

Courses

Accounting

ACCT 101

Introduction to Accounting [RE] • 5.0 Credits

Students will learn how to integrate accounting principles into a small business environment in order to record and process financial data. Students will also develop financial data for business and managerial decision-making, financial performance presentation, and business planning and tax planning. Students will also gain experience using Excel and QuickBooks as information tools to track and develop business information. Offered in winter quarter. It is recommended that students complete either CS 101 or CA 120, CA 140, CA 150, and CA 170 prior to enrollment.

ACCT 105

Business & Payroll Tax Accounting [RE] • 5.0 Credits

Formerly ACCT 105, BA 105, BUS 105

A study of the various aspects of federal, state, and local taxes levied upon business. Emphasis placed on Federal Income and Social Security tax withholding, sales tax requirements, and various state regulations regarding employee health, safety, unemployment insurance, and business and occupation tax. Students practice completion of various tax reports and maintenance of accurate tax-related records. Offered spring quarter only. **Prerequisite: Completion of ACCT& 202 with a 2.0 or higher, or concurrent enrollment.**

ACCT 107

Federal Income Taxes [RE] • 5.0 Credits

Formerly ACCT 107, BA 107, BUS 107

This course emphasizes tax planning and tax recognition, not tax expertise. Students will be aware of the many issues and general solutions in taxation, including tax considerations in business decision-making, tax effects of business transactions; taxation of compensation; fringe benefits; capital gains; fixed asset transactions; tax credits; alternative minimum tax and passive activity rules, but leaving the detailed tax planning or compliance work for other tax courses. **Prerequisite: Completion of ACCT& 202 with a 2.0 or higher, or concurrent enrollment.**

ACCT 111

Computerized Accounting [RE] • 5.0 Credits

Formerly ACCT 111, BA 111, BUS 111

This course requires students to use QuickBooks to account for service and merchandising businesses. The different modules include Accounts Receivable, Accounts Payable, Payroll, and integration of Microsoft Excel and Word. **Prerequisite: Completion of ACCT& 202 with a 2.0 or higher, or concurrent enrollment.**

ACCT& 201

Principles of Accounting I • 5.0 Credits

Formerly ACCT& 201, BA 251, BUS 251

Fundamentals of accounting as applied to actual business situations. Introduction to the accounting cycle for service and merchandising firms controlling to purchases and sales with business papers, special journals, and subsidiary ledgers. **Prerequisite: Completion of MATH 40 with a 2.0 or higher, or appropriate placement. It is also recommended that students complete either CS 101 or CA 120 and CA 150 prior to enrollment.**

ACCT& 202

Principles of Accounting II • 5.0 Credits

Formerly ACCT& 202, BA 252

The theory and practice of accounting, including financial statements.

Emphasis on partnership and corporate accounting. **Prerequisite:**

Completion of ACCT& 201 with a 1.0 or better, or instructor permission. It is recommended that students complete either CS 101 or CA 120 and CA 150 prior to enrollment or concurrent enrollment with ACCT& 202.

ACCT& 203

Principles of Accounting III • 5.0 Credits

Formerly ACCT& 203, BA 253

A continuation of ACCT& 202. Introduction of manufacturing and cost accounting. Analysis of financial statements, budgeting, and cost volume analysis. **Prerequisite: Completion of ACCT& 202 with a 1.0 or higher, or instructor permission. It is recommended that students complete either CS 101 or CA 120 and CA 150 prior to enrollment.**

ACCT 222

Advanced Microsoft Excel [RE] • 5.0 Credits

Formerly ACCT 222, BUS 222

Students will develop advanced business-related spreadsheet skills in developing and analyzing Excel worksheets under common business management scenarios. Topics include formulas, formatting, financial and lookup functions, charts, pivot tables, data tables, and other advanced features used to make business decisions and communicate financial, forecasting, and operational performance. **Prerequisite: Completion of MATH 40 with a 2.0 or higher. It is also recommended that students complete CS 101 prior to enrollment.**

ACCT 257

Governmental Accounting [RE] • 5.0 Credits

Formerly ACCT 257, BA 257, BUS 257

Accounting practices for the growing nonprofit segment of the economy (governmental units, educational institutions, hospitals, etc.) with a comparison to accounting for profit-making organizations. Includes a practice set to be used on microcomputer. **Prerequisite: Completion of ACCT& 201 with a 0.7 or higher.**

ACCT 264

Fraud & Accounting Information Systems [RE] • 5.0 Credits

Formerly ACCT 264, BA 264, BUS 264

This course provides a perspective of Accounting Information Systems through the examination of fraud including various schemes, skimming, and check tampering. Accounting and legal principles provide a context for the big picture of occupational fraud and abuse. The behavioral theory and social factors that motivate perpetrators of fraud are explained. The Systems Understanding Aid (SUA) is an accounting practice set supported with documents to enhance understanding an accounting system. **Prerequisite: Completion of ACCT& 201, ACCT& 202, or ACCT& 203 with a 0.7 or higher.**

Administrative Office Technology

AOT 117

Office Orientation [RE] • 4.0 Credits

This class encompasses business ethics, personal values, human relations, and effective communication in an office environment. This course focuses on attaining and retaining entry-level employment.

AOT 142

General Office Procedures [RE] • 5.0 Credits

This class bridges the gap between the classroom and the office by prioritizing work and managing time, preparing realistic office

Courses

assignments, filing office documents; managing personal information (PIM software); and conducting online research.

AOT 156

Supervised Employment [RE] • 2.0 Credits

Formerly AOT 156, AOT 195

This is a supervised work experience involving the application and practice of skills and principles learned in the classroom. The student will be placed with an employer where the environment will build on the student's area of career interest and prepare them to be productive employees. Instructor permission is required to enroll. Grade is pass/no credit.

Adult Basic Education

ABE 9

Ed Interviewing • 0.5–3.0 Credits

The purpose of this course is to improve learner retention, persistence, and performance through research-proven goal setting, problem-solving, and evaluation, intervention, and self-awareness strategies. \$25 per quarter BeDA tuition.

ABE 50

Basic Ged(R) Prep • 1.0–15.0 Credits

Individualized instruction to prepare students to pass the four official GED(R) tests with a total score of 600 points or better. The GED(R) test consists of a battery of four individual tests. The four tests include Language arts-writing, Science, Social Studies, Mathematical Reasoning, and Reasoning Through Language Arts. \$25 per quarter BeDA tuition.

ABE 51

ABE Math Level 1 • 1.0–10.0 Credits

Emphasizes development of strategies to effectively solve mathematical problems for high school completion, and college and career readiness. Students meet class objectives through the analysis of numbers, place values, shapes and measurement to solve addition and subtraction problems. Students build their math vocabulary as well as note taking and technology skills. \$25 per quarter BeDA tuition.

ABE 52

ABE Math Level 2 • 1.0–10.0 Credits

Emphasizes development of strategies to effectively solve mathematical problems for high school completion, and college and career readiness. Students meet class objectives through the analysis of numbers, place values, shapes and measurement to solve addition, subtraction, multiplication and division problems. Students build their math vocabulary as well as note taking and technology skills. \$25 per quarter BeDA tuition.

ABE 53

ABE Math Level 3 • 1.0–10.0 Credits

Emphasizes development of strategies to effectively solve mathematical problems for high school completion, and college and career readiness. Students meet class objectives through the analysis of numbers, place values, shapes and measurement to solve addition, subtraction, multiplication and division problems with whole numbers, decimals, fractions and percents. Students build their math vocabulary as well as note taking and technology skills. \$25 per quarter BeDA tuition.

ABE 54

ABE Math Level 4 • 1.0–10.0 Credits

Emphasizes development of strategies to effectively solve mathematical problems for high school completion, and college and career readiness.

Students meet class objectives through the use of fractions, percents, ratios, and proportions to solve problems relating to measurements, geometry and basic algebra. Students build their math vocabulary as well as note taking and technology skills. \$25 per quarter BeDA tuition.

ABE 60

Advanced Ged(R) Prep • 1.0–15.0 Credits

Individual instruction to enable students to successfully complete all four of the GED(R) tests. Students may already have completed two of the tests and need to pass the two remaining tests. Or the student could have passed all four GED(R) tests but needs to accumulate more points to reach the necessary total score of 600 points. \$25 per quarter BeDA tuition.

ABE 61

ABE English Level 1 • 1.0–10.0 Credits

Emphasizes development of strategies to effectively communicate in English for high school completion, and college and career readiness. Students read and report on books, short stories, graphs, maps, and informational text that relate to social studies, science and literature. Students meet composition objectives by writing complete sentences in short answers, notes, and paragraphs. Students build their vocabulary for reading and writing as well as improve spelling and technology skills. \$25 per quarter BeDA tuition.

ABE 62

ABE English Level 2 • 1.0–10.0 Credits

Emphasizes development of strategies to effectively communicate in English for high school completion, and college and career readiness. Students read and report on books, short stories, graphs, maps, and informational text that relate to social studies, science and literature. Students meet composition objectives by writing complete sentences in short answers, notes, and paragraphs. Students build their vocabulary for reading and writing as well as improve spelling and technology skills. \$25 per quarter BeDA tuition.

ABE 63

ABE English Level 3 • 1.0–10.0 Credits

Emphasizes development of strategies to effectively communicate in English for high school completion, and college and career readiness. Students read and report on college-level readings, graphs, maps, and informational texts that relate to social studies, science, and literature. Students meet composition requirements by composing texts that utilize complex writing patterns. Students research topics based on a focused question, compare texts from multiple sources, evaluate credibility of sources, and learn proper citation skills. \$25 per quarter BeDA tuition.

ABE 70

Ged(R) Math • 1.0–5.0 Credits

Individualized instruction to prepare students to pass the official Mathematics Reasoning GED(R) tests. \$25 per quarter BeDA tuition.

ABE 90

I-BEST Special Studies • 1.0–10.0 Credits

This course integrates Washington Adult Basic Education ABE level 5 and 6 reading, writing, math, and listening standards and indicators with a college-level course. Example: Child Development Associate certificate, Nursing Assistant Certified, or Phlebotomy. \$25 per quarter BeDA tuition.

Courses

Agricultural Food Systems

AFS 101

Introduction to Agricultural Systems • 5.0 Credits

Introduction to the disciplines, history, philosophy, theory, and integration of fields of agriculture, food production, manufacturing and distribution, and rural society to define and solve real-world problems. Provides an increased awareness of emerging agriculture in the Columbia Basin including crop management, sustainable agriculture, niche and specialty markets, organic crop and animal production, water management, global issues, technology innovations, financial management, global issues, technology innovations, financial management, bioterrorism, crop insurance programs, emerging commodities, biotechnology, and crop innovations.

AFS 199

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework.

AFS 201

Agricultural & Food Systems W/ Lab [RE] • 5.0 Credits

Introduction to the development of tools and skills in building, evaluating, and applying systems in agricultural production, food manufacturing and distribution, rural society, and society as a whole. Focus is on the types of systems, construction, and analysis including the history, philosophy, and theory of different agricultural systems. It is recommended that students complete AFS 101 prior to enrollment.

