

COURSE DESCRIPTIONS

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GENERAL INFORMATION

Developmental Studies Prerequisites. Enrollment in most college-level courses requires completion of developmental studies (DSP) coursework or qualifying placement test scores. Students who have tested into DSP courses should check the DSP placement chart in the Academic Information and Services section of the Catalog to determine eligibility for college-level courses.

TBR Designations. Courses denoted with the ♦ symbol represent transferable general education courses within the Tennessee Board of Regents system. Every TBR institution incorporates a common 41-hour general education core into its degree requirements and accepts all courses designated with the ♦ symbol as meeting these requirements at other TBR institutions. A complete matrix of courses that satisfy general education requirements at all TBR institutions is available on the TBR Web page (www.tbr.edu).

University of Tennessee Designations. Courses denoted with the ★ symbol represent Pellissippi State courses that receive direct course equivalency at the University of Tennessee, Knoxville.

COURSE DESCRIPTIONS

ACCOUNTING

★ACC 2000 Principles of Accounting I 3 Credits

A survey of financial and managerial accounting. Financial accounting topics include structure of financial statements and accounting for merchandising operations, cash, receivables, inventories, plant and equipment, liabilities, and equity. Managerial accounting topics include analysis of financial statements, introduction to managerial accounting, cost behavior and CVP analysis and budgeting. **Corequisite(s):** College-level math

★ACC 2030 Principles of Accounting II 3 Credits

A continuation of the study of financial and managerial accounting theory and practice, including analyzing and recording business transactions, completing the accounting cycle, and analyzing and preparing financial statements. Accounting for liabilities, equity and payroll as well as measuring cash flow, cost accounting systems, special analysis and budgeting are taught in the course. **Prerequisite(s):** ACC 2000

ACC 2215 Intermediate Accounting I 3 Credits

A study of financial accounting theory and practice, including financial statement presentation and the accounting cycle, current asset measurement and valuation, fixed asset acquisition, depreciation, depletion, disposition, and measurement and valuation of intangible assets. **Prerequisite(s):** ACC 2030

ACC 2220 Intermediate Accounting II 3 Credits

A continuation of the study of financial accounting theory and practice, including liabilities and stockholders' equity, cash flow measurement and reporting, issues related to income measurement, and the preparation and analysis of financial statements. **Prerequisite(s):** ACC 2215 or consent of instructor

ACC 2360 Cost Accounting 3 Credits

A study of cost accounting terminology and concepts. Includes job order costing, process costing and standard costing; also includes accounting for overhead and joint processing costs, as well as absorption and variable costing. **Prerequisite(s):** ACC 2030

ACC 2410 Income Taxation 3 Credits

A study of federal income taxation as applied to personal income. Topics include income inclusions and exclusions, adjustments, deductions, taxes, and credits. Practice in income tax

return preparation. **Prerequisite(s):** ACC 2000

ACC 2500 Payroll & Internal Control 3 Credits

This course focuses on Federal laws related to payroll and internal control and their impact on the accounting system and financial reporting requirements. Calculation of employer and employee payroll taxes and the preparation of payroll related to tax forms are also discussed.

Prerequisite(s): ACC 2000

ACC 2530 Accounting Systems 3 Credits

A study of the flow of documents and information from initial transaction to financial statement preparation. Emphasis is on computer software applications using general ledger software. Topics include internal control, general ledger, accounts receivable, accounts payable, payroll and job order costing. **Prerequisite(s):** ACC 2030

ACC 2571 Computer Accounting Internship 3 Credits

This course is a supervised work experience requiring a minimum of 135 hours in the accounting field. Individual conferences are arranged instead of class attendance. **Prerequisite(s):** Completion of 15 hours of ACC courses with minimum 2.5 GPA in ACC courses; seeking an A.A.S. degree as a Computer Accounting major; and a completed internship application submitted to the Coordinator of BCT Internships prior to enrollment in the course and the beginning of the term. Application is available on the Web: www.pstcc.edu/departments/bctpi.

ADVERTISING

★ADV 2500 Advertising & Promotion 3 Credits

A study of advertising principles applied to marketing and organizational situations. Includes study of the communication process, consumer behavior, market segmentation, creative strategy and media.

AMERICAN SIGN LANGUAGE

ASL 1010 Beginning American Sign Language I 3 Credits

An introductory study of the language that deaf adults in America use among themselves. This course includes an introduction to the deaf culture and to the basic structure of its language, as well as the mastery of finger spelling and 400 signs.

ASL 1020 Beginning American Sign Language II 3 Credits

A continuation of the study of the language of the American deaf. This course includes further study of the structure of the language and the mastery of an additional 400 signs. **Prerequisite(s):** ASL 1010

ASL 2010 Intermediate American Sign Language I 3 Credits

A course that provides in-depth experience in conversing in American sign language, as well as the mastery of 100 widely used American sign language idioms. **Prerequisite(s):** ASL 1020

ASL 2020 Intermediate American Sign Language II 3 Credits

A course that involves conversational practice, experience in signing music and the mastery of 100 additional American sign language idioms. **Prerequisite(s):** ASL 2010

ANTHROPOLOGY

★ANT 1100 Physical Anthropology 3 Credits

Focuses on the range of human genetic variation and adaptation that is demonstrated in living populations today, comparisons of biology and behavior between human and non-human primates and an examination of our human prehistory as it is outlined in the fossil record.

★ANT 1200 Prehistoric Archaeology 3 Credits

Introduction to methods, theory, and techniques used to analyze and date archaeological cultures, past life ways, and cultural evolution.

◆★ANT 1300 Cultural Anthropology 3 Credits

An introduction to the field of cultural anthropology focusing on the description and analysis of geographically diverse social groups and their learned traditions. Culture consists of the

abstract values, beliefs and impressions of the world that lie behind behavior and upon which the attitudes and ideals of a society reflect.

★ANT 2100 **Biological Anthropology** **3 Credits**
An introduction to human biological variation as a result of evolutionary processes. Examples based upon contemporary, historic, and prehistoric populations are used to introduce anthropological methods for the analysis of variation using living persons, genetic material, and skeletal remains. **Prerequisite(s):** ANT 1100 or consent of instructor

ART

★ART 1011 **Drawing I** **3 Credits**
Fundamental aspects of drawing, including line, tone, space, form, and composition utilizing a variety of media. Emphasis placed on development of observational skills and perception of reality.

★ART 1031 **Three-Dimensional Media** **3 Credits**
Fundamental aspects of three-dimensional design utilizing projects that deal with real space and a variety of three-dimensional materials.

ART 1110 **2D Design** **3 Credits**
A fundamental exploration of the elements of two-dimensional art (line, shape, texture, value, and color) and their relationship to the principles of design (balance, rhythm, variety, and unity). Stress is placed on visual thinking through the use of problem-solving structures.

ART 1610 **Basic Printmaking** **3 Credits**
An introductory survey of printmaking focusing on the basic fundamentals and techniques in relief printing, monoprints and collographs.

◆★ART 1720 **Western Art I** **3 Credits**
Major movements in Western art, with emphasis on Europe from prehistory through the Middle Ages. Course provides an overview of the predominant artistic/architectural/cultural movements from the Paleolithic to Early Christian/Byzantine period, including Mesopotamia, Egypt, the Aegean, Greece, the Etruscans and Rome.

◆★ART 1730 **Western Art II** **3 Credits**
Major movements in Western art, with emphasis on Europe from the 14th through the 17th century. The course provides an overview of the predominant artists, aesthetic intent, and techniques encountered in the Late Gothic (Proto-Renaissance), Early and High Renaissance, Mannerism, and the Baroque periods.

★ART 2000 **Special Topics in Studio Art** **3 Credits**
A course on a topic of special interest to a member of the studio arts faculty offered on a non-recurring basis. Topics offered will provide special opportunities for students to explore a variety of unique art media not normally available. Course topics will be listed in the semester specific course offerings under Art, and may include among other media, watercolor, metal casting, glass, solar printmaking, and/or similar opportunities. **Prerequisite(s):** Topic dependent; in most cases no prerequisite

★ART 2110 **Intermediate Drawing** **3 Credits**
A continuation of the fundamental concepts of drawing with emphasis on composition, techniques and content. **Prerequisite(s):** ART 1011

ART 2120 **Life Drawing** **3 Credits**
Continued development of drawing and observational skills with a concentration on the structure and dynamics of the human form; perception of the figure in conceptual and expressive contexts. **Prerequisite(s):** ART 2110 or consent of instructor for art majors; no prerequisite for non-art majors

★ART 2130 **Painting** **3 Credits**
Capacities of oil and acrylic painting on canvas. **Prerequisite(s):** ART 1011 and 2950 for art majors; no prerequisite for non-art majors

★ART 2140 **Painting II** **3 Credits**

Continued exploration of the capacities of oil and acrylic painting on canvas. May be repeated. Maximum of 6 hours. **Prerequisite(s):** ART 2130 for art majors; no prerequisite for non-art majors

★ART 2210 **Ceramics I** **3 Credits**
Hand-building techniques, including forming methods, glazing, clay preparation, and firing small and large-scale pieces.

★ART 2220 **Ceramics II** **3 Credits**
Thrown ceramic forms, including functional pottery techniques, glazing and firing methods.

★ART 2410 **Sculpture** **3 Credits**
Problems that explore basic materials and techniques, including clay modeling, plaster construction and mold making. **Prerequisite(s):** ART 1031 for art majors; no prerequisite for non-art majors

★ART 2420 **Life Sculpture** **3 Credits**
Modeling techniques in clay and wax working from the figure. Possibilities of expression with the human figure as subject. Modeling process encompasses both observational and material handling techniques. **Prerequisite(s):** ART 1031 for art majors; no prerequisite for non-art majors

★ART 2620 **Intaglio Printmaking** **3 Credits**
Metal plate intaglio printing in traditional and contemporary techniques of etching; soft-ground, drypoint, mezzotint, aquatint, open bite process and collograph plate construction. May be repeated. Maximum 6 hours. **Prerequisite(s):** ART 1011 for art majors; no prerequisite for non-art majors

★ART 2950 **Intermediate Design & Color** **3 Credits**
Exploration of the basic principles and concepts of composition in correlation with the elements of design. Emphasis will be placed on color theory, techniques and individual approaches to problem solving.

BANKING

BKG 2005 **Accounting for Bankers** **3 Credits**
A study of financial accounting theory and practice. Emphasis is placed on analyzing preparing and reporting financial information.

BKG 2020 **Principles of Banking** **2 Credits**
A study of the language and documents of banking, check processing, teller functions, deposit functions, trust services, bank loans and investments.

BKG 2060 **Marketing for Banking** **2 Credits**
A study of marketing principles and their practical application in the banking industry.

BKG 2100 **Analyzing Financial Statements** **2 Credits**
A study of financial statement analysis. Topics include generation of statement data and limitations of the accounting information provided, business funds flow and analysis tools and techniques.

BKG 2150 **Introduction to Commercial Lending** **2 Credits**
An overview of the commercial lending function. Topics include the commercial loan customer, types of commercial loans, the loan decision process, cost analysis, control and profitability and the regulatory and legal environments.

BKG 2200 **Consumer Lending** **2 Credits**
An overview of the role of consumer credit in overall bank operations. Topics include credit risk evaluation, policy, loan processing, servicing and collecting loans, compliance and portfolio management.

BKG 2240 **Deposit Operation** **2 Credits**
Focuses on how banks operate in the context of the U.S. payments mechanism. The deposit-taking activities of banks, their management of deposited funds, and the competitive and reg-

ulatory environments in which banks operate are the central subjects of the text.

BKG 2250 Money & Banking 3 Credits

A study of money and the world of banking that it creates and through which it flows. Topics include the tools of monetary and fiscal policy, the impact of monetary policy on the banking system, monetary theory and international banking.

BKG 2300 Law & Banking 2 Credits

A study of law and legal issues, with special emphasis on the Uniform Commercial Code. Topics include contracts, real estate and bankruptcy.

BKG 2310 Law & Banking Applications 2 Credits

Introduction to laws pertaining to secured transactions, letters of credit and the bank collection process. Laws covering collateral, perfection and default will also be covered.

BKG 2350 Trust Business 3 Credits

A study of trust management. Topics include the trust department, trust investments, tax administration, and real estate administration.

BKG 2400 Commercial Bank Management 3 Credits

An introduction to daily bank activities, including formulation of objectives and policies, management of assets and liabilities, sources and uses of funds, and the administration of deposits, loans, and other investments.

