to evaluate how effective they are. Suggested modernization of state and local governments will also be studied. The students will also actively inquire into the operations of state and local governments inquire into the operations of state and local governments

SS 1763 Native American Culture 3 Cr Hrs

This course will examine and explore major elements of the complex relationship between history, culture and majority-minority relations with regard to unique circumstances of Native Americans. Special emphasis will be placed on understanding major cultural, political and economic issues in both historical and contemporary terms.

SS 2103 Stats/Social Behavioral Science 3 Cr Hrs

This course will introduce students to many of the important concepts and procedures needed to (1) evaluate such daily inputs as organizational reports, newspapers and magazine articles and radio and television commentaries, (2) improve their ability to make better decisions over a wide range of topics, and (3) improve their ability to measure and cope with changing conditions, both at home and on the job. The emphasis will be on explaining statistical procedures and interpreting the resulting conclusions. The course will be augmented with a computer lab where students will perform statistical analysis using Microsoft Excel.

SS 2203 Social Welfare Institution 3 Cr Hrs

(On demand.) This course is an analysis of social welfare as a social institu-

tion, including the social, cultural, political and economic factors affecting policies and programs.

Surgical Technology

ST 1005 Intro to Surgical Technology 5 Cr Hrs

A three hour theory and two credit hour lab course designed to provide the student with in-depth knowledge concerning the scope and practice of Surgical Technology. Students will be exposed to concepts of hospital structure and management and the physical environment of a surgical suite. Students will learn patient safety procedural issues such as identification, consent, chart review, and needs of the patient. Students will also study skills related to teamwork, professional credentialing and organizations, and legal and ethical issues.

ST 1015 Fundamentals of Surgical Tech 5 Cr Hrs

A three credit hour theory and two credit hour lab course designed to acquaint the student with the skills necessary to function as a beginning surgical technologist. Includes basic concepts necessary to establish, maintain, and coordinate the methods required for good patient care in the operating room. Safe patient care and principles of operating room technique along with safety and hazards in the OR are covered. Students will study skills related to sterile storage and distribution, sterilization and aseptic techniques as part of this course.

ST 1110 Surgical Procedures I 10 Cr Hrs

Ten credit hours. A five credit hour theory and five credit hour clinical course designed to allow the student to begin to apply skills learned in the first semester to real life procedures. With the web-based learning platform and clinical practice the student will learn to select instrumentation and other supplies for specific procedures. The student will apply learning in anatomy and pathophysiology, and techniques from first semester in the practical experience of passing instruments to the surgeon in the clinical setting. The student will apply the basic skills of aseptic technique both in the laboratory setting and the clinical practicum as well as the basic terms and usages of medical terminology. Pre-requisite: Admission to the Surgical Technology program and successful completion of Introduction to Surgical Technology and Fundamentals of Surgical Technology.

ST 1303 Pharmacology for the Surgical Technologist 3 Cr Hrs

A three credit hour online theory course designed to introduce the scientific principles of pharmacology. This course defines the rationale for use of specific drugs, their effects and major side effects on the surgical patient, how they may alter or influence surgical intervention and the role the surgical technologist plays in handling and labeling medications. Pre-requisite: Admission to the Surgical Technology program and successful completion of Introduction to Surgical Technology and Fundamentals of Surgical Technology.

ST 1707 Surgical Procedures II 7 Cr Hrs

A three hour theory and four hour clinical course designed to allow the student to learn to select instrumentation and other supplies for surgical procedures. The student will learn more difficult procedures and continue the learning process from Surgical Procedures I. In the surgical suite of the clinical areas, the student will be able to demonstrate the more advanced skills of the Surgical Technologist. The student will also be encouraged to further develop his/her sterile consciousness in order to work more confidently within the operating room. Job interviews with resumes will also be covered. Pre-requisite: Admission to the Surgical Technology program and satisfactory completion of all previous curriculum requirements.