Agriculture

AG 101

Crop Production I Field Crops W/ Lab [RE] • 4.0 Credits

This course covers introduction to principles of crop production, including crop growth, development, yield and quality. Emphasis is placed on applying technology advances in agronomy to active crop-production situations, including basic soils, climate, crop physiology, and breeding. Major field and forage crops grown in the Columbia Basin and Washington state will be covered. Production practices such as planting, maintenance, storage techniques and harvesting will also be covered. \$35 science fee.

AG 102

Introduction to Animal Science W/ Lab • 5.0 Credits

Introductory Animal Science including the history, philosophy, and theory of animal husbandry. Types and breeds of livestock, terminology, methods, management systems, techniques of animal and poultry production, and consumer impact are discussed. \$35 science fee.

AG 107

Agriculture Safety [RE] • 3.0 Credits

This course is an overview of various hazards associated with agriculture. Hazards examined include machinery, controlled spaces, pesticides, and other items in the agricultural workplace. The course also covers identifying safety hazards, applying procedures, analyzing safety rules and regulations. Emphasis will be placed on safety and worker protection in the agricultural workplace, agricultural pesticide uses and applications, chemical safety, and waste hazards associated with pesticides and fertilizer use. Safety standards for agriculture identified by the Washington State Administration codes (WAC 296-307) will be covered. \$35 science fee.

AG 117

Agriculture Mechanics and Machinery W/ Lab [RE] • 4.0 Credits

This course emphasizes agriculture equipment including tractors, planters, harvesters and balers used in modern agriculture. The course also covers economic factors, operation principles, adjustments and maintenance of commonly used machines. Maneuvering, attaching, detaching, and using implements will be covered. \$35 science fee.

AG 140

Weed Science W/ Lab [RE] • 4.0 Credits

The course provides a background on weed identification, biology, distribution of weeds, interference in crops, and weed ecology. Weed control by preventive, cultural, biological, mechanical, and chemical means. The course also covers herbicide terminology, equipment calibration, and dosage calculations. \$35 science fee.

AG 181

Irrigation Principles and Management W/ Lab [RE] • 4.0 Credits

This course focuses on elements of irrigation including methods, management and the irrigation industry in the Columbia Basin. The course covers irrigation methods, systems, efficiencies, equipment, and their relationship to soils and plants. The course will also cover water scheduling, flow measurement, and irrigation management. Water supply, quality, and issues will also be discussed. \$35 science fee.

AG 199

Special Studies [RE] • 1.0–20.0 Credits

A class used to explore new coursework. \$35 science fee.

AG 201

Soils W/ Lab [RE] • 5.0 Credits

Formerly AG 201, BIO 201, BIOL 201

A general background and understanding of soils, soil formation processes, soil origins with an emphasis on soil origins in the Pacific Northwest, soil taxonomy, organic matter, water relationships, pH, and biological relationships. \$35 science fee. **Prerequisite: This course is cross-listed with BIOL 201. Students completing AG 201 may not receive graduation credit for BIOL 201.**

AG 205

Crop Pests and Diseases W/ Lab [RE] • 4.0 Credits

This course provides an overview of pests, diseases, and nematodes common in the crops of Washington. The course will focus on identification of pests and diseases, study of life cycles, control and management strategies of pests, diseases, and nematodes. The course will cover basic principles of plant pathology, entomology, and nematology. \$35 science fee.

AG 210

Applied Agriculture Research [RE] • 2.0 Credits

In the lab, students are directly involved in conducting agricultural research as a member of a research team led by a faculty member. Students have the opportunity to collect and analyze agricultural and environmental data that will be used to make management decisions. Upon completion of this course, students prepare a research paper summarizing their results and present this paper at a scientific meeting or seminar. The lab provides an opportunity for students to be directly involved in a research project. \$35 science fee.

AG 221

Introduction to Precision Agriculture [RE] • 3.0 Credits

This course will provide an introduction to Precision Agriculture technologies, covering both the applications and the different

Courses

technologies (e.g. geographic information systems (GIS), global positioning systems (GPS), remote sensing systems, variable rate application, drones etc.) that make precision farming possible. This course covers the introductory use of each of these tools in the processes of a precision farming system. Economic and environmental benefits will also be discussed. \$35 science fee.

AG 222

Advanced Precision Agriculture W/ Lab [RE] • 4.0 Credits

This course covers unmanned aerial systems (UAS) usage in precision agriculture, including platforms, history and commercial applications. Processes of precision agriculture such as data collection, data analysis, and analysis application will be emphasized. This course also covers Federal Aviation Administration (FAA) regulatory framework, privacy issues, and navigation. \$35 science fee. **Prerequisite: Completion of AG 221 with a 2.0 or higher.**

AG 232

Crop Production II Fruit & Veg Production W/ Lab [RE] • 4.0 Credits

This course is designed to provide students with an in-depth understanding of the principles and practices of sustainable fruit and vegetable crop production. Students will learn about soil fertility management, stand establishment, environmental modification, and pest management. \$35 science fee.

AG 250

GPS and GIS Applications W/ Lab [RE] • 4.0 Credits

This course applies Global Positioning Systems (GPS) and Geographic Information Systems (GIS) applications such as agriculture, surveying, aviation etc. The course will focus on basics of cartography, geography, map projections, and coordinate systems. Emphasis is on data collection using GPS, transfer data, process field data, analysis, storage/retrieval of data, generating reports and or maps using imaging software. Students will utilize hands-on computer exercises with real farm data to provide a practical experience. \$35 science fee. **Prerequisite: Completion of AG 221 with a 2.0 or higher.**

AG 252

Insects of Economic Importance W/ Lab [RE] • 5.0 Credits

Formerly AG 252, BIO 252, BIOL 252

A study designed to introduce students to the breadth and diversity of the science of entomology and an in-depth study of insects including: their diversity; the basics of systematic entomology; insect societies; insect physiology and structures; their ecological relationships with their physical and biotic environments; their population and community level ecology; their effects on human welfare through applied disciplines of medical and agricultural entomology; and the methods by which humans attempt to manage insect populations. \$35 science fee. **Prerequisite: This course is cross-listed with BIOL 252. Students completing AG 252 may not receive graduation credit for BIOL 252.**

AG 289

Agriculture Business Concepts [RE] • 5.0 Credits

Designed to address issues pertinent to the agricultural community including global competition for markets, water rights and the environment, agricultural co-ops, immigration, foreign trade, fiscal policy, and working with government agencies. It is intended as a capstone course to bring together several concepts related to agriculture business. \$35 science fee.

AG 297

Agriculture Internship [RE] • 3.0 Credits

This course is designed to provide students with major-related, supervised, evaluated practical training work experiences in a community agency, business, or industrial firm. The course involves the application and practice of skills and principles learned in the classroom and in real-world situations. Students will also evaluate agricultural careers and an overview of the types of agricultural employment. Students are graded on the basis of documented learning acquired through hands-on experiences in an actual work setting. \$35 science fee. Grade is pass/no credit.

AG 299

Special Studies [RE] • 1.0–20.0 Credits

A class used to explore new coursework. \$35 science fee.

AG 402

Ag Information & Data Analytics [RE] • 5.0 Credits

Formerly AG 340, AG 402, AMGT 340, AMGT 402, HCAD 315, HCAD 402, NRS 315

This course focuses on the information resource of management and introduces the fundamental concepts of data analytics. The course focuses on data analytic methods in framing and answering strategic questions facing decision makers in a variety of business sectors. The course will introduce theories and methods for analysis and communication of various kinds and types of data. This course will introduce various analytical techniques that are practical and feasible while being relevant and ethically and legally viable. The course promotes proficiency with technology and its essential managerial applications. This course is cross-listed with AMGT 402, HCAD 402, and NRS 315. Students completing AG 402 may not receive graduation credit for AMGT 402, HCAD 402, or NRS 315. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. \$35 science fee. **Prerequisite: Completion of AMGT 360, BUS& 101, CS 101, ENGL 410 or ENGL 315, and CMST 415, all with a 2.0 or better. Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AG 404

Agriculture Operations Management & Evaluation [RE] • 5.0 Credits

Formerly AG 310, AG 404, AMGT 310, AMGT 404, HCAD 310, HCAD 404

This course focuses on the operations level of management within an organization or enterprise. The course highlights the importance of the ongoing daily nature of organizational functionality through areas including capacity planning, inventory management, quality control, and supply chain management. Students are tasked with collaboratively examining an assigned company's operations within their preferred academic and career interests in an empowered student-led process resulting in a comprehensive presentation of information. This course is cross-listed with AMGT 404 and HCAD 404. Students completing AG 404 may not receive graduation credit for AMGT 404 or HCAD 404. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. \$35 science fee. **Prerequisite: Completion of AMGT 360, BUS& 101, CS 101, ENGL 410 or ENGL 315, and CMST 415, all with a 2.0 or better. Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AG 430

Fundamentals of Agriculture Financial Management [RE] • 5.0 Credits

Formerly AG 430, AMGT 430

This course covers basic financial tools and principles including short-term and long-term financial and investment decisions. Topics include financial statement analysis, the time value of money, capital budgeting, the cost of capital, dividend policies, and working capital. A final project is to apply

Courses

course concepts to a business related to their career choice. This course is cross-listed with AMGT 430. Students completing AG 430 may not receive graduation credit for AMGT 430. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. \$35 science fee. **Prerequisite: Completion of AMGT 400, BUS& 101, CS 101, ENGL 410 or ENGL 315, and CMST 415, all with a 2.0 or better. Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AG 470

Agriculture Management Internship [RE] • 1.0–10.0 Credits

Formerly AG 470, AMGT 470

This course is designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. This course is cross-listed with AMGT 470. Students completing AG 470 may not receive graduation credit for AMGT 470. Instructor permission is required to enroll. \$35 science fee. Grade is pass/no credit. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, and instructor approval, and AMGT 400 with a grade of 0.7 or better.**

AG 480

Agriculture Management Capstone [RE] • 5.0 Credits

Formerly AG 480, AMGT 480, HCAD 480

This course provides the opportunity for students to demonstrate that they have learned the material and concepts from the program and can apply it in the real world. It provides students the opportunity to do a comprehensive analysis of an on-going business or organization and develop a long range, strategic plan including implementation and recommendations for change or to explore the development of a new entrepreneurial venture and measure its feasibility in a comprehensive manner. Instructor permission is required to enroll. This course is cross-listed with AMGT 480 and HCAD 480. Students completing AG 480 may not receive graduation credit for AMGT 480 or HCAD 480. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. \$35 science fee. **Prerequisite: Instructor permission required.**

American Sign Language

ASL& 121

American Sign Language I • 5.0 Credits

This course explores American Sign Language (ASL) and Deaf culture, providing students with foundational skills in ASL communication. Students will learn fingerspelling, numbers, essential vocabulary, and sentence structure, allowing them to engage in simple, everyday conversations. Through interactive practice, students will also develop an understanding of ASL grammar, the use of facial expressions and body language, and the cultural and social customs of the Deaf community.