BKG 2420 Introduction to Mortgage Lending 2 Credits

This course covers construction and permanent financing for residential property; real estate law; documentation; mortgage loan servicing; the secondary mortgage market; the role of government in mortgage lending; and residential real estate as an investment. The discussion of underwriting, processing and servicing will give participants a framework for learning the mortgage lending business and refining their existing knowledge. Additionally, the coverage of laws and regulations affecting mortgage lending provide an understanding of mortgage lending's history and a glimpse into its future.

BKG 2450 Supervision 3 Credits

A study of principles of management, including planning, organizing, staffing, directing and controlling.

BKG 2600 Bank Investments & Funds Management 2 Credits

A study of banking investment and funds management strategies that earn an acceptable return without undue risk.

BKG 2700 Financial Planning 2 Credits

An overview of the financial planning process and its application.

BKG 2850 Economics for Bankers 3 Credits

An introduction to the principles of economics. Special emphasis is placed on their importance to bankers. The course provides the basics of economic theory and examples.

BIOLOGY

BIOL 1000 Special Topics in Biology 4 Credits

Study and discussion of a selected topic in biology. Content will vary, as this course is a means for classes to explore certain biology-related topics in depth. Classes may be taught by visiting professors. May be repeated for credit when a different topic is taught.

Prerequisite(s): Consent of instructor

◆★BIOL 1110 General Biology I 4 Credits

Chemical basis of life; cell structure and function, including energy metabolism; cell division; DNA and gene regulation; Mendelian and molecular genetics; evolution. Course includes 3 hours of lecture and 2 hours of laboratory applications each week.

◆★BIOL 1120 General Biology II 4 Credits

Plant and animal anatomy (tissues, organs and organ systems), physiology, reproduction, and growth; microorganisms; fungi; ecology. Course includes three hours of lecture and two hours of laboratory applications each week.

◆BIOL 1310 **Concepts of Biology** **3 Credits**

A survey of biology concepts and content as applicable to the Tennessee K-8 curriculum standards and the National Science Foundation Standards. Instructional topics include scientific method, cell structure and function, food production and energy for life, heredity and reproduction, diversity and adaptation among living things, interactions between living things and their environment, and biological change. Students will design, develop, and implement hands-on science activities for K-8 students; create and develop a course portfolio; and collect and evaluate biologically related resources. Course includes two hours of lecture and three hours of laboratory applications each week.

BIOL 2000 **Independent Scientific Investigation** **2 Credits**

Independent laboratory, library or field research in biology under the supervision of a consenting faculty member. Designed to develop an interest in biology and the application of techniques of scientific research. Students may accumulate up to 6 credit hours; a minimum of four hours of research is required each week. Intended as elective credit and may not be applied toward general education requirements.

◆★BIOL 2010 **Human Anatomy & Physiology I** **4 Credits**

A study of basic biological chemistry, cellular structure and function (including cellular respiration, protein synthesis, and cell division); histology; and integumentary, skeletal, and nervous systems. Course includes three hours of lecture and laboratory applications each week.

◆★BIOL 2020 **Human Anatomy & Physiology II** **4 Credits**

A study of the anatomy and physiology of blood and the circulatory, immune, respiratory, digestive, excretory, endocrine, and reproductive systems. Course includes three hours of lecture and laboratory applications each week. **Prerequisite(s):** BIOL 2010

BIOL 2021 **Careers in Biology** **2 Credits**

This course is an exploration of prospective careers for biology-related majors. Students will be required to shadow professionals in several different career fields and give in-class presentations of their experiences. Students will also practice interviewing, writing essays for application to graduate and professional schools, and writing resumes and cover letters. **Prerequisite(s):** ENGL 1010 and 1020 **Corequisite(s):** High school advanced placement biology or BIOL 1110 or 1120 or 2010 or 2020; exceptional high school students may be admitted upon their teachers' recommendations

★BIOL 2040 **General Ecology** **4 Credits**

Relationships between organisms and their environment, including human environmental problems. Four hours of lecture, with announced field trips.

BIOL 2050 **Human Physiology** **4 Credits**

A study of the homeostatic mechanisms in the human body as they pertain to normal physiology and mechanisms of disease. The laboratory provides students an opportunity to learn by measuring many of the vital physiological processes. Course includes three hours of lecture and laboratory applications each week.

★BIOL 2110 **Cell Biology** **4 Credits**

This course is a study of basic biomolecules, cell structure and function, cellular respiration and photosynthesis, molecular genetics, cellular communication, cancer, and evolution of the cell. The course includes 3 hours of lecture and 3 hours of laboratory per week. **Prerequisite(s):** BIOL 1110 and 1120 and CHEM 1110 and 1120; or two years of high school biology and ACT natural science score of 26 or higher; or consent of instructor

★BIOL 2120 **General Genetics** **4 Credits**

Mendelian genetics, chromosomal inheritance, modified Mendelian ratios, chromosome mapping, linkage, gene and chromosomal mutations, recombination, gene expression, recombinant DNA technology, transposable elements, extranuclear genome, population genetics, and quantitative genetics. Course includes three hours of lecture and three hours of laboratory applications each week. **Prerequisite(s):** BIOL 1110 or CHEM 1110 or CHEM 1010 or BIOL 2010

★BIOL 2130 **Microbiology** **4 Credits**

An introductory course in microbiology dealing with bacteria, fungi, yeast, and viruses to include discussions of cell structure, identification, taxonomy, metabolism, genetics, resistance, infection, disease, and immunity. Course includes three hours of lecture and four hours of laboratory applications each week. **Prerequisite(s):** BIOL 1110 or BIOL 2010 or CHEM 1010 or CHEM 1110

BIOL 2210 **Pathophysiology** **2 Credits**

An introduction to the disease processes and mechanisms of the human body and to the dysfunction of the body's systems.

BIOL 2400 **Principles of Nutrition** **3 Credits**

Human nutrition for the lifespan, including biochemistry of body nutrients, health and disease, government and scientific guidelines. **Prerequisite(s):** BIOL 2010 or CHEM 1010

★BIOL 2410 **Anatomy for Radiological Technologists** **4 Credits**

Gross and microanatomy of the human. Course includes three hours of lecture and three hours of laboratory applications each week. This course will only count toward the radiological technologist program at the University of Tennessee Medical Center.

BOTANY

◆★BOT 1010 **Fundamentals of Botany I** **4 Credits**

Introduction to taxonomy through tree identification, basic organization and function of cells, respiration, photosynthesis, genetics (including meiosis, mitosis, Mendelian inheritance), survey of plant kingdom (bacteria, algae, fungi, mosses, ferns, conifers, and flowering plants).

◆★BOT 1020 **Fundamentals of Botany II** **4 Credits**

Plant growth, anatomy, growth regulation; uptake and transport; origin of life and mechanism of evolution; ecology, importance to humans and environmental concerns.

BUSINESS ADMINISTRATION

★BUS 2010 **Business Functions** **4 Credits**

Understanding how business works through application and integration of fundamental business functions. Includes aspects of marketing, finance, logistics, operations, organizational behavior and information management. **Corequisite(s):** ACC 2000 and ECN 2010

CHEMISTRY

◆★CHEM 1010 **Principles of Chemistry** **4 Credits**

Atomic structure, periodic law, bonding, gas laws, liquid and solid states, solutions, acids and bases, oxidation and reduction reactions and equilibrium. Course includes three hours of lecture and three hours of laboratory applications each week. **Prerequisite(s):** Two years of high school algebra and completion of DSP math requirements

◆★CHEM 1020 **Basic Organic & Biochemistry** **4 Credits**

Organic chemistry: alkanes and unsaturated and aromatic hydrocarbons, with emphasis on structure, nomenclature, and functional groups. Biochemistry: amino acids and proteins, carbohydrates, lipids, nucleic acids. Course includes three hours of lecture and three hours of laboratory applications each week. **Prerequisite(s):** CHEM 1010

◆★CHEM 1110 **General Chemistry I** **4 Credits**

Modern atomic theory, chemical bonding, stoichiometry, kinetics. Course includes three hours of lecture and three hours of laboratory applications each week. **Prerequisite(s):** Two years of high school algebra and completion of DSP math requirements

◆★CHEM 1120 **General Chemistry II** **4 Credits**

Chemical equilibrium, thermochemistry, electrochemistry, introduction to organic chemistry. Course includes three hours of lecture and three hours of laboratory applications each week. **Prerequisite(s):** CHEM 1110

◆CHEM 1310 **Concepts of Chemistry** **3 Credits**

of the project.

CET 2810 **Civil Design Applications** **3 Credits**

This course uses a major design project that incorporates basic and advanced concepts learned in prerequisite courses. The project consists of preparation of a final plat and related documents for a large subdivision or commercial development. Students will work in teams and use AutoCAD Land Desktop to create a plat map complete with lot descriptions, road alignment storm drainage systems and utility layouts. Supporting documents will include all design calculations, profiles and cross-sections. Students will use Excel and Timberline software to calculate volume of cut/fill and cost of development. Students will prepare a time-scaled logic diagram with Primavera SureTrack. Student teams will give an oral presentation defending their design. **Prerequisite(s):** CET 2010 and 2212 **Corequisite(s):** CET 2220

COLLEGE SUCCESS

COLL 1500 **College Success** **3 Credits**

A course designed to empower students to reach their educational, career and life goals. This class introduces students to a wide range of strategies, techniques and self-management tools commonly recognized to lead to success. This course is for college-level credit and is designed to transfer.

COMMUNICATIONS

★CMN 1500 **Communication in an Information Age** **3 Credits**

This course provides an overview of human, mass and mediated communication. It includes an introduction to finding, organizing and evaluating information.

COMMUNICATION GRAPHICS TECHNOLOGY

★CGT 1030 **Introduction to Macintosh Graphic Design** **3 Credits**

Introduction to the Macintosh computer and its operating system and an overview of graphic design applications. A functional lab will be included as a component of the course. **Corequisite(s):** ART 1011 and CGT 1950; no corequisite for non-CGT majors

CGT 1040 **Digital Photography** **3 Credits**

A study of the fundamentals of photographic concepts, techniques and digital imaging processes for graphic design. Includes skill development with Adobe Photoshop software. **Prerequisite(s):** CGT 1030 or consent of instructor

CGT 1105 **Digital Graphic Design I** **4 Credits**

A study of visual communications theory, creative problem solving techniques and concepts for graphic design. Portfolio development and review. **Prerequisite(s):** ART 1011 and CGT 1030 and 1950 **Corequisite(s):** CGT 1110

CGT 1110 **Typography** **3 Credits**

A study of the basics of typography, including history, font designs, functional and expressive applications for graphic designs. Introduction to use of computerized equipment emphasized. **Prerequisite(s):** CGT 1030 **Corequisite(s):** CGT 1105 or consent of instructor

★CGT 1510 **History of Graphic Design & Illustration** **3 Credits**

Major movements and pivotal artists/designers/illustrators/art directors, 1850 to the present, and their effect on current graphic design trends.

CGT 1911 **Portfolio** **1 Credit**

Organization and correct presentation of first-year art and design studio work for critical evaluation. A successful performance review by designated faculty and industry professionals is essential for continuance to second-year CGT coursework. **Prerequisite(s):** Completion of or enrollment in first-year CGT coursework and consent of instructor

CGT 1950 **Design Fundamentals** **3 Credits**

A study of visual design fundamentals, creative problem solving techniques, color theory application and concept development for graphic design. Emphasis will be placed on visual literacy development, presentation techniques, craftsmanship and computer skill development using graphic design industry standard software. **Corequisite(s):** ART 1011 and CGT 1030

of computing. This course is intended for University Parallel students not majoring in computer science.

★CSIT 1020 Introduction to Computer Science 4 Credits

Problem solving and algorithm development. Organization and characteristics of modern digital computers. Emphasis on developing good programming habits. Building abstractions with procedures and data. Programming in a modern computing language. Program development using UNIX operating system. This course is intended for University Parallel students majoring in Computer Science or Computer Engineering. It is not designed as an elective for non-majors. **Corequisite(s):** MATH 1530 or 1730

★CSIT 1050 Programming for Engineering Transfer 1 Credit

Computer programming using C++ for engineering problem solving. Introduction to computer programming concepts, problem analysis, code formulation, engineering data utilization and applications.