Truck Driving

TD 1110 Entry Level CDL 10 Cr Hrs

Seven week course that will cover the following areas: Orientation to the truck industry, vehicle equipment control, pre-trip inspection, basic maneuvering and handling, documentation and cargo handling, logbook operations, preventive maintenance, driving and shifting techniques, hazard perception, air brake certification, hazardous material training, and a defensive driving course

Welding Technology

WE 1001 Common Work Assignments 1 Cr Hr

Entry Level occupational orientation for Welders.

WE 1002 Arc Cutting and Gouging 2 Cr Hrs

Removes metal using the air carbon arc cutting process. Carries out shape cutting operations using the manual plasma arc cutting process. Perform minor external repairs to equipment and accessories.

WE 1003 Oxy-Fuel Gas Cutting I 3 Cr Hrs

Set-up and perform manual oxy-fuel gas cutting operations that include straight and shape cutting, beveling, and weld removal (weld washing). Sets up and operates machine oxy-fuel gas cutting equipment (track burner) to per-

form straight cutting and beveling operations. Perform minor external repairs to equipment and accessories.

WE 1004 Drawing/Welding Symbol Interpretation 4 Cr Hrs

Entry Level occupational Blueprint Reading and Weld Symbol Interpretation for Welders wishing to pursue a career in Welding. Prepare parts from simple sketches or drawings and performs weld operations for the completion of detail assignments.

WE 1011 Weld Inspection and Testing 1 Cr Hr

Visually examines all personal welding and cutting assignments for unfavorable weld and cut edge discontinuities before final inspection by a supervisor.

WE 1013 Arc Welding Principles & Practices 3 Cr Hrs

Set-up shielded metal, gas metal, flux cored, and gas tungsten arc welding operations. Perform minor external repairs to equipment and accessories.

WE 1123 Directed Independent Study in Welding Technology 1-3 Cr Hrs

WE 1012 Oxy-Fuel Gas Cutting II/Metallurgy 2 Cr Hrs

Students will possess the prerequisite oxy-fuel gas cutting skills of an entry level welder. Sets up and performs manual oxy-fuel gas cutting operations that include straight and shape cutting, beveling, and weld removal (weld washing) for various product forms including plate and pipe. Sets up and operates machine oxy-fuel gas cutting equipment (track burner) to perform straight cutting and beveling operations. Demonstrates knowledge of preparation and selection of materials, cutting applications, cut quality and cut surface repairs (corrective actions). Perform minor external repairs to cutting equipment and accessories. Recognizes fundamentals related to weld metallurgy.

WE 1014 Layout and Fit-up Practices 4 Cr Hrs

Students will learn to demonstrate a fundamental knowledge of layout and fit-up principles. The will show the ability to operate shop equipment safely and use layout tools for geometric construction. This class will instruct students in advanced measurement practices, design for welding and the use of fixture positioners. Students will work from drawings or sketches to prepare, form or cut multiple parts and assemble simple weldments.

WE 1021 Structural Qualification/Certification 1 Cr Hr

Students will possess a fundamental understanding of code/standard interpretation and certification.

WE 1022 Cutting Skills & Arc Practices 2 Cr Hrs

Students will come to possess the prerequisite oxy-fuel gas cutting skills of an entry level welder. Students will set-up and performs manual oxy-fuel gas cutting operations that include straight and shape cutting, beveling, and weld removal (weld washing) for various product forms including plate and pipe. Set up and operate machine oxy-fuel gas cutting equipment (track burner) to perform straight cutting and beveling operations. Students will demonstrate knowledge of preparation and selection of materials, cutting applications, cut quality and cut surface repairs (corrective actions); perform minor external repairs to cutting equipment and accessories.

WE 1101 Welding Codes & Standards 1 Cr Hr

Students will come to possess a fundamental understanding of code/standard interpretation.

WE 1031 Weld Inspection & Testing II 1 Cr Hr

Students will possess a fundamental understanding of code/standard interpretation and certification. Examine cut and welded surfaces. Understand and identify weld discontinuities.

WE 1113 Arc Welding Plate 3 Cr Hrs

This is a continuation of Layout and Fit-up Practices. Students will learn to demonstrate knowledge of joint design and preparation, selection of materials, arc welding application, weld quality and weld repairs.