Anthropology

ANTH& 100

Survey of Anthropology [S/B] • 5.0 Credits

Formerly ANT 101, ANTH& 100

The field of anthropology is the scientific study of people from all periods of time and in all areas of the world. Anthropology, as a discipline, focuses on both the biological and cultural characteristics of our species (*Homo sapiens*). In this course, students explore this discipline by looking at how

each of the major branches of anthropology attempts to answer the basic question: What does it mean to be human?

ANTH 197

Field Experience • 1.0–3.0 Credits

Formerly ANT 197, ANTH 197

A lab class which incorporates methods and techniques used in excavating archaeological and paleontological sites. Students are able to participate on an excavation site dealing with the Ice Age Floods and a mammoth. Grade is pass/no credit.

ANTH 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

ANTH& 204

Archaeology [S/B] • 5.0 Credits

Formerly ANT 130, ANTH& 204

Archaeology is the study of the cultural past of humankind and ANTH& 204 provides an introduction to the field of anthropological archaeology. In this course, students examine the major concepts, theories, and methods of anthropological archaeology that contribute to an understanding of the human past. This course also includes surveys of past cultures from the Americas, Africa, Asia, and Europe.

ANTH& 205

Biological Anthropology [M/S] • 5.0 Credits

Formerly ANT 111, ANTH& 205

Physical Anthropology is the study of human beings from an evolutionary and biological perspective and ANTH& 205 provides an introduction to this sub-field of anthropology. In this course, students examine our own species (*Homo sapiens*) by looking at the biological basis of life, the processes of evolution, our primate relatives both living and extinct, and the variation seen in modern human populations.

ANTH& 206

Cultural Anthropology [S/B] • 5.0 Credits

Formerly ANT 120, ANTH& 206

Cultural Anthropology is the branch of anthropology that studies the species *Homo sapiens* from a cultural perspective. This course examines and attempts to explain the diversity and similarity of cultures and peoples throughout the world.

ANTH 214

Biological Anthropology Lab [M/S] • 1.0 Credit

Biological Anthropology focuses on the use of empirical evidence to place humans in perspective within our historical and biological world. The Biological Anthropology laboratory is designed to allow students, through examples and hands-on exercises, to understand the evolutionary processes that have produced modern humans. This course is designed to complement the Biological Anthropology course (ANTH& 205). \$11.40 lab fee. **Prerequisite: Completion of ANTH& 205 with a grade of 0.7 or better, or concurrent enrollment in ANTH& 205.**

ANTH& 234

Religion & Culture [S/B] • 5.0 Credits

Formerly ANT 128, ANTH& 234

The cross-cultural study of the relationship between humans and the supernatural world. Unlike other religious studies scholars, anthropologists are more concerned about the relationship and interconnections between people's religious traditions and beliefs, and other aspects of society. The objective of this course is familiarizing students with certain aspects that are common to many of the world's religions. This course explores and

Courses

analyzes the meaning of myth systems, the importance and meaning of religious symbols, rituals, religious specialists, how different societies organize supernatural powers and entities, and then finally a quick survey of the world's religions. We will do this in order to come to appreciate the significance all religions hold for the people who follow them, and develop a broad definition of religion that enables us to examine myriad systems of belief on equal terms.

ANTH 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

Applied Management

AMGT 300

Cross-Cultural Logistics and Global Management [RE] • 5.0 Credits

This is a survey course focused on managerial skills development in a global context. The course includes a discussion of modern management's functions, resources, and demands for those in supervisory or leadership positions within different cross-cultural organizations. Students are tasked with examining their own perspectives and developing skills of empathy, active listening, and humility to improve managerial performance while also analyzing the management of global supply chains. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite: Completion of BUS& 101 with a 2.0 or better, and acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 301

Contemporary Issues in Business & Management [RE] • 5.0 Credits

Formerly AMGT 301, AMGT 417

A class dealing with current events impacting business and management. Seminars will be presented on contemporary topics related to modern trends in the field where students will be challenged to apply managerial perspectives and skills to identify, diagnose, and address real-world changes. **Prerequisite: Completion of BUS& 101 with a 2.0 or better, and acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 303

Human Resource Management [RE] • 5.0 Credits

Formerly AMGT 303, AMGT 420, HCAD 303, HCAD 420

This course examines the evolving role of human resource management and its increasing importance as a driver of organizational performance. Students learn about the broad responsibilities of human resource departments, from ensuring compliance with government regulations and handling compensation and benefits, to managing diversity and organizational culture. The importance of learning the business, resisting isolation, effectively communicating reasons for change, and ensuring alignment with the organization's strategic objectives is explored. Students are also introduced to the growing role of data analysis in HR decision-making. This course is cross-listed with HCAD 303. Students completing AMGT 303 may not receive graduation credit for HCAD 303. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite: Completion of BUS& 101 with a 2.0 or better, and acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 305

Marketing for Managers [RE] • 5.0 Credits

Formerly AMGT 305, AMGT 350

This course develops marketing skills and knowledge necessary for modern managers. Customer service relationship approaches, green marketing, and using managerial resources to apply sales techniques to B Corporations are emphasized concepts. Students complete a marketing plan template on a company or organization in the industry of their interest as a final project for the course. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite: Completion of BUS& 101 with a 2.0 or better, and acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 317

BAS Special Topics [RE] • 1.0–5.0 Credits

An opportunity to participate in a class dealing with special topics related to applied management that are not covered in depth in the existing curriculum. Topics chosen relate to emerging issues in management/business or topics of regional interest within the management/business arena. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 320

Leadership & Organization Behavior [RE] • 5.0 Credits

This course examines leadership theories and organizational behaviors and structures. The course explores the concepts from the perspective of managers engaged in team development and training. The primary project of the course is a collaborative student-led instructional experience where groups of students develop materials and train their peers on the primary theories of leadership and organizational behavior. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite: Completion of BUS& 101 with a 2.0 or better, and acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 360

Business Planning and Strategy [RE] • 5.0 Credits

This course focuses on applying case study analyses to real-world strategic-level corporate and organizational challenges. The course emphasizes the need to use structured approaches to critical thinking to resolve complex high-level managerial challenges. Students repeatedly practice and develop their skills through progressively more challenging case studies in a collaborative environment before finishing the term with an individually produced analysis. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite: Completion of BUS& 101 with a 2.0 or better, and acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 389

BAS Independent Study [RE] • 1.0–5.0 Credits

A class designed to explore a specific topic of special interest. Students are required to work 55 hours to earn one credit hour. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 400

Accounting for Managers [RE] • 5.0 Credits

This course covers the theory, language, and application of accounting. Students learn financial data accumulation and reporting with an emphasis on using this information to perform the managerial functions of planning, organizing, leading, and controlling. During the course,

Courses

students prepare comprehensive evaluations of the current and potential future performance of multiple organizations. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite: Completion of either ACCT 101 or ACCT& 201, and AMGT 360, BUS& 101, CS 101, CMST 415, and either ENGL 410 or ENGL 315, all with a 2.0 or better, and acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 401

Legal Issues for Business & Managers [RE] • 5.0 Credits

Formerly AMGT 330, AMGT 401, HCAD 330, HCAD 401

This course explores the state and federal laws and regulations that affect management behavior and organizational practices in various organizational settings. Material covered includes torts and crimes, traditional and sales and lease contracts, business organizations, employment law, products liability, labor relations, and professional liability. The course will pay special attention to issues surrounding business start-up and intellectual property. This course is cross-listed with HCAD 401. Students completing AMGT 401 may not receive graduation credit for HCAD 401. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite: Completion of AMGT 360, BUS& 101, CS 101, ENGL 410 or ENGL 315, and CMST 415, all with a 2.0 or better. Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 402

Information & Data Analytics [RE] • 5.0 Credits

Formerly AG 340, AG 402, AMGT 340, AMGT 402, HCAD 315, HCAD 402, NRS 315

This course focuses on the information resource of management and introduces the fundamental concepts of data analytics. The course focuses on data analytic methods in framing and answering strategic questions facing decision makers in a variety of business sectors. The course will introduce theories and methods for analysis and communication of various kinds and types of data. This course will introduce various analytical techniques that are practical and feasible while being relevant and ethically and legally viable. The course promotes proficiency with technology and its essential managerial applications. This course is cross-listed with AG 402, HCAD 402, and NRS 315. Students completing AMGT 402 may not receive graduation credit for AG 402, HCAD 402, or NRS 315. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite: Completion of AMGT 360, BUS& 101, CS 101, ENGL 410 or ENGL 315, and CMST 415, all with a 2.0 or better. Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 404

Operations Management & Evaluation [RE] • 5.0 Credits

Formerly AG 310, AG 404, AMGT 310, AMGT 404, HCAD 310, HCAD 404

This course focuses on the operations level of management within an organization or enterprise. The course highlights the importance of the ongoing daily nature of organizational functionality through areas including capacity planning, inventory management, quality control, and supply chain management. Students are tasked with collaboratively examining an assigned company's operations within their preferred academic and career interests in an empowered student-led process resulting in a comprehensive presentation of information. This course is cross-listed with AG 404 and HCAD 404. Students completing AMGT 404 may not receive graduation credit for AG 404 or HCAD 404. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite: Completion of AMGT 360, BUS& 101, CS 101, ENGL 410 or ENGL 315, and CMST 415, all with a 2.0 or better. Acceptance into**

a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.

AMGT 430

Fundamentals of Financial Management [RE] • 5.0 Credits

Formerly AG 430, AMGT 430

This course covers basic financial tools and principles including short-term and long-term financial and investment decisions. Topics include financial statement analysis, the time value of money, capital budgeting, the cost of capital, dividend policies, and working capital. A final project is to apply course concepts to a business related to their career choice. This course is cross-listed with AG 430. Students completing AMGT 430 may not receive graduation credit for AG 430. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite: Completion of either AMGT 400 or ACCT& 203, AMGT 360, BUS& 101, CS 101, either ENGL 410 or ENGL 315, and CMST 415, all with a 2.0 or better, and acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

AMGT 470

BAS Internship [RE] • 1.0–5.0 Credits

Formerly AG 470, AMGT 470

This course is designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. This course is cross-listed with AG 470. Students completing AMGT 470 may not receive graduation credit for AG 470. Instructor permission is required to enroll. Grade is pass/no credit. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, and instructor approval.**

AMGT 480

Applied Management Capstone [RE] • 5.0 Credits

Formerly AG 480, AMGT 480, HCAD 480

This course provides the opportunity for students to demonstrate that they have learned the material and concepts from the program and can apply it in the real world. It provides students the opportunity to do a comprehensive analysis of an on-going business or organization and develop a long range, strategic plan including implementation and recommendations for change or to explore the development of a new entrepreneurial venture and measure its feasibility in a comprehensive manner. Instructor permission is required to enroll. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. This course is cross-listed with AG 480 and HCAD 480. Students completing AMGT 480 may not receive graduation credit for AG 480 or HCAD 480. **Prerequisite: Instructor permission required.**

AMGT 489

BAS Independent Study [RE] • 1.0–5.0 Credits

A class designed to explore a specific topic of special interest. Students are required to work 55 hours to earn one credit hour. Class must be passed with a 2.0 or better to count for BAS-Applied Management degree. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

Art, Visual

ART& 100

Art Appreciation [H] • 5.0 Credits

Formerly ART 110, ART& 100

Courses

A general survey of fine and applied arts with brief media encounters in various areas of art. The class emphasis is on building a general appreciation of the techniques, styles, themes in art, and the history of art.