CSIT 1110 Introduction to Information Technology 4 Credits

A first course in computer science and information technology, providing a comprehensive overview of computer architecture, data organization and communication. This course includes problem solving, logic design, personal computing, operating systems and application software.

★CSIT 1300 Problem Solving for Engineering Transfer 2 Credits

Application of computers to engineering problem solving. Introduction to computer mathematical tools, problem analysis, code formulation, engineering data plotting and simulations. Solutions of engineering problems using MatLab.

★CSIT 1360 Introduction to Cluster Computing 4 Credits

This course covers introductory material on high-performance computing technology, including types of clusters, cluster components, and software and hardware tools to build cluster infrastructure. **Prerequisite(s):** CSIT 2410 **Corequisite(s):** CSIT 1730

★CSIT 1400 Data Structures 4 Credits

Advanced problem solving and algorithm development, structured programming, data structures and applications, I/O techniques, lists, queues, trees, algorithms, and files. Program development using UNIX operating system. This course is intended for University parallel students. **Prerequisite(s):** CSIT 1020 or department approval

CSIT 1510 Introduction to Programming Using Java 4 Credits

A study of the Java programming language, object-oriented programming, design and algorithm development. Topics include language structure and syntax, methods, program control statements, classes, strings, arrays, and applets. **Corequisite(s):** CSIT 1110

CSIT 1520 Advanced Java Programming 4 Credits

A study in Java language techniques beyond the introductory course. Emphasis will include object-oriented design, arrays, GUI and event-driven programming, exceptions and Java packages for collections, file I/O, and database connectivity. **Prerequisite(s):** CSIT 1110 and 1510 or Java programming experience

★CSIT 1600 Computer Organization 4 Credits

Number systems, Boolean algebra, combinational and sequential circuits, processor functional units and control, pipelining, memory and caching, stored program computing, memory management, computer system organization, and assembly language programming are components of the course. **Prerequisite(s):** CSIT 1020 or 1510

CSIT 1620 Introduction to Game & Simulation Programming 4 Credits

An introduction to the field of game development using programming languages: 2D and 3D development tools, online resources, language structures and syntax, use of game development techniques and application of scripting in a virtual world will be explored. **Corequisite(s):** MDT 1600

CSIT 1670 Gaming & 3D Simulation Programming I 4 Credits

Students will explore 3D virtual simulation and game development using a selected game development tool or engine. In depth development of game strategy, action figures, movement,

system installation, configuration and maintenance tasks. **Prerequisite(s):** CSIT 2410 or Linux/UNIX system administrator or user-level experience

CSIT 2412 Linux Certification Exam Preparation 2 Credits

A study of system administration tools and techniques for the Linux operating system to prepare for entry-level industrywide Linux certificates. **Prerequisite(s):** CSIT 2411 or Linux/UNIX system administrator experience

CSIT 2425 SQL Applications Using Oracle 4 Credits

A comprehensive study of SQL using the Oracle relational database management system. Hands-on training will include database creation and management, data queries, view definition and use, operators and functions, procedures, security, calculation, indexing, utilities and data transport. **Prerequisite(s):** CSIT 1810 and one programming course

CSIT 2430 Introduction to Scripting Languages 4 Credits

This course provides an introduction to script programming and compares a range of scripting languages used for UNIX and Web-based applications. **Prerequisite(s):** CSIT 2410

CSIT 2445 Oracle Application Development 4 Credits

An introduction to database application programming using Oracle development tools, including Oracle Forms, Oracle Reports and advanced PL/SQL procedures. Hands-on training will include design and development of client-server and Web applications. **Corequisite(s):** CSIT 2425 or department approval

CSIT 2460 Unix Utilities & Shell Programming 4 Credits

A study of the UNIX operating system. Topics include the use of UNIX utilities, electronic mail, shell programming. **Prerequisite(s):** CSIT 1110 and one programming course or CSIT 1720

CSIT 2465 Database Application Development 4 Credits

A study of database program development for business applications using rapid application development (RAD) tools. Topics include table creation and maintenance, indexing, data manipulation, forms, reports, labels, queries, data modules, object-oriented data manipulation (OODML), event-driven applications. Web-to-database connectivity will be emphasized. **Prerequisite(s):** CSIT 1810 and one programming course

CSIT 2475 Linux Advanced System & Network Administration 4 Credits

A study of advanced system and network administration topics for the Linux operating system. Topics include configuration and management of services like FTP, SSH, NFS, NIS, LDAP, Samba, DNS, BIND, DHCP, HTTP, sendmail, postfix and procmail. Emphasis will be on the practical use and application of the advanced system and network administration skills. **Prerequisite(s):** CSIT 2411 or appropriate Linux/UNIX system administration experience

CSIT 2476 Linux System Security Administration 4 Credits

A study of system security administration topics for the Linux operating system. Topics include SELinux, console access control, firewalls, TCP wrappers, xinetd access control, tripwire configuration, PAM configuration, system monitoring techniques, encryption, PKI and Open SSH configuration. **Prerequisite(s):** CSIT 2411 or appropriate Linux/UNIX system administration experience

CSIT 2477 Advanced Linux Certification Exam Preparation 2 Credits

A study of system administration tools and techniques for the Linux operating system to prepare for advanced-level industrywide Linux certificates. **Prerequisite(s):** CSIT 2475 and 2476 or CSIT 2412 or entry-level Linux certification or advanced-level Linux/UNIX system administrator experience

CSIT 2490 Special Topics in Information Technology 4 Credits

A directed study and utilization of specific hardware, applications and software products within business and industry. This course requires extensive utilization of specific computer resources. Students may expect a high degree of lab work and documentation. **Prerequisite(s):** CSIT 1110 or department approval

CSIT 2550 Advanced Database Management Systems 4 Credits

A study of database management system concepts. Topics include relational and object-ori-

- CUE 2000** **History & Philosophy of Credit Unions** **2 Credits**
 A study of the credit union movement, including the history, legal basis, powers and characteristics of credit unions. Topics include credit union management and the financial system.
- CUE 2050** **Credit & Collections** **3 Credits**
 A study of the extension of credit. Topics include nature and role of credit, types of credit, basis of the credit decision, numerical scoring systems and collections policies, practices and systems.
- CUE 2100** **Credit Union Accounting I** **3 Credits**
 A study of principles of accounting theory. Includes analyzing and recording business transactions and summarizing, adjusting, closing and preparing financial statements.
- CUE 2150** **Human Resource Management** **3 Credits**
 A study of records management, training, salary administration, job evaluation, performance appraisal and benefit programs.
- CUE 2200** **Credit Union Management** **2 Credits**
 A study of planning, organizing, leading and controlling as it relates to credit union operation.
- CUE 2230** **Strategic Business Management & Leadership** **3 Credits**
 This course will expose students to various authors on leadership and the future. The course will identify students' skills and potential to enable them to move into progressively challenging roles that will have positive impacts on other individuals and on the future of credit unions.
- CUE 2250** **Risk Management & Insurance** **3 Credits**
 A study of the concepts and principles of risk management and control. Important concepts of insurance, property and liability, personal and institution risk exposures and insurance are covered.
- CUE 2300** **Financial Counseling** **2 Credits**
 A study of financial counseling. Topics include family resource management, consumer credit, budgeting, social security and estate planning.
- CUE 2310** **Economics & the Monetary System** **3 Credits**
 Introduction to basic concepts and theories of supply, demand, inflation, GNP and elasticity. Additional topics include money's functions, types of financial institutions, significant banking legislation and the Federal Reserve and its powers. Special emphasis is placed on applications to credit unions.
- CUE 2350** **Money & Banking** **3 Credits**
 A study of financial institution structures and their role in the financial, economic and open market operations.
- CUE 2400** **Business Law** **3 Credits**
 A study of the principles of law as applied to business transactions, including contracts, employment, negotiable instruments and security agreements.
- CUE 2450** **Financial Management I** **3 Credits**
 An introduction to general concepts in finance and their application to credit union financial management. This is the first in a two-part series on financial management.
Prerequisite(s): CUE 2000
- CUE 2500** **Credit Union Finance** **3 Credits**
 Applications and issues in credit union financial management. **Prerequisite(s):** CUE 2450

DEVELOPMENTAL STUDIES (SEE TRANSITIONAL STUDIES)

EARLY CHILDHOOD EDUCATION

- ECEd 1010** **Orientation to Early Childhood Education** **2 Credits**
 Introduces the student to the early childhood education profession and the basic skills

needed for a successful academic career. Topics include professionalism, family relationships, individual and cultural diversity, child development, developmentally appropriate practice, observation and assessment, learning environment, health and safety, and guidance. Students study the different types of early childhood programs, community resources and professional organizations.

ECEd 2010 Safe, Healthy Learning Environments 3 Credits

A study of the basic principles of good health as they relate to the child in the family, child care center, or family child-care home, and the community. Includes child nutrition, growth, disease and accident prevention, and safety. Also included is a study of principles of creating appropriate learning environments for young children. Laboratory observation and interaction.

ECEd 2015 Early Childhood Curriculum 3 Credits

A study of developmentally appropriate practices and the teacher's role in supporting the development of children age birth to 9. Emphasis is on curriculum planning, including goals, environment, roles of teachers and parents, materials, and settings. Field experience required.

ECEd 2020 Infant, Toddler & Child Development 3 Credits

The study of the physical, cognitive, social, and emotional aspects of young children and their application to the care, guidance, and development of the child birth to 9.

ECEd 2021 Infant, Toddler & Child Development Lab 1 Credit

A laboratory course that provides the opportunity for students to observe and interact with children in an early childhood setting. Students participate in an accredited developmental program with children from infancy to early childhood to observe their emotional, social, cognitive and physical development. **Corequisite(s):** ECEd 2020

ECEd 2030 Infant & Toddler Care 3 Credits

A course in methods of providing safe, competent individual and group care, as well as a warm and secure emotional atmosphere for infants and toddlers. Includes procedures for stimulating the intellectual and physical development of infants and toddlers in addition to basic care-giving skills. Course open to Nonmajors (i.e. parents, parent-to-be, babysitters).

ECEd 2040 Family Dynamics & Community Involvement 3 Credits

The role of the family and community in the physical, cognitive, social, and emotional growth of the child in a diverse society. The areas of professionalism, program management, advocacy, and family development and the structure of the family will be the main topics. Building partnerships with families of children with special needs will also be included. Laboratory observation and interaction.

ECEd 2050 Psychomotor Development 3 Credits

The major theories of psychomotor development and the application to the development of the young child. Particular emphasis is placed on the positive development of motor skills. Laboratory observation and interaction. **Prerequisite(s):** ECEd 2020

ECEd 2060 Development of Exceptional Children 3 Credits

This course covers physical disabilities, mental retardation, sensory impairment, the gifted child, and the accessing and coordinating of community resources to ensure accurate diagnosis and appropriate treatment and services. Students will learn to interpret diagnostic instruments and to write programs to meet the special needs of exceptional children. Laboratory observation and interaction.

ECEd 2070 Developmental Assessment 3 Credits

A study of the basic instruments and checklists leading to competency in screening children for developmental problems. The course will also consider appropriate community support programs and referral procedures. Laboratory observation and interaction.

ECEd 2080 Language & Literacy Development in Early Childhood 3 Credits

This course outlines the research-based principles and practices for providing children age birth to 9 a strong foundation in language and literacy within a developmentally appropriate approach. **Prerequisite(s):** ECEd 2015 and 2020; or department approval

Prerequisite(s): ECN 2010 **Corequisite(s):** College-level math

EDUCATION

EDU 1020 **Reading, Writing & Math Teaching Methods** **3 Credits**

A model for teaching reading, writing, and math methods and skills in the K-6 educational setting. This course is designed for K-6 education paraprofessionals pursuing the academic requirements of the No Child Left Behind Act.

EDU 1200 **Student Leadership** **1 Credit**

This course is designed to provide a formally structured leadership education program for current student leaders involved in co-curricular programs and potential new student leaders that will engage them in active leadership training and personal development. Course is designed for Student Ambassadors, Tele-counselors, COSA members and other PSTCC student leaders. Registration for the course is by instructor approval only. **Prerequisite(s):** Consent of instructor

EDU 2010 **Introduction to Teaching & Technology** **3 Credits**

An overview of school in America, the role and responsibility of the teacher, and an introduction to instructional technology principles and practices. The course combines classroom discussion with field observations as a means to analyze the teaching profession.