ART 111

2D Design • 5.0 Credits

Introduction to the formal elements and principles of design common to all two-dimensional media. Students examine the formal elements of line, shape, form, space, pattern, texture, and color and applies the principles of unity and variety, balance, focus, repetition, rhythm, movement, and proportion. Students are introduced to spatial and ordering strategies through a sequence of design and color theory problems which emphasize creative problem-solving using a variety of media and techniques. Recommended for all art, design, photography, and architecture students, and for anyone with a general interest in art. \$11.40 lab fee.

ART 112

3D Design • 5.0 Credits

This course of study is an introduction to the visual and tactile elements and principles that relate to three-dimensional forms in space. Students have the opportunity to work with various materials to create three-dimensional forms in space. Students execute various aesthetic design problems that focus on arriving at a better understanding of a three-dimensional dialogue, applicable to sculpture, architecture, and ceramics, and provides a better understanding of three-dimensionality related to digital art and design. \$11.40 lab fee.

ART 113

Drawing I • 3.0 Credits

A basic studio course that focuses on the fundamental skills: observation, composition, development of forms, and personal expression. Surveys a wide range of media and techniques and examines master works of drawing. \$11.40 lab fee.

ART 114

Drawing II • 3.0 Credits

A continuation of ART 113 with emphasis on individual direction, composition, color, expanded technique, and media experiences. \$11.40 lab fee. **Prerequisite:** Completion of ART 113 with a minimum grade of 0.7, or instructor permission.

ART 115

Life Drawing • 3.0 Credits

A continuation of ART 114 with emphasis on human figures and the rendering of the human face; includes structural anatomy, proportion, composition, and abstraction of these subjects for purposes of individual expression. It is recommended that students complete ART 113 prior to enrollment or have instructor permission. \$11.40 lab fee.

ART 116

Art History Ancient World [H] • 5.0 Credits

A comparative study of architecture, sculpture, and pictorial arts from the ancient cultures of the world. A chronological survey of prehistoric, Mesopotamian, Egyptian, Greek, Roman, Byzantine, and Islamic arts.

ART 117

Art History Medieval-Baroque [H] • 5.0 Credits

A study of architecture, painting, and sculpture from the Middle Ages through the Gothic, Renaissance, and Baroque. Comparative studies of cross cultural traditions.

ART 118

Art History Modern Times [H] • 5.0 Credits

A chronological study of architecture, sculpture, painting, printmaking, photography, and the design arts from Romanticism to the present.

ART 198

Special Studies • 1.0–15.0 Credits

Formerly ART 198, ART 199

An experimental class to be used to explore new approaches and applications to studio art.

ART 199

Special Studies • 1.0–15.0 Credits

Formerly ART 198, ART 199

An experimental class to be used to explore new approaches and applications to art theory.

ART 201

Photography I • 1.0–3.0 Credits

This course introduces students to the foundations of photography/digital photography and photographic composition through various assignments, case studies, and a final project. Students are introduced to fundamental camera controls and tools used to manipulate or enhance photographic images from image-capture to print. Emphasis is placed on how photography functions as an interpretive medium. Student supplies digital camera and materials. It is recommended that students complete ART 111 prior to enrollment. \$30 Art photography ink/supply fee.

ART 202

Photography II • 1.0–3.0 Credits

This course further develops the advanced student's technical and interpretive understanding of digital photography. Students choose a photographic topic early in the quarter to investigate and build upon for the remainder of the course. Emphasis is placed on research of historic and contemporary trends, discussion of personal direction, and constructing a photographic portfolio. Student supplies digital camera and materials. It is recommended that students complete ART 111 and ART 201 prior to enrollment. \$30 Art photography ink/supply fee.

ART 209

Digital Art and Design • 5.0 Credits

An introduction to the use of digital media in art. This course acquaints students with the fundamentals of using the Creative Suite program that includes Adobe Photoshop, Illustrator, and InDesign. These computer programs are used for creating graphic design layouts, working with digital imagery, or creating your own unique digitally-based works of art. It is recommended that students complete ART 111 prior to enrollment. \$11.40 lab fee.

ART 211

Graphic Design I [RE] • 5.0 Credits

An introductory class in the theory and application of layout, typography, color, and image as it is used in today's advertising and industrial graphics. The course covers the fundamentals of graphic design with an emphasis on creative problem solving through traditional and digital techniques using industry-accepted software. It is recommended that students complete ART 111, ART 113, and ART 209 prior to enrollment. \$11.40 lab fee.

ART 212

Graphic Design II [RE] • 5.0 Credits

An intermediate class that expands on the use of theory and refined application of layout, typography, color, and image as it is used in today's

Courses

advertising and industrial graphics. The course objective is to develop greater proficiency in graphic design processes and skills to achieve creative solutions through traditional and digital techniques using industry-accepted software. \$11.40 lab fee. **Prerequisite: Completion of ART 211 with a 0.7 or higher.**

ART 215

Painting I • 1.0–3.0 Credits

An introduction to techniques of painting in oil or acrylic; preparation of wood, canvas, and paper supports; color mixing and application methods. Traditional and experimental approaches to subject matter, composition, and expression. \$11.40 lab fee.

ART 216

Painting II • 1.0–3.0 Credits

Continuation of ART 215 with greater emphasis on individual development of subject matter, technique, and personal expression. Oil, acrylic, or mixed media. \$11.40 lab fee. **Prerequisite: Completion of ART 215 with a 0.7 or higher.**

ART 220

Sculpture I • 1.0–3.0 Credits

A study of three-dimensional form with emphasis on the inter-relationships between space and form through the techniques of modeling, mold-making, and casting. It is recommended that students complete ART 111 and ART 112 prior to enrollment. \$11.40 lab fee.

ART 221

Sculpture II • 1.0–3.0 Credits

A continuation of ART 220 with emphasis on the techniques of casting, construction, and carving. \$11.40 lab fee. **Prerequisite: Completion of ART 220 with a 0.7 or higher.**

ART 222

Ceramics I • 1.0–3.0 Credits

A basic introduction to ceramic forms with emphasis on production by hand methods. Consideration of the nature and possibilities of clay, clay body formulation, and introductory glaze testing, as well as loading and firing procedures for bisque and glaze kilns. \$11.40 lab fee.

ART 223

Ceramics II • 1.0–3.0 Credits

A continuation of ART 222 with special emphasis on wheel technique, glaze formulation, and design of clay forms. \$11.40 lab fee. **Prerequisite: Completion of ART 222 with a 0.7 or higher.**

ART 224

Ceramic Sculpture • 1.0–3.0 Credits

A studio course designed to focus on using clay as a sculptural medium. Students develop projects that explore either large scale slab construction, large scale coiling, building effective armatures and supports, and working solid. Other fabricating processes such as mold-making for slip-casting and using forms made on the potter's wheel for sculptural construction are introduced. Students also apply various glazing techniques and firing processes that are appropriate to their sculptural work. \$11.40 lab fee.

ART 225

Metals I • 1.0–3.0 Credits

An introduction to the broad range of materials, techniques, and formats characteristic of metal art and jewelry. It is recommended that students complete ART 111 prior to enrollment. \$11.40 lab fee.

ART 226

Metals II • 1.0–3.0 Credits

A continuation of ART 225 with emphasis on advanced fabrication techniques, casting, and contemporary metal art and jewelry design. This course explores form as a means of expression for both functional and nonfunctional work. It is designed to develop skill, craftsmanship, and sensitivity to design in working with metal. \$11.40 lab fee. **Prerequisite: Completion of ART 225 with a 0.7 or higher.**

ART 230

Professional Practices • 1.0–2.0 Credits

This course focuses on preparing the art major for admission into an accredited art program as well as exploring the business aspects of being a professional artist.

ART 241

Illustration I • 1.0–3.0 Credits

A studio course that applies the elements of design and drawing to a variety of illustration formats. Focus is on technical skills, application of a wide range of media, and illustrative concepts. It is recommended that students complete ART 111 and ART 113 prior to enrollment. \$11.40 lab fee.

ART 242

Illustration II • 1.0–3.0 Credits

A continuation of Illustration I with emphasis on individual development of subject, technique, and concept. A variety of illustration styles and applications are explored further. \$11.40 lab fee. **Prerequisite: Completion of ART 241 with a 0.7 or higher.**

ART 243

Illustration III • 1.0–3.0 Credits

A continuation of ART 242 with emphasis on the use of mixed media, color, and graphic techniques applied to illustration. \$11.40 lab fee. **Prerequisite: Completion of ART 241 and ART 242, both with a 0.7 or higher.**

ART 250

Studio Problems • 1.0–3.0 Credits

Individual, contracted, advanced study in visual arts theory and practice. Completion of all available studio art within desired area of study and instructor permission is required to enroll. \$11.40 lab fee.

ART 251

Studio Problems - Design • 1.0–3.0 Credits

Individual, contracted, advanced study in design. Studio and seminar. Instructor permission is required to enroll. \$11.40 lab fee.

ART 252

Studio Problems - Graphic [RE] • 1.0–3.0 Credits

Individual, contracted, advanced study in computer graphics. Studio and seminar. It is recommended that students complete ART 209, ART 211, and ART 212 prior to enrollment. Instructor permission is required to enroll. \$11.40 lab fee.

ART 253

Studio Problems - Drawing • 1.0–3.0 Credits

Individual, contracted, advanced study in drawing. Studio and seminar. Instructor permission is required to enroll. \$11.40 lab fee.

Courses

ART 254

Studio Problems - Painting • 1.0–3.0 Credits

Individual, contracted, advanced study in painting. Studio and seminar. Instructor permission is required to enroll. \$11.40 lab fee.

ART 255

Studio Problems - Sculpture • 1.0–3.0 Credits

Individual, contracted, advanced study in sculpture. Studio and seminar. Instructor permission is required to enroll. \$11.40 lab fee.

ART 256

Studio Problems - Metals • 1.0–3.0 Credits

Individual, contracted, advanced study in metal arts. Studio and seminar. Instructor permission is required to enroll. \$11.40 lab fee.

ART 257

Studio Problems - Ceramics • 1.0–3.0 Credits

Individual, contracted, advanced study in ceramic arts. Studio and seminar. Instructor permission is required to enroll. \$11.40 lab fee.

ART 259

Studio Problems - Photography • 1.0–3.0 Credits

Individual, contracted, advanced study in photography, studio and seminar. Instructor permission is required to enroll. \$30 Art photography ink/supply fee.

ART 298

Special Studies Lab • 1.0–15.0 Credits

Formerly ART 298, ART 299

An advanced experimental class to be used to explore new approaches and applications to studio art. \$11.40 lab fee.

ART 299

Special Studies • 1.0–15.0 Credits

Formerly ART 298, ART 299

An advanced experimental class to be used to explore new approaches and applications to art theory.

Astronomy

ASTR& 101

Intro to Astronomy W/ Lab [M/S] • 5.0 Credits

Formerly AST 101, ASTR& 101

A survey of astronomy including history of astronomy, the solar system, galaxies, cosmology, and current topics. Several night observation sessions are held. Lecture and lab must be taken concurrently. \$50 astronomy lab fee. **Prerequisite: A grade of 2.0 or better in MATH 50, 60, or 62, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

ASTR 102

Intro to Astronomy - Part II W/ Lab [M/S] • 5.0 Credits

The second course of an introductory survey of astronomy including star formation, planetary systems formation, star birth and death, Einstein's special relativity model of the universe, galaxies and their evolution, cosmology and current topics. Several night observation sessions are held at the on-campus Moore Observatory. \$50 astronomy lab fee.

Prerequisite: A minimum grade of 0.7 in MATH 50, 60, 62, 96, or a higher math class, or appropriate placement, or instructor permission. It is recommended that students complete ASTR& 101 prior to enrollment.

ASTR 199

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework. \$11.40 lab fee.

ASTR 299

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework. \$11.40 lab fee.

Automotive Technology

AMT 100

Basic Automotive Maintenance & Lab [RE] • 2.0 Credits

This course is intended for students to get introduced to general automotive systems and service procedures. This course is designed to familiarize students with the major vehicle parts and components, knowledge of basic tools and equipment, and perform basic preventative maintenance procedures. Lab time consists of students applying concepts learned with hands-on experience while working on student-owned vehicles and school mock-ups. This course is for the general student population and is not intended for automotive majors.

AMT 104

Diesel Engine Theory [RE] • 2.0 Credits

This course provides basic knowledge and theory of operation of automotive diesel engines including ignition and fuel systems. \$50 Automotive Technology class fee. \$11.40 lab fee. **Prerequisite:**

Completion of AMT 107, AMT 109, AMT 113, and AMT 114, all with a 0.7 or better, or instructor permission.

AMT 107

Introduction to Automotive Technology I & Lab [RE] • 7.0 Credits

This course is designed to introduce students to automotive systems and components, tools, fasteners, and shop procedures. Students will learn the basic components of many different systems incorporated within the automobile. Students will learn the proper safety required in an automotive shop setting, and basic hand tool identification. Students will learn about fasteners and how to tell the difference between SAE and Metric, and they will learn how to remove broken bolts (drilling, tapping, and rethreading). \$50 Automotive Technology class fee. \$11.40 lab fee. \$185 automotive uniform shirt fee. **Prerequisite: Acceptance into the Automotive Technology program, and a grade of 1.0 or better in MATH 100 or a higher math class or concurrent enrollment.**

AMT 113

Introduction to Automotive Technology II & Lab [RE] • 7.0 Credits

This course is designed to give students the basic knowledge of utilizing electronic service publications. Students will learn how to use electronic service information needed to perform preventive maintenance, service bulletins, look up service history and perform estimate making. These systems include service procedures and information for completing work orders and creating maintenance log entries. Students will also learn the basic knowledge and understanding of automotive procedures for maintaining vehicles by following factory-recommended services. Students will learn how to perform preventive maintenance on various systems within the automotive systems such as oil changes, automatic and manual transmission/transaxle service, brake fluid service, power steering systems services, transfer case service, front and rear differential services, battery, starting and charging system service, and performing basic air conditioning inspections. \$50 Automotive Technology class fee. **Prerequisite: Acceptance into the Automotive Technology program, and a grade of 1.0 or better in MATH 100 or a higher math class or concurrent enrollment.**

Courses

AMT 119

Automotive Steering and Suspension Systems & Lab [RE] • 7.0 Credits

This course is designed to provide the student with detailed instruction on the design and operating principles maintenance and service of automobile suspension and steering systems including steering geometry and alignment angles. Emphasis is placed on wheel alignment procedures, including computerized four-wheel alignment. Service and diagnostics are stressed including McPherson struts, rack and pinion steering systems, and tire design and applications. New technologies are covered to incorporate electronic steering and in-depth coverage of computerized suspension systems. Students will learn how to diagnose, inspect, and service steering system components using industry-standard equipment. Students will learn how to diagnose inspect, remove, and replace rear-wheel and front-wheel drive suspension components. Students will learn how to perform alignments on front and rear-wheel drive vehicles. Students will work in a manner that exhibits pride in cleanliness, work ethic, and professionalism. \$50 Automotive Technology class fee. \$11.40 lab fee. **Prerequisite: Grade of 2.0 or better in AMT 220 or instructor permission.**

AMT 120

Basic Electrical Systems, Electronics & Lab [RE] • 8.0 Credits

This course provides students with a basic understanding of the theoretical and practical aspects of electricity, diagnosis, and service of automotive electrical systems. Subjects covered will include basic automotive electronic fundamentals including solid-state components such as sensors, actuators, and microprocessors, basic electrical principles, and how malfunctions affect the proper functioning of vehicles' automotive computer circuits and components. Students will learn the use of appropriate diagnostic equipment such as Digital Volt Ohm Meters (DVOM) and service information. Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostics, removal, and installation procedures used on automobiles and light trucks. \$50 Automotive Technology class fee. \$11.40 lab fee. **Prerequisite: Completion of AMT 107 and AMT 113 with a minimum grade of 2.0, and MATH 100 or a higher math class with a minimum grade of 1.0, or appropriate placement, or instructor permission.**

AMT 123

Automotive Brake Systems & Lab [RE] • 7.0 Credits

This course is designed to provide a comprehensive understanding of the theory coverage of design, operating principles, diagnosis, maintenance, and service of automotive brake systems and traction control. Emphasis will be placed on the mechanical portion of the disc and drum braking system, servicing the disc and drum brakes with measuring and resurfacing included. Anti-lock Braking (ABS) is covered from operating principles through diagnosis and service. Students will learn how to diagnose mechanical and hydraulic problems within the braking system and learn how to diagnose computer-controlled problems within the Anti-Lock (ABS) and traction control systems. Students will work in a manner that exhibits pride, cleanliness, work ethic, and professionalism. \$50 Automotive Technology class fee. \$11.40 lab fee. **Prerequisite: Completion of AMT 120 with a 2.0 or better, or concurrent enrollment, or instructor permission.**

AMT 129

Engine Systems, Servicing & Lab [RE] • 8.0 Credits

The focus of this course is to provide the students with a detailed study of the modern internal combustion gasoline engine. Topics include basic principles of design and operation including fuel and ignition systems. Students will learn the components of the internal combustion engine and how they operate. Students will learn the theory and operation of lubrication and cooling systems. Students will gain an understanding of

the diagnosis, service, and operation of the internal combustion engine. Students will learn how to diagnose various engine concerns through visual and auditory inspection. Emphasis will be on the theory, operation, and servicing of the internal combustion engine and systems. \$11.40 lab fee. **Prerequisite: Completion of AMT 220 with a 2.0 or better, or instructor permission.**

AMT 133

Engine Repair and Rebuild & Lab [RE] • 7.0 Credits

This course is designed to give students a detailed breakdown of the gasoline engine for repairs and rebuilding. Students will learn how to disassemble, inspect, and measure various engine components after disassembly. Students will learn the proper procedure for engine, cylinder heads, and valve train reassembly. Students will learn the procedures needed for engine removal and installation. Upon completion of this course, students will be familiar with the terminology, repair, and removal and installation procedures for the gasoline engine. \$50 Automotive Technology class fee. \$11.40 lab fee. **Prerequisite: Completion of AMT 220 with a 2.0 or better, or instructor permission.**

AMT 140

Automotive Internship [RE] • 1.0–5.0 Credits

This internship program is designed to prepare the student for automotive industry employment. Students are expected to apply learned skills and training to be a productive employee. The employer is expected to place students in an environment that builds on coursework learned to enhance their knowledge of working in the automotive industry. The student will work in a manner that exhibits pride, cleanliness, work ethic, and professionalism. \$11.40 lab fee. Grade is pass/no credit.

AMT 193

Independent Study [RE] • 1.0–15.0 Credits

A class used to explore new coursework or for a specific topic of special interest. Grade is pass/no credit.

AMT 199

Special Studies [RE] • 1.0–10.0 Credits

A class used to explore new coursework.

AMT 220

Advanced Electrical and Troubleshooting & Lab [RE] • 8.0 Credits

This combination class/lab is designed to give the student a highly developed understanding of diagnosis, troubleshooting, and service of the advanced automotive electrical and electronic operating systems. Subjects covered will include strategy-based diagnostics, reading and understanding wiring diagrams, circuit diagnosis, lighting systems, body, chassis, and powertrain system descriptions and functions, and vehicle networking. You will learn the proper use of appropriate diagnostic equipment such as oscilloscopes, scan tools, and a digital volt ohm meter (DVOM). Upon completion of this course, students will be familiar with the terminology, basic theory, diagnostic, removal, and installation procedures used on automobiles and light trucks. \$50 Automotive Technology class fee. \$11.40 lab fee. **Prerequisite: Completion of AMT 120 with a 2.0 or better, or concurrent enrollment, or instructor permission.**

AMT 230

Automatic Transmissions & Lab [RE] • 7.0 Credits

This course has been developed to provide students with the knowledge and skills needed to successfully diagnose and repair automatic transmissions and transaxles. Emphasis is placed on an understanding of the operation of the internal components (hydraulic, mechanical, and electrical), troubleshooting, disassembly, assembly, and testing. Students will learn how to perform necessary diagnostic tests using

Courses

special equipment such as pressure gauges, digital volt ohm meters (DVOM), scan tools, and oscilloscopes. Students will learn how to perform necessary service, repairs, and adjustments to automatic transmissions and transaxles. Students will work in a manner that exhibits pride, cleanliness, work ethic, and professionalism. \$50 Automotive Technology class fee. \$11.40 lab fee. **Prerequisite: Completion of AMT 220 with a 2.0 or better, and ENGL& 101 or ENGL 103 with a 1.0 or better, or instructor permission.**

AMT 233 **Manual Transmission, Drivetrain, & Lab [RE] • 7.0 Credits**

This course is designed to provide students a comprehensive coverage of the drivetrain components, including theory, operating principles, diagnosis, service, and repair techniques of the clutch, manual transmissions/transaxles, and differentials. Emphasis will be placed on understanding gearing, levers, hydraulics, component design, troubleshooting, replacement, disassembly, repair, service techniques, and assembly. Students will work with automotive manual transmissions/transaxles, differentials, clutches, driveshafts, and u-joints. Students will learn how to diagnose, inspect, remove, and replace a clutch, students will also learn how to diagnose, clean, inspect disassemble and reassemble a manual transmission/transaxle. Students will learn how to diagnose, clean, inspect, remove, replace, and service front-wheel drive (FWD) systems and components, and rear-wheel drive (RWD) systems and components. Students will work in a manner that exhibits pride, cleanliness, work ethic, and professionalism. \$50 Automotive Technology class fee. \$11.40 lab fee. **Prerequisite: Completion of AMT 220 with a 2.0 or better, and ENGL& 101 or ENGL 103 with a 1.0 or better, or instructor permission.**