Corequisite(s): ENGL 1010

EDU 2030 **Field Studies in Science Education** **2 Credits**

Background in elementary science education goals and pedagogies; training in cart demonstrations; design, preparation, implementation and evaluation of hands-on science activities in the elementary schools; and development of family science activities. **Prerequisite(s):** Successful completion of a college-level laboratory science course or two years of high school science

ELECTRICAL ENGINEERING

★ECE 2010 **Circuits I** **3 Credits**

Fundamental laws of circuit analysis: Ohm's law, Kirchoff's voltage and current laws and the law of conservation of energy; circuits containing independent and dependent voltage and current sources; resistance, conductance, capacitance and inductance analyzed using mesh and nodal analysis, superposition and source transformations and Norton's and Thevenin's theorems; steady state analysis of DC and AC circuits; complete solution for transient analysis for circuits with one and two storage elements. **Prerequisite(s):** CHEM 1110 and CSIT 1050

Corequisite(s): PHYS 2110

★ECE 2020 **Circuits II W/Lab** **4 Credits**

Average, complex, real and imaginary power; effective value of voltage and current; three-phase circuits; delta and wye connections, power measurement using two wattmeters; complex frequency; sinusoidal forcing functions and natural response; resonance: general case, special cases in series and parallel circuits; scaling: magnitude and frequency; mutual inductance transformers as circuit elements; linear and ideal transformers as circuit elements; linear and ideal transformers; admittance, impedance and hybrid parameters; trigonometric and complex Fourier series. Course includes 3 hours of lecture and 3 hours of laboratory applications each week. **Prerequisite(s):** ECE 2010 **Corequisite(s):** MATH 2110 and PHYS 2120

ELECTRICAL ENGINEERING TECHNOLOGY

EET 1001 **Introduction to Electrical Engineering Technology** **1 Credit**

The student is introduced to electronic equipment, components, and software. Particular emphasis is given to the application of the multimeter, oscilloscope, function generator, power supply, and circuit simulation software. Practical soldering techniques are introduced and practiced. The student will be exposed to modern electronic systems, such as a microcontroller and a variety of electronic sensors, using a robotic system. An introduction to laboratory reports using application software is covered. Basic professional ethics, time management, and quality work habits are also discussed.

0700 (Basic Reading)

◆★ENGL 1010 **English Composition I** **3 Credits**

Study and practice of expository and persuasive writing. Topics include critical reading and writing essays, with emphasis on research, writing processes and effective formatting. **Prerequisite(s):** Satisfactory placement test scores; or satisfactory completion of DSPW 0700 and 0800

◆★ENGL 1020 **English Composition II** **3 Credits**

Analytic writing based on the study of literature; study and practice of research writing. **Prerequisite(s):** ENGL 1010

★ENGL 1030 **Writing Workshop** **1 Credit**

Writing Center-based course for (1) students eligible to take degree-level English courses who want additional instruction in writing and (2) students taking degree-level English courses who are required by their instructors to work on certain aspects of their writing. Instruction in mechanics, paragraph development, essay structure, developing and documenting research papers, and writing about literature. Students in category 1 must register for the course by the end of the late registration period; students in category 2 must be assigned to the workshop no later than the 14th day of instruction. To receive credit, students must satisfy the competency requirements established at the beginning of the instructional period and must meet with the instructor assigned to them a minimum of 30 hours per semester, averaging two hours per week. Grading: P/F. **Prerequisite(s):** Enrollment in or completion of ENGL 1010

ENGL 1060 **Basic Pronunciation—ESL** **2 Credits**

A course to help international students improve their English speaking skills and master the patterns of English spelling. Students practice the production of English sound patterns and related spelling patterns. Highly recommended to all ESL students who do not have excellent pronunciation.

ENGL 1221 **English Review for Non-native Speakers** **5 Credits**

Comprehensive review of English rhetorical structures. Extensive practice in reading, vocabulary and writing. A student may be admitted to this course by passing a comprehensive ESL placement test, which includes reading, writing, vocabulary and grammar. **Prerequisite(s):** The student must achieve a score of 75 on the Michigan Test of English Language Proficiency and must complete an ESL writing sample that demonstrates the ability to perform at the college level as an ESL writer.

ENGL 1330 **Composition Practice for Non-native Speakers** **5 Credits**

Intensive practice in composition organization and development. A student may be admitted to this course by passing a comprehensive ESL placement test, which includes reading, writing, vocabulary and grammar. The course may be taken before or with ENGL 1010. **Prerequisite(s):** The student must achieve a score of 75 on the Michigan Test of English Language Proficiency and must complete an ESL writing sample that demonstrates the ability to perform at the college level as an ESL writer.

◆★ENGL 2110 **American Literature I** **3 Credits**

A study of the development of American literature from its beginnings to the War Between the States. **Prerequisite(s):** ENGL 1020

◆★ENGL 2120 **American Literature II** **3 Credits**

American literature from the War Between the States to the present. **Prerequisite(s):** ENGL 1020

◆★ENGL 2210 **British Literature I** **3 Credits**

A study of the development of British literature from three periods: Anglo-Saxon and Middle Ages, Renaissance and Restoration, and 18th Century. **Prerequisite(s):** ENGL 1020

◆★ENGL 2220 **British Literature II** **3 Credits**

A study of the development of British literature from three periods: Romantic, Victorian and

global warming, managing waste discharges, energy production, and how to manage change to ensure a high quality environment for generations that follow. Environmental issues will be further explored in weekly laboratory exercises. **Prerequisite(s):** GEOL 1040; no prerequisite for Career/Technical majors

◆GEOL 1310 **Concepts of Earth Science** **3 Credits**

This course covers the basic principles from the fields of geology, oceanography, meteorology and astronomy. Topics include map interpretation, minerals and rocks, processes acting at the Earth's surface and within the Earth, plate tectonics, geologic time and dating, water movements, ocean floor, weather and climate, composition and motions of the Earth, solar systems, phases of the moon, origin and life cycles of stars, and galaxies.

GERMAN

★GERM 1010 **Beginning German I** **3 Credits**
Introduction to German.

★GERM 1020 **Beginning German II** **3 Credits**
Continuation of GERM 1010. **Prerequisite(s):** GERM 1010 or one year of high school German

◆★GERM 2010 **Intermediate German I** **3 Credits**
Reading, writing and speaking German. **Prerequisite(s):** GERM 1020 or equivalent

◆★GERM 2020 **Intermediate German II** **3 Credits**
Continuation of GERM 2010. **Prerequisite(s):** GERM 2010 or equivalent

HISTORY

◆★HIST 1010 **Western Civilization I** **3 Credits**
A survey of the ancient Western world to 1715.

◆★HIST 1020 **Western Civilization II** **3 Credits**
A survey of the Western world from 1715 to the present.

◆★HIST 1110 **World Civilization I** **3 Credits**
A survey of world history from the emergence of human civilizations to the 1500s. The course focuses on finding the order, meaning, and purpose in human events through a comparative study of the Western and non-Western historical experiences.

◆★HIST 1120 **World Civilization II** **3 Credits**
A survey of world history from the 1500s to contemporary times. The course focuses on finding the order, meaning, and purpose in human events through a comparative study of the Western and non-Western historical experiences.

◆★HIST 2010 **U.S. History I** **3 Credits**
A survey of U.S. history from settlement to 1877.

◆★HIST 2020 **U.S. History II** **3 Credits**
A survey of U.S. history from 1877 to the present.

◆★HIST 2040 **African-American Studies** **3 Credits**
A multidisciplinary approach to the African-American experience during the 19th and 20th centuries. This course fulfills the Social/Behavioral Sciences requirement for University Parallel and Career/Technical students.

HOSPITALITY

★HSP 1200 **Introduction to Hospitality** **3 Credits**
This course is an introduction to the hospitality industry, with emphasis on the broad spectrum of hospitality organizations and career opportunities.

HSP 2075 **Purchasing & Cost Control** **4 Credits**
This course is intended to provide the student with the methodologies and tools to control food, beverage, labor and other costs within a hospitality business. Hospitality purchasing prin-

ciplines are also explored. This course regularly uses basic mathematics. **Prerequisite(s):** HSP 1200

HSP 2100 Professional Beverage Management 3 Credits

This course deals with the management of beverages within the hospitality industry context. The course provides students with a history of beverages within the industry as well as knowledge of the products, facilities, regulations and mixology. **Prerequisite(s):** HSP 1200

★HSP 2220 Tourism & Travel 4 Credits

This course examines the modes of travel and accommodations, travel behavior, the sociology of tourism, tourism components and supply, and tourism marketing and research. Destination geography and attractions are also explored. **Prerequisite(s):** HSP 1200

HSP 2250 Professional Catering 3 Credits

This course examines the requirements to start and operate a catering company. Topics of discussion include kitchen equipment, regulations, operations and business planning. **Prerequisite(s):** HSP 1200

★HSP 2260 Hotel Operations 3 Credits

This course familiarizes students with the development of the lodging industry in the United States and different functions within a hotel. The course focuses on the fundamental application of procedures used to effect a smooth transition from check-in to check-out. **Prerequisite(s):** HSP 1200

★HSP 2300 Food & Beverage Operation 3 Credits

This course covers restaurant and food service operations, including facilities capabilities, personnel management, daily operations, sanitation, and facilities readiness. **Prerequisite(s):** HSP 1200

★HSP 2320 Quantity Food Production 3 Credits

This course is a study and application of principles of quantity food production using institutional equipment and procedures. It includes quantity food planning, procurement and service.

HSP 2950 Hospitality Internship 3 Credits

This course is a supervised work experience in the hospitality field requiring a minimum of 135 work hours. Work activities can range from entry-level to management training. Individual conferences are arranged instead of class attendance. **Prerequisite(s):** Second-year status, a minimum 2.5 GPA in HSP courses, pursuit of an A.A.S. degree as a Hospitality major, a completed internship application submitted to the coordinator of the BCT internships prior to the beginning of the enrolled term. Application is available on the Web: www.pstcc.edu/departments/bctpi.

HUMANITIES

HUM 2100 Leadership Development 3 Credits

A course designed to provide students with the fundamental knowledge and skills required of effective leaders. Experiential learning exercises, interactions with peers and college and community leaders, and written assignments are combined to illustrate the application of strategies required to successfully communicate with others, facilitate group or organizational activities, constructively resolve conflicts, and plan and implement activities or programs. Issues of diversity, personal growth and interpersonal relationships are explored within the context of leadership development. **Corequisite(s):** ENGL 1010

◆★HUM 2810 Introduction to Film Studies 3 Credits

An overview of film history using selected world cinema feature films. Basic elements of film expression for understanding and analyzing narrative cinema. Some research is required.

INTERIOR DESIGN TECHNOLOGY

IDT 1001 Introduction to Interior Design 3 Credits

An overview of the profession of interior design. An introductory study of the basic elements and principles for creative, comfortable and aesthetically pleasing interiors. An emphasis is placed on the use of interior materials. Professional designer techniques are introduced.

IDT 2900 **Interior Design Internship** **3 Credits**
Course provides actual work experience in the design field. Individual conferences are held in lieu of class attendance. **Prerequisite(s):** Consent of instructor

JOURNALISM

★JOU 2000 **Newswriting** **3 Credits**
Writing for print and electronic media under deadline. Gathering information by using records, documents, observation and interviewing. Emphasis on library resources and current events. Basic style and editing based on AP Stylebook and Libel Manual. **Prerequisite(s):** CMN 1500 and ENGL 1020 and keyboarding skills

★JOU 2030 **Editing** **3 Credits**
Methods and practice in judging news, editing copy, writing headlines, and designing newspapers and magazines. Emphasis on precise word use and news display. Writing skills specific to newspapers and magazines. **Prerequisite(s):** ENGL 1010 or JOU 2000

★JOU 2700 **Public Relations Principles** **3 Credits**
Theories and principles of public relations. Overview of public relations in the management of business, government, institutions and organizations. Brief case studies and public relations projects. **Prerequisite(s):** CMN 1500

JOU 2998 **Journalism Internship** **3 Credits**
This course is designed to afford students practical work experience in the field of journalism, public relations, broadcasting or advertising. **Prerequisite(s):** CMN 1500 and consent of instructor **Corequisite(s):** If internship is in a journalism or public relations environment, student must be enrolled in or have already completed JOU 2030 and/or JOU 2700

LAW (SEE PARALEGAL STUDIES)

LIBERAL ARTS STUDIES

LAS 2020 **Special Topics in Liberal Arts** **3 Credits**
Study and discussion of a selected topic in liberal arts. Content varies. May be repeated for up to 6 hours of credit.