AMT 240 **Drivability Diagnostics & Lab [RE] • 9.0 Credits**

This course is designed to provide students with knowledge and understanding of the theory, operation, diagnosis, and repair of conventional and computer-controlled systems such as ignition fuel and emissions. Students will learn how to diagnose mechanical and electrical engine components and control systems and determine needed action. Students will learn the advanced use of Automotive scan tools, lab scopes, and other computer-related test equipment. Emphasis is placed on the theory and practice through diagnosis and repair of electronic ignition systems, fuel delivery, and emission control systems. \$50 Automotive Technology class fee. \$11.40 lab fee. **Prerequisite: Grade of 2.0 or better in AMT 220 or instructor permission.**

AMT 243 **Heating, Ventilation & AC Systems & Lab [RE] • 5.0 Credits**

This course is designed to provide students with a basic understanding of the theory, diagnosis, and service of automotive heating, ventilation, and air conditioning (HVAC) systems. Emphasis is on proper air conditioning recharging techniques and the electrical portion of the HVAC systems. \$50 Automotive Technology class fee. \$11.40 lab fee. **Prerequisite: Grade of 2.0 or better in AMT 220 or instructor permission.**

AMT 251 **Hybrid Operations and Safety [RE] • 3.0 Credits**

This combination class/lab is designed to give students an overview of hybrid/high voltage vehicles. The class covers safety, driving characteristics, environmental concerns, and hybrid/high voltage energy principles. \$11.40 lab fee.

AMT 252 **High Voltage Basic Operations [RE] • 3.0 Credits**

This combination class/lab is designed to give students an overview of high voltage batteries, transformers, high voltage wiring, dc-dc converters,

safety circuitry, three-phase motors, and high voltage control systems. \$11.40 lab fee.

AMT 253 **Basic Maintenance and Servicing of Hybrids • 3.0 Credits**

This combination class/lab is designed to give students the theory and hands-on experience to perform basic preventive maintenance of hybrid vehicles. \$11.40 lab fee.

AMT 254 **High Voltage Diagnostics • 3.0 Credits**

This combination class/lab is designed to give students theories and strategies for diagnosing high voltage and hybrid specific systems. \$11.40 lab fee.

AMT 255 **Component Replacement • 3.0 Credits**

This combination class/lab is designed to give students theory and hands-on experience of proper removal and replacement of hybrid components. \$11.40 lab fee.

Biology

BIOL& 100 **Survey of Biology W/ Lab [M/S] • 5.0 Credits**

Formerly BIO 100, BIOL& 100
An introductory course in basic biological principles and processes. The lab illustrates the basic concepts discussed in lecture and acquaints students with general laboratory procedures. Primarily for non-science majors. \$25 science fee.

BIOL 140 **Fundamentals of Botany W/ Lab [M/S] • 5.0 Credits**

Formerly BIO 140, BIOL 140
An introductory course in the plant sciences. Includes structure and function of plant cells, tissues, organs; growth, reproduction, diversity, evolution, and ecology. Emphasis on local flora and ecology. Primarily for non-science or agriculture majors. \$25 science fee.

BIOL 148 **Plant Identification W/ Lab [M/S] • 5.0 Credits**

Formerly BIO 148, BIOL 148
Spring wildflowers of eastern Washington with emphasis on the Columbia Basin Region. Techniques in identification, collection, preservation, mounting of preserved specimens, and ecological principles. During the latter part of the quarter, attendance at all-day Saturday field trips is required. \$25 science fee.

BIOL& 160 **General Biology W/ Lab [M/S] • 5.0 Credits**

Formerly BIO 105, BIOL& 160
An introduction to basic cell structure and physiology with emphasis on: function and structure of cell membranes; metabolism and enzyme function; genetics and protein synthesis; genetics of viruses, prokaryotes, and eukaryotes; cell signaling and communication. The use of models, microscope slides, and physiological experiments illustrate cellular structure and function. This course does not satisfy the prerequisite for BIOL& 212 or 213. It is strongly recommended that students complete high school chemistry or CHEM& 121 or higher prior to enrollment, or be concurrently enrolled in CHEM& 121. \$25 science fee.

Courses

BIOL& 175

Human Biology W/ Lab [M/S] • 5.0 Credits

Formerly BIO 110, BIOL& 175

The biology of the human organism. Evolution, ecology, the functioning of cells, tissues, and the major organ systems form the core of the class. Emphasis is placed on providing students with sufficient background to make informed decisions relating to the biological aspects of the human species. Primarily for non-science majors. \$25 science fee.

BIOL 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.

BIOL 201

Soils W/ Lab [M/S] • 5.0 Credits

Formerly AG 201, BIO 201, BIOL 201

A course offering students a general background and understanding of soils, soil formation processes, soil origins with an emphasis on soil origins in the Pacific Northwest, soil taxonomy, organic matter, water relationships, pH, and biological relationships. \$25 science fee.

Prerequisite: This course is cross-listed with AG 201. Students completing BIOL 201 may not receive graduation credit for AG 201.

BIOL& 211

Majors Cellular W/ Lab [M/S] • 5.0 Credits

Formerly BIO 111, BIOL& 211

An introductory cell biology lecture and lab course for biology majors, pre-medical, pre-dental, pre-pharmacy, pre-physical therapy, and other pre-professional students planning to transfer to a four-year university. This is the first of a three-quarter series with an emphasis on cell chemistry, structure, metabolism, energetics, cell division, cell signaling, the molecular basis of inheritance and development, and the basis of genetic engineering. Health Science majors are advised to take BIOL& 160. \$25 science fee. **Prerequisite:** Completion of CHEM& 121 or higher with a grade of 2.0 or better, or completion of a year-long high school chemistry course with a B or better, or concurrent enrollment in CHEM& 161.

BIOL& 212

Majors Plant W/ Lab [M/S] • 5.0 Credits

Formerly BIO 112, BIOL& 212

Includes the concept of evolution; the origin of life; a survey of prokaryotes, protists, plants, and fungi; plant anatomy and function. Primarily for science majors. \$25 science fee. **Prerequisite:** Completion of BIOL& 211 with a 2.0 or better.

BIOL& 213

Majors Animal W/ Lab [M/S] • 5.0 Credits

Formerly BIO 113, BIOL& 213

A survey of the invertebrate and vertebrate animals covering their diversity, structure, and function of organ systems, and the interactions between organisms and the environment. Primarily for science majors. \$25 science fee. **Prerequisite:** Completion of BIOL& 211 with a grade of 2.0 or better.

BIOL& 241

Human A&P 1 W/ Lab [M/S] • 6.0 Credits

Formerly BIO 221, BIOL& 241

The structure and functions of systems of the human body; integumentary, skeletal, muscular, and nervous. The use of human models and animals illustrate the systems. \$25 science fee. **Prerequisite:** A grade of 2.0 or better in BIOL& 160 or BIOL& 211. It is recommended that students also complete CHEM& 121 prior to enrollment.

BIOL& 242

Human A&P 2 W/ Lab [M/S] • 6.0 Credits

Formerly BIO 222, BIOL& 242

Continuation of BIOL& 241: endocrine, digestive, respiratory, circulatory, lymphatic, urinary, and reproductive systems. \$25 science fee.

Prerequisite: Completion of BIOL& 241 with a 2.0 or better.

BIOL 252

Insects of Economic Importance W/ Lab [M/S] • 5.0 Credits

Formerly AG 252, BIO 252, BIOL 252

A study designed to introduce students to the breadth and diversity of the science of entomology and an in-depth study of insects including: their diversity; the basics of systematic entomology; insect societies; insect physiology and structures; their ecological relationships with their physical and biotic environments; their population and community level ecology; their effects on human welfare through applied disciplines of medical and agricultural entomology; and the methods by which humans attempt to manage insect populations. \$25 science fee. **Prerequisite:** This course is cross-listed with AG 252. Students completing BIOL 252 may not receive graduation credit for AG 252.

BIOL 253

Plant Pathology W/ Lab [M/S] • 5.0 Credits

Formerly BIO 253, BIOL 253

An introduction to the organisms causing plant diseases, their identification, and control technologies. Material presented covers the basic principles necessary to develop an adequate understanding of plant disease processes in natural, urban, commercial, and industrial situations. Emphasis is placed on diseases encountered in the Pacific Northwest. \$25 science fee.

BIOL& 260

Microbiology W/ Lab [M/S] • 6.0 Credits

Formerly BIO 260, BIOL& 260

Basic principles, concepts, and techniques in the study of bacteria, protists, fungi, and viruses. Concepts of immunity and the role of micro-organisms in medicine. \$25 science fee. **Prerequisite:** Completion of BIOL& 160 or BIOL& 211 with a grade of 2.0 or better. It is also strongly recommended that students complete CHEM& 121, BIOL& 241, and BIOL& 242 (for nursing majors), or BIOL& 212 and BIOL& 213 (for biology majors) prior to enrollment.

BIOL 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.

Blueprint Reading

BPR 105

Blueprint Reading [RE] • 3.0 Credits

This course is a comprehensive guide to interpreting drawings commonly found in manufacturing. This course is intended as an introduction to understanding blueprints and being able to visualize and understand the intent of the designer or draftsman as presented in a blueprint. The first step in making quality parts or assemblies is interpreting the drawing correctly and applying the given information to the final product.

BPR 106

Blueprint Reading I (WT) [RE] • 5.0 Credits

This course is designed to introduce the welding student to the world of blueprint symbols, facts, and figures. BPR 106 is the first of a two-part series in which students learn the various methods of presenting to

Courses

the fabricator what the designer wants in the final product. Symbolism for welding structural shapes, types of fittings, their physical make up, material, and dimensioning are covered in the class. The successful student will be an asset to any fabrication shop or when working for the ironworkers or millwrights. **Prerequisite: Completion of DRW 106 and WT 112, both with a 2.0 or better, or instructor permission.**

BPR 110

Basic Blueprints and Drawings [RE] • 3.0 Credits

This course is intended to provide students with information about how to read and interpret information from blueprints, drawings, exploded views, illustrated parts catalogs, assembly drawings, flow diagrams, and schematics.

BPR 204

Blueprint Reading II (MT) [RE] • 3.0 Credits

This course is designed to give students skills and knowledge necessary to read, understand tolerances, and apply geometric dimensioning to machine shop drawings. **Prerequisite: Completion of MT 102 with a 0.7 or higher.**

BPR 206

Blueprint Reading II (WT) [RE] • 3.0 Credits

The second course in the series with the emphasis on pipe isometrics. The course is designed to provide students with the ability to read, draw, and dimension pipe isometrics for fabrication. The successful student will be an asset to any fabrication shop or when working for or with pipefitters or entry level. **Prerequisite: Completion of BPR 106 with a 2.0 or better, or instructor permission.**

Business

BUS& 101

Introduction to Business [S/B] • 5.0 Credits

Formerly BA 101, BUS& 101

As an introduction to business, this course is a critical survey of the theory, principles, and practices of modern business. Functional areas of business, such as entrepreneurship, management, marketing, accounting, and finance are introduced. Students will learn about the breadth of business operations and decision making in a competitive global marketplace. The importance of professional communication in business settings involving diverse stakeholders is highlighted. The increasing reliance on teamwork as a driver of success is also emphasized.

BUS 103

Principles of Sales [RE] • 5.0 Credits

Formerly BA 103, BUS 103

A study in consumer motivation, buyer benefits, overcoming sales resistance, and closing of sales supplemented by sales demonstrations developed and presented in the classroom.

BUS 120

Personal Finance [RE] • 5.0 Credits

Formerly BA 120, BUS 120

In this introductory course students learn a basic foundation of personal finance knowledge and how to apply it to their life. Students learn the fundamentals of planning, analyzing, managing, and investing personal financial resources. This includes practical knowledge and strategies for many real-life scenarios such as purchasing a home, deciding on a credit card, and buying a car. Other important topics include understanding how credit scores work, budgeting, and insurance, as well as a basic overview of investment tools and strategies. Additionally, students learn

how to create a budget and a balance sheet and calculate their net worth. Students are challenged to apply this information to their own life situations by developing a personal financial plan.

BUS 165

Investments [RE] • 5.0 Credits

Formerly BA 165, BUS 165

Fundamentals of investing and investment alternatives, including a study of traditional investment vehicles such as stocks, bonds, mutual funds, and more speculative strategies such as options and futures. The course examines investment decision-making within the framework of investment goals including safety, risk, growth, and income. The mechanics of various financial markets are also discussed.

BUS 170

Introduction to Event Planning [RE] • 5.0 Credits

Introduction to event planning including learning about the types of meetings and events, awareness of site location and suitability, logistics of the planning process, importance of market and sales research, and careers options in the event planning industry.

BUS 171

Event Planning Internship [RE] • 1.0–6.0 Credits

To obtain experience in event planning by assisting or being the lead in the completion of an event planning project(s).

BUS 179

Introduction to Entrepreneurship [RE] • 5.0 Credits

This is a survey course in entrepreneurship and business development. This course focuses on starting and developing a new business. Topics include evaluating opportunities and testing the feasibility of creative ideas, selecting and dealing with partners; examining alternative methods of financing, developing the initial competitive strategy, structuring and managing the business through the early survival months, and locating sources of outside help.

BUS 180

Professionalism & Customer Service [RE] • 5.0 Credits

Students will develop the skills necessary to build professionalism in the workplace. These skills will increase the student's ability to communicate with those around them and their ability to interact with customers in an effective and professional manner. Topics include the importance of human connection, types of communication, entering the workplace, working as a team, and delivering effective presentations. This course will also provide students with the insights needed to grow their interpersonal communication skills to thrive in a diverse workplace.

BUS 185

Leading & Managing Teams [RE] • 5.0 Credits

Students will develop an understanding of their leadership style along with the skills necessary to become a better team leader in today's business setting. Topics include how to build your team, how to improve teamwork and collaboration amongst team members, and how to continuously improve the team's performance. This course will also provide students with the insights needed to align team goals with organizational goals, to avoid the pitfalls of dysfunctional and under-performing teams, and to build trust amongst team members to boost performance.

BUS 190

Leadership Practicum [RE] • 5.0 Credits

Students will develop occupational skills through activities affiliated with National DECA. Students will develop practical marketing, management,

Courses

and human relation skills through a range of unprepared case studies, as well as prepared events, and practice sessions. Students will participate in service projects and leadership activities with business professionals to gain leadership, communication, and human relations experience. Students will apply leadership principles and practices to the operations and execution of leader responsibilities in a student-led organization.

BUS 199

Special Studies [RE] • 1.0–5.0 Credits

Formerly BA 199, BUS 199

A class used to explore new coursework.

BUS& 201

Business Law • 5.0 Credits

Formerly BA 254, BUS& 201

An introduction to the American legal system including its social, political, and ethical impacts on international and domestic business. The court system and judicial procedures are examined. Class focuses on business and personal liability in the areas of torts, crimes, and contracts, including its application of the Uniform Commercial Code, emphasizing on contractual relations and implications in business forms, employment, agency, regulation, and property.

BUS 210

Managing Personal Finance [RE] • 5.0 Credits

BUS 210 Managing Personal Finance is similar to BUS 120 Personal Finance in content but different in format and is an alternative to BUS 120. The course covers the fundamentals of planning, managing, protecting and investing financial resources. Topics include foundations of financial planning, purchasing assets, managing credit and insurance needs as well as investments. A review of a Personal Finance book is required. The course uses contemporary personal finance articles instead of a text so writing instead of exams is emphasized.

BUS 222

Advanced Microsoft Excel [RE] • 5.0 Credits

Formerly ACCT 222, BUS 222

Students will develop advanced business-related spreadsheet skills in developing and analyzing Excel worksheets under common business management scenarios. Topics include formulas, formatting, financial and lookup functions, charts, pivot tables, data tables, and other advanced features used to make business decisions and communicate financial, forecasting, and operational performance. **Prerequisite: Completion of MATH 40 with a 2.0 or higher. It is also recommended that students complete CS 101 prior to enrollment.**

BUS 250

Management Information Systems • 5.0 Credits

Formerly BA 250, BUS 250

This course is designed to introduce business majors to Management Information Systems (MIS) and demonstrate how these systems are used throughout organizations in theory and application. Ethics and privacy, analytics and contemporary topics are explored. Various software applications are used to create and analyze a business.

BUS 262

Management Principles [RE] • 5.0 Credits

Formerly BA 262, BUS 262

A study of the essentials of management in merchandising, manufacturing, agriculture, agrichemical business, and service businesses.

BUS 263

Principles of Finance [RE] • 5.0 Credits

Formerly BA 263, BUS 263

An examination of the analytical tools used to manage and control finances. Concepts include: acquisition and oversight of working capital; intermediate and long-term financing; and the cost of capital and capital budgeting.

BUS 265

Marketing Principles [RE] • 5.0 Credits

Formerly BA 265, BUS 265

Study of marketing functions from the viewpoint of the manager covering such topics as marketing, distribution channels, price market grid, transportation, and consumer behavior.

BUS 267

Marketing Special Projects [RE] • 1.0–5.0 Credits

Formerly BA 267, BUS 267

A practical and student-centered project oriented class, utilizing marketing skills to develop marketing plans for the Tri-Cities area business and charitable organizations. The use of primary and secondary data collection, research, business start-up planning, profitable business decision-making, and business communication skills as they relate to a final project.

BUS 271

Human Relations in Business [RE] • 5.0 Credits

Formerly BA 271, BUS 271

Study of the individual and his or her growth and development. Course is designed to enable students to establish goals and lead others in the accomplishment of those goals. It is aimed at heightening the student's awareness of leadership and management.

BUS 272

Organization Development [RE] • 3.0 Credits

Formerly BA 272, BUS 272

A critical study of theory, principles, and practices in the development of contemporary business organizations. The focus is on diagnosis in a problem-solution approach. Key issues are triggering, managing, and nourishing change in a turbulent and highly competitive global business environment. Systems understanding, resource, and technology applications are considered.

BUS 295

Business Internship [RE] • 1.0–5.0 Credits

Formerly BA 295, BUS 295

A supervised, paid work experience in a community agency, business, or industrial firm involving the application and practice of skills and principles learned in the classroom. Instructor permission is required to enroll.

Chemistry

CHEM& 110

Chemical Concepts W/ Lab [M/S] • 5.0 Credits

Formerly CHEM& 110, CHM 100

Basic introduction to chemical principles as they apply to the structure and behavior of matter. Illustrations from everyday life, environmental topics, medicine, and biochemistry are used to illustrate chemical principles. Topics include: measurement in science, atoms, molecules, nuclear chemistry, and current chemical issues such as energy, polymers, or foods and drugs among others. Assumes no previous chemistry background. Course intended for non-science majors and may be used to fulfill the general science requirement for the AA degree. \$25 science

Courses

fee. **Prerequisite:** A grade of 2.0 or better in MATH 50, 60, or 62, or a grade of 0.7 or better in a higher math class, or appropriate placement.

CHEM& 121

Intro to Chemistry W/ Lab [M/S] • 5.0 Credits

Formerly CHEM& 121, CHM 110

Fundamentals of inorganic chemistry with special emphasis on the application of principles to the health sciences. Topics covered include: measurements, energy, atomic structure, chemical bonding, nomenclature, mole concept, stoichiometry, gas laws, liquid and solid states, solutions, equilibrium, acid/base chemistry, oxidation-reduction, and nuclear chemistry. Course intended for students who plan to pursue an associate degree or enter a four-year baccalaureate program in the Health Sciences. May also be used to fulfill the general science requirement for the AA degree. \$25 science fee. **Prerequisite:** A grade of 2.0 or better in MATH 50, 60, or 62, or a grade of 0.7 or better in a higher math class, or appropriate placement.

CHEM& 122

Intro to Organic Chemistry W/ Lab [M/S] • 5.0 Credits

Formerly CHEM& 122, CHM 120

Fundamentals of organic chemistry with special emphasis on the application of principles to the health sciences. Topics covered include: saturated, unsaturated, aromatic hydrocarbons, alcohols, thiols, phenols, ethers, aldehydes, ketones, carboxylic acids, esters, amines, and amides. Each family of compounds are studied with respect to its structure, behavior, and function. Biochemical applications are integrated into this approach. \$25 science fee. **Prerequisite:** A grade of 2.0 or better in CHEM& 121, CHEM& 140, or CHEM& 161.

CHEM& 123

Intro to Biochemistry W/ Lab [M/S] • 5.0 Credits

Formerly CHEM& 123, CHM 130

Topics covered include: optical isomerism; structure and function of carbohydrates, lipids, proteins, and nucleic acids; protein synthesis, enzymes, hormones; biochemical energetics and metabolism of carbohydrates, lipids, and proteins. \$25 science fee. **Prerequisite:** A grade of 2.0 or better in CHEM& 122 or CHEM& 242.

CHEM& 140

General Chemistry Prep W/ Lab [M/S] • 5.0 Credits

Formerly CHEM& 140, CHM 101

Introduction to chemical principles, chemical measurements, matter and energy, atomic theory, periodic properties, mole concept, molecules, compounds and chemical bonding, nomenclature and chemical equations, stoichiometry and chemical calculations, gas laws, solids, liquids, phase changes, oxidation-reduction reactions, solutions, reaction rates and chemical equilibrium, and acids/bases. The course is directed toward students needing a knowledge of the fundamentals of inorganic chemistry and planning to obtain a degree in the physical/life science/engineering disciplines. Excellent preparation for CHEM& 161. \$25 science fee. **Prerequisite:** A grade of 2.0 or better in MATH 70 or 72, or a grade of 0.7 or better in a higher math class (excluding MATH 100, MATH& 107 and MATH& 146), or appropriate placement.