MANAGEMENT

MGT 2000 **Principles of Management** **3 Credits**
A study of management through analyzing managerial functions of planning, organizing, leading and controlling.

MGT 2030 **Team Leadership** **3 Credits**
A study of team leadership techniques needed for successful management. Student teams study the application of modern team management principles to leading, motivating, delegating and disciplining. **Prerequisite(s):** MGT 2000 or HSP 1200

MGT 2050 **Human Resources** **3 Credits**
A study of principles of human resource management, including equal employment law, recruitment, selection, and development and maintenance of the human resource. **Prerequisite(s):** MGT 2000 or HSP 1200

MGT 2100 **Information Systems** **3 Credits**
An introduction to information systems. The course takes the user perspective in the analysis of organizational information needs, system design, system acquisition and organizational impact of the system. **Prerequisite(s):** MGT 2000; and OST 1211 or 1005

MGT 2160 **Quality Improvement** **3 Credits**
This course is an introduction to quality management as a system through the application of statistical process control, W. Edwards Deming's management philosophy and various quality management techniques.

MGT 2170 **Project Management** **3 Credits**
This course is a study of project management including project software, project planning,

cost and control. **Prerequisite(s):** MGT 2000 **Corequisite(s):** MATH 1530 or department approval

MGT 2180 **Team Practicum** **3 Credits**

A management simulation which is a culmination of the student's academic studies that gives experience in applying theories and skills from various business disciplines to self-managed team problem solving through the use of readings, case studies, simulations, role plays and guest speakers. **Prerequisite(s):** MGT 2030 and 2050 and department approval

MGT 2240 **Business Capstone** **3 Credits**

A project-oriented course designed to require students working in cross-functional teams to apply what they have learned in their major curriculum to the development of a complex entrepreneurial project. Emphasizes necessity of informed decision making and planning in all phases of business. **Prerequisite(s):** ACC 2000 and MKT 2200 and MGT 2000 or HSP 1200 and department approval

MGT 2471 **Management Internship** **3 Credits**

This course is a supervised work experience requiring a minimum of 135 hours in a management training capacity. Individual conferences are arranged instead of class attendance. **Prerequisite(s):** Completion of 15 hours of MGT courses with a minimum 2.5 GPA in MGT courses; seeking an A.A.S. degree as a Management major; and a completed internship application submitted to the Coordinator of BCT Internships prior to enrollment in the course and the beginning of the term. Application is available on the Web: www.pstcc.edu/departments/bctpi.

MARKETING

MKT 2200 **Principles of Marketing** **3 Credits**

A study of the function of marketing in businesses and organizations. Topics include target markets, segmentation, product and service analysis, promotion planning, distribution and supply chain management, and pricing strategies within the context of relationship marketing.

MKT 2260 **Marketing Information** **3 Credits**

This course focuses on the collection, evaluation, and analysis of data and information about the external environment, products and industries, and consumer/buyer behavior. It is an analysis of how buying behavior and decision-making affect the development, pricing, distribution and promotion of products. **Prerequisite(s):** MKT 2200 and OST 1211

MKT 2420 **Customer Service** **3 Credits**

A practical course designed to prepare students to meet and exceed customers' expectations. The course focuses on communication, including listening, electronic, verbal, nonverbal, and telephone communication skills and communicating in difficult and diverse customer situations. Techniques for learning involve simulations, observation research and an individual skill-building project.

MKT 2450 **E-Commerce** **3 Credits**

A study of e-commerce and its impact on business. The course provides a framework for understanding e-commerce, including possible marketing opportunities, as well as implementation and organization issues involved in capitalizing on e-commerce.

MKT 2471 **Marketing Internship** **3 Credits**

This course is a supervised work experience requiring a minimum of 135 hours in an e-commerce/marketing training capacity. Individual conferences are arranged instead of class attendance. **Prerequisite(s):** Completion of 15 hours of MKT courses with minimum 2.5 GPA in MKT courses and at least a 2.0 cumulative GPA; seeking an A.A.S. degree as a Marketing major; and a completed internship application submitted to the Coordinator of BCT Internships prior to the beginning of the term. Application is available on the Web: www.pstcc.edu/departments/bctpi/documents.html.

MKT 2500 **Services Marketing** **3 Credits**

This course is about services marketing, focusing on marketing strategy specifically for services, service quality and productivity, service environments and processes, and employee

management. The course will also cover customer relationships and loyalty and service recovery in service businesses.

MKT 2570 **Sales/Event Marketing** **4 Credits**

A study of the principles and techniques of effective promotion. Course is designed to provide foundational skills in sales and sales management, public relations and event marketing.

Prerequisite(s): ADV 2500 and MKT 2200

MATHEMATICS

DSPM 0700 **Basic Mathematics** **3 Credits**

This course includes the study of integers, fractions, decimals, percents, ratios, proportions, measurements, equations and related applications. The TI-83 or TI-83 Plus calculator is required and used throughout the course.

DSPM 0800 **Elementary Algebra** **3 Credits**

This course includes the study of real numbers, algebraic expressions, functions, linear equations and inequalities, graphing, systems of linear equations and inequalities, and related applications. The TI-83 or TI-83 Plus calculator is required and used throughout the course.

Prerequisite(s): DSPM 0700 or equivalent math placement score

DSPM 0850 **Intermediate Algebra** **3 Credits**

This course includes the study of quadratics, rational and radical functions and their graphs, polynomial expressions, quadratic equations and inequalities, rational expressions and equations, radical expressions and equations, and related applications. The TI-83 or TI-83 Plus calculator is required and used throughout the course. **Prerequisite(s):** DSPM 0800 or equivalent math placement score

◆★**MATH 1010** **Survey of Mathematics** **3 Credits**

Topics include critical thinking skills, problem solving, logic, geometry with some right triangle trigonometry, measurement, consumer math, probability and statistics. **Prerequisite(s):** High school algebra I and algebra II and ACT math score of at least 19; or DSPM 0850 or equivalent math placement score

◆★**MATH 1130** **College Algebra** **3 Credits**

This course is designed for students who are not in University Parallel/College Transfer programs of science, mathematics, engineering, or computer science. Topics include linear, polynomial, rational, exponential, and logarithmic functions and their graphs and applications; linear and nonlinear models. **Prerequisite(s):** High school algebra I and algebra II and ACT math score of at least 19; or DSPM 0850 or equivalent math placement score

★**MATH 1410** **The Structure of the Number System** **3 Credits**

Recommended for prospective elementary education teachers. Topics include problem solving, sets and relations, numeration systems, integers, elementary number theory, rational numbers, decimals and algebraic applications. **Prerequisite(s):** High school algebra I and algebra II and geometry and ACT math score of at least 19; or DSPM 0850 or equivalent math placement score

★**MATH 1420** **Geometry/Statistics** **3 Credits**

Recommended for prospective elementary education teachers. Topics include elementary probability and statistics, basic plane and 3-space geometry, congruence and similarity, constructions, transformations, area, volume, surface area and measurements. **Prerequisite(s):** High school algebra I and algebra II and geometry and ACT math score of at least 19; or DSPM 0850 or equivalent math placement score

◆★**MATH 1530** **Elementary Probability & Statistics** **3 Credits**

Topics include elementary probability theory, concepts of descriptive statistics, discrete and continuous distributions, hypothesis testing, confidence intervals, sample sizes, correlation, regression, multinomial and contingency tables. Noncalculus based. Computer applications will be investigated. **Prerequisite(s):** High school algebra I and algebra II and ACT math score of at least 19; or DSPM 0850 or equivalent math placement score

◆★**MATH 1630** **Finite Mathematics** **3 Credits**

Linear functions and applications, interest, annuities, amortization, systems of linear equations, including Gauss-Jordan elimination, and matrix theory. Linear programming using graphical and simplex methods. ACT math score of at least 21 is recommended. **Prerequisite(s):** High school algebra I and algebra II and precalculus and satisfactory placement test scores; or MATH 1130 or 1710

◆MATH 1710 **Precalculus Algebra** **3 Credits**

Precalculus algebra for students in University Parallel/transfer programs of science, mathematics, engineering or computer science. This is one of two courses in a sequence that prepares students for Calculus I. It provides a review of algebraic, logarithmic and exponential functions. Topics include systems of equations and inequalities, maximization, exponential and logarithmic functions, and complex numbers. **Prerequisite(s):** High school algebra I and algebra II and ACT math score of at least 19; or DSPM 0850 or equivalent math placement score

◆★MATH 1720 **Precalculus Trigonometry** **3 Credits**

Precalculus trigonometry for students in University Parallel/transfer programs of science, mathematics, engineering or computer science. This is one of two courses in a sequence that prepares students for Calculus I. It provides a review of plane trigonometry and other analytical aspects used in calculus. This course is a prerequisite for MATH 1910 if high school trigonometry has not been completed. **Prerequisite(s):** High school algebra I and algebra II and ACT math score of at least 19; or DSPM 0850 or equivalent math placement score

◆★MATH 1730 **Precalculus** **5 Credits**

Precalculus for students in University Parallel/College Transfer programs of science, mathematics, engineering or computer science. This course prepares students for Calculus I. Review of algebraic, trigonometric, logarithmic and exponential functions. Topics include systems of equations and inequalities, maximization, trigonometric definitions, graphs, equations and identities, exponential and logarithmic functions and complex numbers. **Prerequisite(s):** High school algebra I and algebra II and ACT math score of at least 19; or DSPM 0850 or equivalent math placement score

◆★MATH 1830 **Basic Calculus & Modeling** **4 Credits**

Topics include differentiation and integration of polynomial, rational, exponential, and logarithmic functions and methods of numerical integration. Topics from business modeling, such as economic applications and case studies, will be explored with computer simulations, computer labs, or calculators. A graphing calculator is required. **Prerequisite(s):** High school algebra I and algebra II and precalculus and satisfactory placement scores; or MATH 1130 or 1710 or 1730

◆★MATH 1910 **Calculus I** **4 Credits**

Single variable calculus for students majoring in science, mathematics, engineering and computer science. Limits and differentiation of polynomial, rational, trigonometric, exponential and logarithmic functions and applications. ACT math score of at least 26 is recommended. **Prerequisite(s):** High school algebra I and algebra II and geometry and trigonometry and satisfactory placement test scores; or MATH 1730; or MATH 1710 and 1720

★MATH 1920 **Calculus II** **4 Credits**

Integral calculus with applications. Topics include methods of integration, sequences, series, polar coordinates and differential equations. Applications include real-world problems in physics, engineering, economics and biology. **Prerequisite(s):** MATH 1910

★MATH 2000 **Matrix Computations** **1 Credit**

Introduction to matrix calculations, including determinants, eigenvalues and eigenvectors. For students in engineering transfer programs. **Prerequisite(s):** MATH 2110 or consent of instructor

★MATH 2010 **Matrix Algebra** **3 Credits**

Topics include solutions of systems of linear equations and Euclidean vector operations. Concepts of linear independence, basis and dimension, rank, and nullity are defined and illustrated. Additional topics include eigensystems and general linear transformations. A computer laboratory component is required. **Prerequisite(s):** MATH 1920

of air power concepts and doctrine; and an assessment of communicative skills. A weekly leadership laboratory consisting of Air Force customs and courtesies, Air Force environment, drill and ceremonies, and field training orientation is mandatory. **Corequisite(s):** MSAF 2040

★MSAF 2030 Leadership Laboratory III 1 Credit

Leadership Laboratory includes a study of Air Force customs and courtesies, drills and ceremonies, and giving military commands; instructing, correcting, and evaluating the preceding skills; studying the environment of an Air Force officer; and learning about opportunities available to commissioned officers. **Corequisite(s):** MSAF 2010

★MSAF 2040 Leadership Laboratory IV 1 Credit

Leadership Laboratory includes a study of Air Force customs and courtesies, drills and ceremonies, and giving military commands; instructing, correcting, and evaluating the preceding skills; studying the environment of an Air Force officer; and learning about opportunities available to commissioned officers. **Corequisite(s):** MSAF 2020

MILITARY SCIENCE—ARMY

★MSCI 1100 Foundations of Officership 2 Credits

Formation and functioning of the American defense establishment and its relationship with American society, customs and traditions of the Army, aspects of military physical fitness training, selected topics dealing with current world affairs, challenges facing the military in the future. Introduces rifle marksmanship, mountaineering, drill and ceremony and optional field training exercises. **Prerequisite(s):** U.S. citizenship

★MSCI 1200 Basic Leadership 2 Credits

Introduction of basic leadership theory, principles and skills, with emphasis on effective oral communications. Students present a military skill subject briefing. Skills taught include rifle marksmanship, small unit communications and land navigation. Leadership lab focuses on rappelling, tactical formations, drill and ceremony and optional field training exercises. **Prerequisite(s):** U.S. citizenship

★MSCI 1300 Army Conditioning Program 1 Credit

Challenging instruction that concentrates on students' individual weaknesses and directly applies exercises designed to increase flexibility, muscular strength, and cardiorespiratory endurance. Student also develops the ability to design and lead a fitness program. May be repeated for up to 6 hours. This course is open to University of Tennessee, Knoxville, ROTC students only.

★MSCI 2100 Individual Leadership Studies 2 Credits

Practical application of small unit operating techniques and training to include first aid, evacuating casualties, marksmanship and weapons familiarization, map reading and land navigation, drill and ceremony, and customs and traditions. This course is open to University of Tennessee, Knoxville, ROTC students only. **Prerequisite(s):** U.S. citizenship and three years remaining to complete degree

★MSCI 2200 Leadership & Teamwork 2 Credits

Introduction to Army values, ethics, equal opportunity, and sexual harassment training; counseling techniques; problem solving; career decision making; motivating subordinates; developing and leading a physical fitness program; and military common task training. This course is open to University of Tennessee, Knoxville, ROTC students only. **Prerequisite(s):** MSCI 2100; or consent of instructor

MUSIC

★MUS 1000 Fundamentals of Music 3 Credits

Study of basic elements of music. No previous training or experience required.

◆★MUS 1030 Music Appreciation 3 Credits

Developing listening skills and an understanding of Western music from the ancient world through the 20th century.

MUS 1110	Music Theory I	3 Credits
This is the first in a sequence of four courses designed for the college music major. Prior music reading experience or MUS 1000 is recommended. Materials of music, including basic elements through triads, seventh chords and non-chord tones. Exercise in writing and analysis of music, with emphasis on Common Practice Period music. Corequisite(s): MUS 1300		
MUS 1120	Music Theory II	3 Credits
Continuation of MUS 1110. Prerequisite(s): MUS 1110 Corequisite(s): MUS 1400		
MUS 1300	Ear Training I	1 Credit
Development of proficiency in identifying and notating melodic, harmonic and rhythmic models. A computer laboratory component is included. Corequisite(s): MUS 1110		
MUS 1400	Ear Training II	1 Credit
Continuation of MUS 1300. Prerequisite(s): MUS 1300 Corequisite(s): MUS 1120		
★MUS 2000	Introduction to Music Literature	3 Credits
Study of basic forms of music and accepted masterworks through chronological approach. Prerequisite(s): Permission of program coordinator for non-music majors; no prerequisite for music majors		
MUS 2110	Music Theory III	3 Credits
Study of music theory as it evolved from the Common Practice Period into the chromaticism of the Romantic Period. Exercise in writing and analysis. Prerequisite(s): MUS 1120 Corequisite(s): MUS 2300		
MUS 2120	Music Theory IV	3 Credits
Continuation of MUS 2110. Prerequisite(s): MUS 2110 Corequisite(s): MUS 2400		
MUS 2300	Ear Training III	1 Credit
Development of skill in identifying and notating complex melodic, harmonic, and rhythmic models. A computer laboratory component is included. Prerequisite(s): MUS 1400 Corequisite(s): MUS 2110		
MUS 2400	Ear Training IV	1 Credit
Continuation of MUS 2300. Prerequisite(s): MUS 2300 Corequisite(s): MUS 2120		
MUS 2500	Conducting	2 Credits
Studies in the basic techniques of conducting choral and instrumental ensembles. Prerequisite(s): MUS 1110, 1120, 1300, 1400, 2000, 2110, and 2300 Corequisite(s): MUS 2120, 2400 and appropriate ensemble		

Applied Music: Ensembles

Music ensembles are available to the entire student body and may be repeated for credit. Students majoring in music must participate in at least one ensemble during each semester in which they are enrolled in 6 or more credit hours.

MUS 1511	Concert Chorale	1 Credit
A non-auditioned chorale ensemble that performs musical literature of various styles appropriate for a large mixed group. Emphasis will be on developing healthy vocal technique, ensemble skills and performance practice knowledge. Students will be required to purchase performance apparel. May be repeated for credit.		
MUS 1521	Variations	1 Credit
A select choral ensemble that specializes in performing literature of many different styles appropriate for a small chamber group. Emphasis will be on ensemble skills, musicality and expertise in various choral performance practices. Membership is by audition only. Students will be required to purchase performance apparel. May be repeated for credit. Prerequisite(s): Consent of instructor		
MUS 1540	Jazz Band	1 Credit
Ensemble experience for those students who are proficient in a brass, woodwind or keyboard instrument; guitar; or trap set. May be repeated for credit. Prerequisite(s): Consent of instructor		

- MUS 1732** **Guitar/Music Major (one-hour lesson)** **2 Credits**
Private instruction in guitar for the student majoring in music with concentration in guitar. May be repeated for credit. Solo class attendance required. **Corequisite(s):** participation in an appropriate Pellissippi State ensemble
- MUS 1740** **Woodwind/Nonmajor (half-hour lesson)** **1 Credit**
Private instruction in woodwind beginning at student's entering level of proficiency. May be repeated for credit.
- MUS 1741** **Woodwind/Nonmajor (one-hour lesson)** **2 Credits**
Private instruction in woodwind beginning at student's entering level of proficiency. May be repeated for credit.
- MUS 1742** **Woodwind/Music Major (one-hour lesson)** **2 Credits**
Private instruction in woodwind for the student majoring in music with concentration in woodwinds. May be repeated for credit. Solo class attendance required. **Corequisite(s):** participation in an appropriate Pellissippi State ensemble
- MUS 1750** **Brass/Nonmajor (half-hour lesson)** **1 Credit**
Private instruction in brass beginning at student's entering level of proficiency. May be repeated for credit.
- MUS 1751** **Brass/Nonmajor (one-hour lesson)** **2 Credits**
Private instruction in brass beginning at student's entering level of proficiency. May be repeated for credit.
- MUS 1752** **Brass/Music Major (one-hour lesson)** **2 Credits**
Private instruction in brass for the student majoring in music with concentration in brass. May be repeated for credit. Solo class attendance required. **Corequisite(s):** participation in an appropriate Pellissippi State ensemble
- MUS 1760** **String/Nonmajor (half-hour lesson)** **1 Credit**
Private instruction in string beginning at student's entering level of proficiency. May be repeated for credit.
- MUS 1761** **String/Nonmajor (one-hour lesson)** **2 Credits**
Private instruction in string beginning at student's entering level of proficiency. May be repeated for credit.
- MUS 1762** **String/Music Major (one-hour lesson)** **2 Credits**
Private instruction in string for the student majoring in music with concentration in strings. May be repeated for credit. Solo class attendance required. **Corequisite(s):** Participation in an appropriate Pellissippi State ensemble
- MUS 1770** **Percussion/Nonmajor (half-hour lesson)** **1 Credit**
Private instruction in percussion beginning at student's entering level of proficiency. May be repeated for credit.
- MUS 1771** **Percussion/Nonmajor (one-hour lesson)** **2 Credits**
Private instruction in percussion beginning at student's entering level of proficiency. May be repeated for credit.
- MUS 1772** **Percussion/Music Major (one-hour lesson)** **2 Credits**
Private instruction in percussion for the student majoring in music with concentration in percussion. May be repeated for credit. Solo class attendance required. **Corequisite(s):** Participation in an appropriate Pellissippi State ensemble
- MUS 1780** **Contemporary Piano Styles/Nonmajor(half-hour lesson)** **1 Credit**
Private instruction in keyboard jazz, blues, pop and rock for students with intermediate piano skills. Daily practice and workbook assignments are required. May be repeated for credit. **Corequisite(s):** Consent of instructor and audition may be required
- MUS 1781** **Contemporary Piano Styles/Nonmajor (one-hour lesson)** **2 Credits**
Private instruction in keyboard jazz, blues, pop and rock for students with intermediate piano skills. Daily practice and workbook assignments are required. May be repeated for credit.

Prerequisite(s): Consent of instructor and audition may be required

MUS 1782 Contemporary Piano Styles/Music Major (one-hour lesson) 2 Credits

Private instruction in piano for the student majoring in music with concentration in keyboard jazz. May be repeated for credit. Solo class attendance required. **Prerequisite(s):** Consent of instructor **Corequisite(s):** Participation in an appropriate Pellissippi State ensemble

OFFICE SYSTEMS TECHNOLOGY

OST 1001 Word I CBT 1 Credit

Fundamental concepts and applications of Microsoft Word for Windows for professional and/or personal use, emphasizing commonly used commands and strategies for formatting, editing and revising text. The course is created specifically to meet the Microsoft Certified Application Specialist program guidelines. It is delivered through Computer Based Training materials; some basic computer-use knowledge is required. **Prerequisite(s):** OST 1100 or equivalent

OST 1002 Word II CBT 1 Credit

Advanced concepts and applications of Microsoft Word for Windows for professional and/or personal use, emphasizing commonly used commands and strategies for formatting, editing and revising text. The course is created specifically to meet the Microsoft Certified Application Specialist program guidelines. It is delivered through Computer Based Training materials; some basic computer-use knowledge is required. **Prerequisite(s):** OST 1001 or equivalent

OST 1003 Excel I CBT 1 Credit

Basic spreadsheet applications emphasizing formatting procedures in generating reports; fundamentals of creating, entering data into spreadsheet, storing, using formulas and printing a spreadsheet. The course is created specifically to meet the Microsoft Certified Application Specialist program guidelines. It is delivered through Computer Based Training materials; some basic computer-use knowledge is required. **Prerequisite(s):** OST 1100 or equivalent

OST 1004 Excel II CBT 1 Credit

Intermediate spreadsheet applications emphasizing financial functions and data tables; creating, sorting and filtering lists; and working with multiple worksheets and workbooks. The course is created specifically to meet the Microsoft Certified Application Specialist program guidelines. It is delivered through Computer Based Training materials; some basic computer-use knowledge is required. **Prerequisite(s):** OST 1003 or equivalent

OST 1005 Word 3 Credits

An introduction to the popular Windows word processing program, Word. Emphasis is on efficient use of Microsoft Word features to create documents using the Microsoft Word for Windows software. Timed theory/production tests will be included. **Prerequisite(s):** OST 1100 or equivalent

OST 1006 PowerPoint CBT 1 Credit

Features, commands and capabilities of PowerPoint; fundamentals of creating business presentations for delivery via overhead transparencies, electronic slide shows and paper-based printouts. This course is created specifically to meet the Microsoft Certified Application Specialist program guidelines. It is delivered through Computer Based Training materials; some basic computer-use knowledge is required. **Prerequisite(s):** OST 1100 or equivalent

OST 1007 Access I CBT 1 Credit

Introduction to basic database features of Microsoft Access. Skills to create databases and tables, enter and update display, print records, create forms, restructure databases, use forms and sub-forms, use charts, create reports and sub-reports are developed. The course is created specifically to meet the Microsoft Certified Application Specialist program guidelines. It is delivered through Computer Based Training materials; some basic computer-use knowledge is required. **Prerequisite(s):** OST 1100 or equivalent

OST 1008 Access II CBT 1 Credit

Advanced database features and applications used to search through databases, create reports, queries, macro and Internet features will be presented. The course is created specifically

OST 2360 **Business Communications** **3 Credits**

Language arts skills, including punctuation, spelling, editing, proofreading, and vocabulary, are reviewed and stressed. Transcription of business communications from voice dictation using computer and transcribers. Students build on skills learned in keyboarding and word-processing courses. **Prerequisite(s):** OST 1105 and 2006 and ENGL 1010

OST 2600 **Access** **3 Credits**

A study of database applications and maintenance including customizing forms and reports, querying and integrating with other software programs using Microsoft Access. **Prerequisite(s):** OST 1211 or 1005 or equivalent

OST 2621 **Excel** **3 Credits**

A study to provide fundamentals of spreadsheet applications including entering, formatting, charting, managing, and analyzing data using Excel software. **Prerequisite(s):** OST 1211 or 1005 or equivalent

OST 2700 **Legal Terminology & Transcription** **3 Credits**

Transcription of legal documents from voice dictation using computers and transcribers. The coordination of keyboarding, transcribing and decision-making skills in the production of legal documents will be emphasized. Students will understand the purpose and function of each legal document and use accurate legal terminology. **Prerequisite(s):** LAW 1000 and OST 1005 or 1211

★OST 2910 **Medical Terminology I** **4 Credits**

An introduction to medical terminology through the study of anatomy and physiology and review of diseases, diagnostic procedures, and related treatments.

OST 2920 **Medical Terminology II** **4 Credits**

A continuation of the study of medical terminology with an emphasis on special procedures and treatments, pharmacology, and abbreviations. Medical documentation and chart formatting is an additional component. **Prerequisite(s):** OST 2910

OST 2925 **Medical Practicum** **2 Credits**

This course is a supervised work experience for OST majors with a concentration in Health Care Office Administration (HCOA) to work with area employers in the medical office field. Individual conferences are arranged instead of class attendance. **Prerequisite(s):** OST 2340, 2940; a minimum 2.5 GPA in OST courses and at least a 2.0 cumulative GPA; pursuit of an A.A.S. degree as an OST major; and a completed internship application submitted to the Coordinator of BCT Internships prior to enrolling in the course and the beginning of the term. Application is available on the Web: www.pstcc.edu/departments/bctpi/documents.html

OST 2932 **Trends in Medical Transcription** **3 Credits**

This course is an introduction to the profession of medical transcriptionist and will explore current issues and trends in the medical transcription field. In addition, an introduction to medical transcribing with an emphasis on report formatting, grammar and editing is included. **Prerequisite(s):** OST 1005 and 2910

OST 2935 **Medical Transcription** **3 Credits**

Transcription of medical communications from voice dictation using digital transcription software. Terminology and document formats are emphasized. **Prerequisite(s):** OST 1005 and 1105 and 2920

OST 2940 **Medical Insurance Coding** **3 Credits**

Introduction to insurance coding guidelines developed for use with the International Classification of Disease (ICD-9-CM), Current Procedural Terminology (CPT-4) and Health Care Financing Common Procedure Coding System (HCPCS). **Prerequisite(s):** OST 2920 or department approval

OST 2945 **Insurance Billing & Coding** **3 Credits**

A continuation of insurance coding with an emphasis on evaluation and management coding, use of modifiers, linkage of service codes to diagnoses codes, and hospital billing. Also covered is the use of billing software to enter patient information, process transactions and produce patient statements. **Prerequisite(s):** OST 2940

well as local state and federal court rules. **Prerequisite(s):** LAW 2210

+LAW 2300 **Contracts & UCC** **3 Credits**

Fundamental principles concerning the formation, performance, and enforcement of personal and commercial contracts; sales and secured transactions under the Uniform Commercial Code; and overview of federal and state law regulating consumer credit and collection procedures. **Prerequisite(s):** LAW 1050 and 1060 for PARS majors; no prerequisite for MGT majors

+LAW 2600 **Special Topics** **3 Credits**

Study and discussion of a selected topic in law. Content will vary. May be repeated with program advisor's consent. **Prerequisite(s):** LAW 1000 **Corequisite(s):** LAW 1060

LAW 2620 **Legal Clinic** **3 Credits**

Supervised practical experience in a legal clinic environment with classroom instruction to support the clinical experience. **Prerequisite(s):** LAW 1000 and minimum 3.0 GPA in LAW courses and department approval **Corequisite(s):** LAW 1060

+LAW 2800 **Legal Internship** **3 Credits**

Part-time supervised work experience in a law-related environment in which the student is assigned definite tasks and responsibilities. Individual conferences and seminars are arranged instead of class attendance. **Prerequisite(s):** Completion of 15 hours of LAW courses with a minimum 2.5 GPA in LAW courses and second-year status and department approval

LAW 2900 **CLA Review** **3 Credits**

Comprehensive review of legal ethics, interviewing, legal analysis, terminology, legal research, and substantive areas of law, including litigation, contracts, corporations, bankruptcy, administrative law, criminal law, real estate and probate. Recommended for students taking national CLA exam. **Prerequisite(s):** Department approval

+Law specialty course

PHILOSOPHY

◆★PHIL 1030 **Introduction to Philosophy** **3 Credits**

An investigation of the fundamental questions pertaining to reality, truth, freedom, the nature of humankind, the existence of God and social/political theory.

★PHIL 1300 **Critical Thinking** **3 Credits**

An introduction to practical reasoning. This course covers the nature of deductive and inductive arguments, diagramming arguments, the search for implicit premises and conclusions and the role of falsehood, deception and emotion in reasoning. More important, PHIL 1300 is a careful study of argument construction and evaluation.

◆PHIL 1500 **Philosophy & Film** **3 Credits**

Examines classical philosophical questions concerning knowledge, truth, minds, bodies, persons, morality, religion and the meaning of life as raised in and through the medium of contemporary film.

◆★PHIL 2010 **Survey of World Religions** **3 Credits**

A comparative introduction to the origins, developments, teachings and practices of the major world religions, such as Taoism, Confucianism, Hinduism, Buddhism, Judaism, Christianity and Islam.

◆PHIL 2400 **Introduction to Ethics** **3 Credits**

An introduction to moral theory and/or a consideration of a variety of moral problems, including abortion, suicide and euthanasia, capital punishment, women's issues, sex and AIDS, animals and the environment and war.

★PHIL 2420 **Ethical Theory & Its Business Applications** **3 Credits**

An introduction to moral philosophy and a consideration of moral issues related to business, including corporate responsibility, employee rights, discrimination, investment, and advertising.

★PHIL 2450 **Medical Ethics** **3 Credits**

This is a study of ethical issues in medicine. Topics include abortion, euthanasia, humane experimentation, and fairness in health care delivery and in the doctor-patient relationship.

PHOTOGRAPHY

★PHO 1000 Introduction to Photography 3 Credits

A beginning course in the study of photography as visual communication with emphasis on the single lens reflex camera. Exposure, metering, focus, depth of field, lenses, electronic flash, basic lighting, and composition are explored. Basic workflow and image enhancement are discussed. Students are responsible for providing a single lens reflex digital or film camera. Hybrid sections require a digital SLR camera.

PHO 1100 Advanced Photographic Techniques 3 Credits

Advanced exploration of camera controls, photographic systems, lenses, and lighting techniques. This is a basic hands-on study of advanced photographic theory and how it relates to portrait, industrial, commercial photography, and other photographic genre. Particular attention is paid to developing professional skills and attitudes. Students are responsible for providing a single lens reflex digital or film camera. **Prerequisite(s):** PHO 1000 or consent of instructor

PHO 2060 Advanced Digital Imaging Techniques 3 Credits

Students explore the unique properties and formats in digital photography including studio and location digital images as well as IPIX and Apple Quicktime VR. Special attention is paid to technical differences including exposure, lighting, focal length changes and resolution. Other topics covered are scanning methods and preparing a digital image for different types of reproduction including print, video and Web publishing. **Corequisite(s):** MDT 2100

PHO 2100 Nature & Travel Photography 3 Credits

A study of basic location photography: nature, urban and rural. The emphasis is on on-site photography, coping with changing lighting and weather conditions, equipment and material selection, and documentation. Students are responsible for arranging transportation to and from shooting locations. **Prerequisite(s):** PHO 1000 and 1100 **Corequisite(s):** PHO 2060 and MDT 2100

PHO 2200 Commercial Photography 3 Credits

An advanced study in solving studio and location problems faced by the commercial photographer in shooting products and models. Emphasis is on the use of digital single lens reflex cameras, professional lighting equipment, props, and setting to fulfill practical assignments. **Prerequisite(s):** PHO 1000 and 1100 **Corequisite(s):** PHO 2060 and MDT 2100

PHO 2300 Portrait Photography 3 Credits

Studio lighting and camera techniques are explored emphasizing the portraiture. Students will use digital single lens reflex cameras and a variety of lighting equipment. Topics explored include posing, makeup, wardrobe, setting, and business practices. **Prerequisite(s):** PHO 1000 and 1100 **Corequisite(s):** PHO 2060 and MDT 2100

PHO 2400 Photojournalism 3 Credits

A study of the methods and techniques of photojournalism as found in contemporary publications such as newspapers, magazines, and corporate publications. Topics include spot news, events, sports, features, environmental portraiture, photo essays, and professional practices. **Prerequisite(s):** PHO 1000 and 1100 **Corequisite(s):** PHO 2060 and MDT 2100

PHO 2500 Wedding & Retail Photography 3 Credits

A study of the methods, techniques, and business practices of contemporary wedding and retail photography. Topics include the bridal portrait, location lighting, candid photography, location portraits, special event photography, marketing, salesmanship, and working with vendors and clientele. **Prerequisite(s):** PHO 1000 and 1100 **Corequisite(s):** PHO 2060 and MDT 2100

PHO 2700 Special Topics in Photography 1-3 Credits

Advanced photographic projects, emphasizing shooting techniques, darkroom techniques, aesthetic exploration, or academic research. May be repeated for credit up to nine hours.

Prerequisite(s): PHO 1000 and 1100 **Corequisite(s):** PHO 2060 and MDT 2100

PHO 2850 **Photography Portfolio** **1 Credit**

Students will produce a working portfolio of their own photography to be used to represent their work in the marketplace. Emphasis will be on selection of contents, materials, and professional presentation. Students are responsible for providing camera, paper, and other materials. **Prerequisite(s):** PHO 1000 and 1100 **Corequisite(s):** PHO 2060 and MDT 2100

PHO 2950 **Independent Photographic Projects** **3 Credits**

This course is carried out independently by the student after consultation with a photography advisor to specify the project. **Prerequisite(s):** PHO 1000 and 1100 **Corequisite(s):** PHO 2060 and MDT 2100

PHYSICAL EDUCATION

★PHED 1000 **Orientation to Exercise Science** **1 Credit**

Overview of the professional and disciplinary area of exercise science, with emphasis on introductory field experience. For exercise science majors only.

★PHED 1001 **Orientation to Sport Management** **1 Credit**

Overview of the professional and disciplinary area of sport management, with emphasis on introductory field experience. For sport management majors only. **NOTE:** PHED 1010 through 2660 are physical education activity courses. Two different activities, each 1 to 2 credit hours, are required for University Parallel majors.

★PHED 1010 **Lifetime Fitness** **1 Credit**

Theory, knowledge and practical experience in principles of wellness relating to the healthful aspects of lifetime fitness.

★PHED 1020 **Beginning Bowling** **1 Credit**

Selection of equipment, correct approach and release and scoring. Fee for facility and equipment rental.

★PHED 1030 **Beginning Softball** **1 Credit**

Instruction in fundamentals, rules and strategies.

PHED 1060 **Wilderness Camping** **3 Credits**

The introduction of equipment, skills and practices associated with hiking and camping. Laboratory experience will consist of announced field trips.

★PHED 1070 **Introduction to Skiing** **1 Credit**

The fundamentals of skiing and skiing safety.

★PHED 1110 **Elementary Ballet** **2 Credits**

Instruction and practice in elementary classical ballet techniques.

★PHED 1120 **Elementary Modern Dance** **2 Credits**

Instruction and practice in elementary modern dance techniques.

★PHED 1130 **Elementary Jazz Dance** **2 Credits**

Instruction and practice in elementary jazz dance styles and techniques.

PHED 2000 **Special Topics** **1-3 Credits**

Opportunity to learn and participate in various sport, fitness and recreational activities. Content of the course will vary. The course might involve international travel and/or contain activities that require additional fees. The student will be responsible for paying all travel-related and/or activity-related expenses. The class content and travel itinerary, if any travel is involved, are determined by the instructor of the course. **Prerequisite(s):** Consent of instructor

PHED 2010 **Archery** **1 Credit**

The introduction of skills, general rules, safety and techniques related to the sport of archery, with particular emphasis on acquisition of skills.

★PHED 2020 **Badminton** **1 Credit**

The introduction of skills, strategy and instruction on using a topographical map and compass to navigate in wilderness terrain.

★PHED 2900 Human Motor Behavior 3 Credits

Theories and principles explaining motor behavior; psychological factors related to and/or affecting motor skill acquisition and performance.

PHYSICS

◆PHYS 1300 Concepts of Physics 3 Credits

A survey of physics concepts and content as applicable to the Tennessee K-8 curriculum standards and the National Science Education Standards. Instructional topics include mechanics, heat, electricity, magnetism, sound and light.

★PHYS 1310 Mechanics & Heat I W/Lab 4 Credits

A calculus-based introduction to mechanics and heat. This course covers vectors, Newton's laws of motion, static and dynamic equilibrium of particles, work and energy, impulse and momentum, torque and rotational equilibrium, and elasticity. Course includes three hours of lecture and three hours of laboratory applications. **Prerequisite(s):** MATH 1910

★PHYS 1320 Mechanics & Heat II W/Lab 4 Credits

A calculus-based introduction to mechanics and heat. This course is a continuation of Mechanics & Heat I. It covers rigid body equilibrium, periodic motion, fluid mechanics, heat and thermodynamics, ideal gas behavior, oscillatory motion, and acoustics. Course includes three hours of lecture and three hours of laboratory applications. **Prerequisite(s):** PHYS 1310 **Corequisite(s):** MATH 1920

◆★PHYS 2010 Noncalculus Based Physics I 4 Credits

This course includes the basic principles of physics with their applications in pre-medical, -dental, -pharmacy, and -veterinary programs and covers mechanics, heat, and wave motion including sound. Course includes three hours of lecture and three hours of laboratory applications. **Prerequisite(s):** MATH 1730, or MATH 1130 and 1720

◆★PHYS 2020 Noncalculus Based Physics II 4 Credits

This course is a continuation of Elements of Physics I. It covers electricity and magnetism, optics, and modern physics. Course includes three hours of lecture and three hours of laboratory applications. **Prerequisite(s):** PHYS 2010

◆★PHYS 2110 Calculus Based Physics I 4 Credits

For students majoring in engineering, mathematics and physics. This is a calculus-based approach to topics in electricity and magnetism. Course includes three hours of lecture and three hours of laboratory applications. **Prerequisite(s):** MATH 1920 **Corequisite(s):** ENS 1510

◆★PHYS 2120 Calculus Based Physics II 4 Credits

For students majoring in engineering, mathematics and physics. This is a calculus-based approach to topics in wave motion, optics and modern physics. Course includes three hours of lecture and three hours of laboratory applications. **Prerequisite(s):** PHYS 2110

POLITICAL SCIENCE

◆★POL 1010 United States Government & Politics 3 Credits

This course provides an introduction to U.S. government and politics focusing on citizen participation and governmental institutions. Topics include the Constitution, federalism, civil liberties and civil rights, voting, the media, parties and groups, public opinion, Congress, the presidency, the federal bureaucracy, and the courts.

◆★POL 1020 Introduction to Political Science 3 Credits

Analysis of politics and political systems in various countries. Topics include model states; democratic, authoritarian, and totalitarian states; political socialization and participation; political leadership; public policy; international relations; and revolution, terrorism, and war.

PSYCHOLOGY

SECURITY ENGINEERING AND ADMINISTRATION TECHNOLOGY

SEAT 1000 Security Operations Administration 3 Credits

An overview of the scope of the security industry, providing an historical perspective on the development of the security field with an emphasis on current role and function. Aspects of protecting people, information and physical assets are examined. Principles and frameworks for recognizing security issues and solutions are introduced within the contexts of contemporary business, government, and public settings.

SEAT 1010 Computer Forensics 3 Credits

Using real-world scenarios and related assignments and exercises, this course provides an overview of computer forensics for the security industry. Topics include information security issues, seizure of computer data, crime scene investigation and the procedures used in tracking cybercriminals.

SEAT 1100 Investigation Techniques 3 Credits

This course introduces students to the different types of security investigations applicable in a variety of public and private settings. Interviewing techniques, development of investigative documentation, and observation skills and use of technical resources for investigative purposes are covered.

SEAT 1300 Emergency Planning 3 Credits

This course introduces the student to emergency planning and management relative to a variety of human and natural disasters. Tools such as security surveys and audits are introduced and practiced in application activities. Students learn to identify and analyze potential disasters, provide corrective action, and plan, organize, and implement contingency and recovery programs.

SEAT 1500 Security Management I 3 Credits

This course is an overview of principles and issues in security management. Topics include personnel management, security planning and evaluation, organizational leadership, and communication. **Prerequisite(s):** SEAT 1000

SEAT 1700 Physical & Personnel Security 3 Credits

This course examines principles of both physical and personnel security. Risk management and vulnerability assessment are included, along with aspects of facility and environmental architecture, physical security methods, loss prevention strategies, guard forces, and government public safety infrastructure. Students demonstrate integration of security components for specific threats. **Prerequisite(s):** SEAT 1000

SEAT 1900 Legal Aspects of Security Administration 3 Credits

This course is an overview of important legal and ethical issues regarding security administration. Students examine such issues as personnel law and obligations, contracts, constitutional rights of individuals, legal liability of security professionals and organizations, legal compliance, and ethical standards. **Prerequisite(s):** SEAT 1000

SEAT 2010 Networks for Security Specialists 3 Credits

This course provides a computer-based comprehensive overview of the protection of digital knowledge, data, and capabilities from misuse or tampering. Step-by-step general instruction on implementing firewalls, wireless security, desktop protection, biometrics, and many of today's essential security measures are covered. The student will acquire an understanding of Internet connectivity architecture, e-commerce, encryption, and intrusion detection – plus, security policy and current law, the management of risk, and the process of implementing and managing security.

SEAT 2200 Security Intelligence Operations 3 Credits

This course will provide the student with an overview of tactical intelligence acquisition, analysis, and dissemination. The student will learn basic criminal intelligence gathering and intelligence analysis techniques commonly used by the contemporary law enforcement and security agencies. The course provides a hands-on practical approach using real-world examples and case scenarios. Students will conduct surveillance and counter-surveillance operations, learn how to use a dead drop, and how to conduct a first meeting with an informant. Students

★THEA 2210 **Acting II** **3 Credits**

The further exploration of acting techniques through exercises, scene work and period/style study. **Prerequisite(s):** THEA 2200

THEA 2250 **Creative Drama** **3 Credits**

Innovative methods of improvisational drama to develop creative thinking, improve oral and written communication and learn dramatic structure. An emphasis is on problem solving through playwriting. The techniques can be used in theatre, education, therapy, childcare and recreation. **Prerequisite(s):** ENGL 1010

★THEA 2260 **Voice & Movement I** **3 Credits**

Basic skills, concepts, and techniques of movement and self-use for the stage. Basic exercises from the varied movement disciplines are taught. Students are prepped for the addition of skill sets in V&M II through practice in Yoga, Feldenkrais, and Fitzmaurice Voicework.

THEA 2280 **Voice & Movement II** **3 Credits**

Basic skills, concepts, and techniques of movement and self-use for the stage. Basic exercises from varied movement and voice disciplines are taught. Students add skill sets of basic stage combat and IPA. **Prerequisite(s):** THEA 2260 or consent of instructor

THEA 2311 **Advanced Play Production** **3 Credits**

Advanced practical experience in a laboratory setting in the different phases of putting on a play, including staging, lighting, publicity, makeup and directing. The course will culminate in a fully staged production. May be repeated once for credit (maximum of 6 hours). **Prerequisite(s):** THEA 1311 or permission of instructor

THEA 2998 **Acting for the Camera** **3 Credits**

This course provides acting students with an every-class opportunity for evaluated on-camera performance within a working studio. Performance includes both as an actor (using written screenplays and playing other characters) and as a performer or talent (news anchor, program host, interviewer, etc.). **Prerequisite(s):** Consent of instructor

TRANSITIONAL STUDIES

(SEE ENGLISH, MATHEMATICS, READING FOR RESPECTIVE "DSP" COURSES)

VIDEO PRODUCTION TECHNOLOGY

VPT 1015 **Sound Production** **3 Credits**

An introduction to basic audio production equipment, processes and analog and digital systems, including introduction to ProTools. Analog and digital systems will be used to record, mix and produce a variety of aural media. Emphasis will be placed on recording on location and in the studio, mixing and effects, and processing of multiple sound tracks for use in film, television/video, and the multimedia environment.

VPT 1020 **Special Topics in Video** **3 Credits**

Selected basic and advanced topics in video, including specialized software and other additional topics. Current topics include Final Cut HD Studio, After Effects, Pro Tools and more. May be repeated for credit up to 6 hours. **Prerequisite(s):** Consent of instructor

VPT 1021 **Adobe After Effects** **3 Credits**

Introduction to one of the industry's most popular motion graphics software tools. Students produce animations through key framing, text, masking, mattes and 3D space. Compositing video, film and title sequences are emphasized.

VPT 1022 **Guerrilla Filmmaking** **3 Credits**

This is an introductory course for both the general interest student and the VPT major. It is a hands-on course covering all aspects of low- to no-budget filmmaking. Pre-production, production, post-production and distribution will be covered. By the end of the course, the class will have collectively produced and distributed an actual film.

VPT 1023 **Guerrilla Sound** **3 Credits**

This is an introductory hands-on production course for students interested in experiencing the

process of creating a soundtrack for film or video. The course may be taken with VPT 1022 Guerrilla Filmmaking for a broader production experience and increased understanding of soundtrack design and creation. Basic sound design, recording and mixing are included using several industry standard software tools, including ProTools.

VPT 1030 Introduction to Desktop Video/Audio 3 Credits

An introductory course for VPT students covering basic desktop computer operating systems and the technologies used to bring photographic (film, video, still) images and audio into the digital domain. Students will learn to prepare audio and video media from pre-production to postproduction, using applications that include QuickTime, ProTools and Avid, for analog and digital delivery systems and the Internet.

VPT 1045 Technical Video Production 3 Credits

Introduction to the basic technologies and processes used in video: the system and the equipment, the basic procedures, techniques and the process of design and production. Students shoot, edit in camera; analyze short projects; learn the basic principles of audio and visual communication; and employ the concepts and vocabulary of motion picture aesthetics. The production process and the job roles are examined throughout, from idea through shooting, through postproduction.

VPT 1050 Electronic Cinematography 3 Credits

This course will focus upon the technical and aesthetic aspects of motion picture photography (using an electronic camera), including image composition, lenses, aperture and shutter speed settings, how to “shoot for editing,” camera mounting equipment, field and studio lighting equipment and techniques, video signal test equipment and theory, and other various related technologies and grip equipment. The course will utilize “expert examples” by world-famous directors of photography and feature hands-on assignments with professional-level facilities and equipment. **Corequisite(s):** VPT 1045

VPT 1090 Campus Broadcast I (Studio Operations) 3 Credits

Hands-on workshop providing beginning students with an opportunity to participate in live-to-tape studio television productions and to support VPT 1500 students as production crew for a variety of in-studio production. Camera, teleprompter, and character generator (graphics) operation; sound support and other technical aspects of production are included.

VPT 1210 Video Editing 4 Credits

The course is the second in a three-course sequence and is designed to increase student skills with Avid software, aesthetic theory, and application and practical use of linear and nonlinear editors. **Prerequisite(s):** VPT 1030

VPT 1220 Final Cut Pro 3 Credits

This course is offered as a beginning-level Final Cut Pro HD course. Covers all aspects of the application, including multilayered motion graphics, nested effects, multitrack soundtracks and compression for Internet and DVD delivery.

VPT 1400 Scriptwriting for Mass Media 3 Credits

Writing of visually oriented scripts for the following: commercials, training programs, communications and documentary programs, emphasizing the interdependence between the visual and auditory portions of the script. **Prerequisite(s):** ENGL 1010

VPT 1500 Campus Broadcast II (Producing and Directing for TV) 3 Credits

Studio production course emphasizing the development of producing and directing skills in preparation for developing news/communications programming for Pellissippi State’s on-campus video news magazine. Students will produce and direct studio programming using VPT 1090 students as production crew. **Prerequisite(s):** VPT 1030 and 1045 and 1090 **Corequisite(s):** VPT 1015 and 1210 and 1400

VPT 2015 ProTools 3 Credits

Advanced sound techniques, emphasizing creative control of audio and sound for picture using ProTools. Multiple soundtracks with voice, music, and effects will be produced, edited, and mixed for distribution in various formats, primarily for video and CD. The focus is primarily on stereo editing and mixing, although some surround concepts will be introduced.

WOMEN'S STUDIES

◆★WMN 2200

Women in Society

3 Credits

An interdisciplinary analysis of women's roles and opportunities in the United States based on current research in the social sciences. Attention will also be given to the changes in women's societal roles throughout history.