CHEM& 161

General Chemistry I W/ Lab [M/S] • 6.0 Credits

Formerly CHEM& 161, CHM 111

Fundamental concepts in chemistry including matter, measurement, and dimensional analysis, atomic theory, atomic structure, chemical bonding, chemical formulas and nomenclature, mole concept, chemical reactions and stoichiometry, thermochemistry, electronic structure, periodic trends,

molecular geometry, valence bond theory, molecular orbital theory, chemical instrumentation, data acquisition, and data analysis. Problem-solving techniques and critical thinking are fundamental in both the lecture and laboratory. \$25 science fee. **Prerequisite:** Completion of CHEM& 140 or CHEM& 121 with a grade of 2.0 or better or completion of a year-long high school chemistry course with a B or better.

CHEM& 162

General Chemistry II W/ Lab [M/S] • 6.0 Credits

Formerly CHEM& 162, CHM 112

Principles of the gas, liquid, and solid states of matter, intermolecular forces, solutions, chemical kinetics, chemical equilibria, chemical instrumentation, data acquisition, and data analysis. Problem-solving techniques and critical thinking are fundamental in both the lecture and laboratory. \$25 science fee. **Prerequisite:** Completion of CHEM& 161 with a 2.0 or better.

CHEM& 163

General Chemistry III W/ Lab [M/S] • 6.0 Credits

Formerly CHEM& 163, CHM 113

Spontaneity, entropy, free energy, electrochemistry, nuclear chemistry, introduction to organic chemistry, chemical instrumentation, data acquisition, data analysis, and other special topics in chemistry. Problem-solving techniques and critical thinking are fundamental in both the lecture and laboratory. \$25 science fee. **Prerequisite:** Completion of CHEM& 162 with a 2.0 or better.

CHEM 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.

CHEM& 241

Organic Chemistry I [M/S] • 4.0 Credits

Formerly CHEM& 241, CHM 221

Stresses nomenclature, structure, stereochemistry, and introduces conceptual material needed to understand reaction mechanisms and synthesis. **Prerequisite:** A grade of 2.0 or better in CHEM& 163 and concurrent enrollment in CHEM& 251.

CHEM& 242

Organic Chemistry II [M/S] • 4.0 Credits

Formerly CHEM& 242, CHM 222

Deals with the major classes of organic compounds with respect to preparations, mechanisms of reactions, syntheses and identification. **Prerequisite:** A grade 2.0 or better in CHEM& 241/251, and concurrent enrollment in CHEM& 252.

CHEM& 243

Organic Chemistry III [M/S] • 4.0 Credits

Formerly CHEM& 243, CHM 223

Advanced reaction mechanisms and syntheses. Polymers, macromolecular and biochemical applications, spectroscopy, chromatography, and identification of organic compounds. **Prerequisite:** A grade of 2.0 or better in CHEM& 242/252, and concurrent enrollment in CHEM& 253.

CHEM& 251

Organic Chemistry I Lab [M/S] • 2.0 Credits

Lab to be taken concurrently with CHEM& 241. \$25 science fee.

Prerequisite: Completion of CHEM& 163 with a 2.0 or better and concurrent enrollment in CHEM& 241.

Courses

CHEM& 252

Organic Chemistry II Lab [M/S] • 2.0 Credits

Lab to be taken concurrently with CHEM& 242. \$25 science fee.

Prerequisite: Completion of CHEM& 241 and CHEM& 251, both with a 2.0 or better, and concurrent enrollment in CHEM& 242.

CHEM& 253

Organic Chemistry III Lab [M/S] • 2.0 Credits

Lab to be taken concurrently with CHEM& 243. \$25 science fee.

Prerequisite: Completion of CHEM& 242 and CHEM& 252, both with a 2.0 or better, and concurrent enrollment in CHEM& 243.

CHEM 254

Quantitative Analysis [M/S] • 2.0 Credits

Formerly CHEM 254, CHM 251

Introduction to analytical chemistry. Sampling, statistics, and spreadsheets. Acid-base, precipitation, complexation, and redox equilibria. Activity coefficients and systematic treatment of equilibrium. Volumetric, gravimetric, potentiometric, environmental, and clinical methods of analysis taught in the lab. **Prerequisite:** Completion of CHEM& 163 with a 0.7 or higher and concurrent enrollment in CHEM 264.

CHEM 255

Instrumental Analysis [M/S] • 2.0 Credits

Formerly CHEM 255, CHM 252

Electrochemistry, potentiometry, coulometry, voltammetry, spectrophotometry, atomic spectroscopy, chromatography, capillary electrophoresis, and mass spectrometry. Ion-selective electrode, coulometric, spectrophotometric, atomic spectrometric, solvent extraction, chromatographic, and mass spectrometric methods of analysis taught in the lab. CHEM 255/265 has a heavy emphasis on instrumental methods of chemical analysis. Computer-interfaced instrumentation included in the lab. **Prerequisite:** Completion of CHEM 254/264 with a 0.7 or higher and concurrent enrollment in CHEM 265.

CHEM 260

Biochemistry [M/S] • 5.0 Credits

Fundamentals of biochemistry course covering an introduction to structure and function of proteins, carbohydrates, lipids, and nucleic acids. Essential metabolic pathways, enzymology, transcription, translation, biological membranes, and medicinal chemistry are also covered. The course is designed to provide a foundation in biochemistry for students in science fields, pre-pharmacy and pre-med programs. \$25 science fee. **Prerequisite:** A grade of 2.0 or better in CHEM& 252 and a grade of 2.0 or better in either BIOL& 160 or BIOL& 211.

CHEM 264

Quantitative Analysis Lab [M/S] • 3.0 Credits

Lab to be taken concurrently with CHEM 254. \$25 science fee.

CHEM 265

Instrumental Analysis Lab [M/S] • 3.0 Credits

Lab to be taken concurrently with CHEM 255. \$25 science fee.

CHEM 281

Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, students can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses.

\$25 science fee. **Prerequisite:** Instructor permission and completion of CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.

CHEM 282

Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, students can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. \$25 science fee. **Prerequisite:** Instructor permission and completion of CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.

CHEM 283

Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, students can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. \$25 science fee. **Prerequisite:** Instructor permission and completion of CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.

CHEM 284

Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, students can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. \$25 science fee. **Prerequisite:** Instructor permission and completion of CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.

CHEM 285

Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, students can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or organic analytical chemistry. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. \$25 science fee. **Prerequisite:** Instructor permission and completion of CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.

CHEM 286

Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, students can pursue a special topic of interest, design and carry out a project, or participate in undergraduate research (either alone or with other students) in the areas of natural product chemistry, or

Courses

organic analytical chemistry. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. \$25 science fee. **Prerequisite: Instructor permission and completion of CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 291

Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, students can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. \$25 science fee. **Prerequisite: Instructor permission and completion of CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 292

Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, students can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. \$25 science fee. **Prerequisite: Instructor permission and completion of CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 293

Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, students can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. \$25 science fee. **Prerequisite: Instructor permission and completion of CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 294

Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, students can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. \$25 science fee. **Prerequisite: Instructor permission and completion of CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 295

Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, students can participate in undergraduate research (either

alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. \$25 science fee. **Prerequisite: Instructor permission and completion of CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 296

Undergraduate Research, Special Topics [M/S] • 1.0–3.0 Credits

Designed for students who want to expand their knowledge of chemistry beyond the basics offered in their regular courses. By arrangement with the instructor, students can participate in undergraduate research (either alone or as part of a team with other students), design and carry out a project, or pursue a special topic of interest in the fields of analytical chemistry, atmospheric science, or chemical education. Note: credits earned in this course cannot be used as a substitute for required credits in other CBC chemistry courses. \$25 science fee. **Prerequisite: Instructor permission and completion of CHEM& 140 with a grade of 2.0 or better or high school chemistry with a grade of B or better.**

CHEM 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.

Communication Studies

CMST& 101

Introduction to Communication Studies [C] • 5.0 Credits

Students in this survey course will explore the theory and practice of fundamental communication skills and strategies. This course emphasizes investigation and understanding in three core settings: public speaking communication, small group communication and interpersonal communication. Ancillary fields of multicultural communication and mass media will be examined. Students will also learn to prepare, deliver and critique effective presentations.

CMST& 102

Intro to Mass Media [S/B] [RE] • 5.0 Credits

Formerly CMST& 102, JOR 100

This course offers an overview of historical, cultural, economic, and social issues affected by the development and continued evolution of mass media. Media products analyzed will be both traditional (print, audio, film, etc.) and evolving (digital). Upon completing this course, students will be conscious of how viewpoints are shaped by the media and be more critical consumers of media products.

CMST 103

Workplace Communication [RE] • 3.0 Credits

Formerly CMST 103, SPE 103

Students in the workforce are able to develop a toolbox of communication strategies and techniques. These tools include interviewing, customer service, cultural diversity, and resolving conflicts topics.

CMST 104

Speech Essentials [C] • 3.0 Credits

Formerly CMST 101, CMST 104, SPE 101

This is a basic course in public speaking. The goal of this course is to introduce, practice, and become comfortable speaking in front of people in the workplace and in the community. This course is recommended for students with no previous speech experience. Students

Courses

are taught different forms of public speaking, learn to be more effective communicators, and learn how to organize their ideas for effective and efficient oral communication. Credit not granted for both CMST 104 and CMST& 220.

CMST 108

Voice and Articulation [RE] • 3.0 Credits

Formerly CMST 108, SPE 108

An introduction to problems of pronunciation and enunciation. Through voice and articulation techniques and the use of the international phonetic alphabet, students gain basic knowledge of phonetics and anatomy of speech. Individual attention is given to minor speech problems.

CMST 110

Communication Behavior [C] • 3.0 Credits

Formerly CMST 110, SPE 110

An introduction to the basic elements that impact our communication with each other. The course is designed to illustrate the reasons for communication failures in two-party and small group situations. Among other areas, active listening, conflict communication, self-esteem, and assertiveness are covered. Credit not granted for both CMST 110 and CMST& 210.

CMST 141

Debate I [RE] • 2.0 Credits

Formerly CMST 141, SPE 141

Provides investigation and practice in oral problem-solving through debate format and impromptu speaking. Includes principles of argumentation and analysis of propositions; use of tests of evidence, reasoning, and logic; detection of fallacies, structure of arguments, and methods of refutation and rebuttal. Students are expected to attend a minimum of two debate tournaments. It is recommended that students complete CMST 104 prior to enrollment.

CMST 142

Debate II [RE] • 2.0 Credits

Formerly CMST 142, SPE 142

Provides investigation and practice in oral problem-solving through debate format and persuasive speaking. Includes principles of argumentation and analysis of propositions; use of tests of evidence, reasoning, and logic; detection of fallacies, structure of arguments, and methods of refutation and rebuttal. Students are expected to attend a minimum of two debate tournaments. It is recommended that students complete CMST 104 prior to enrollment.

CMST 143

Debate III [RE] • 2.0 Credits

Formerly CMST 143, SPE 143

Provides investigation and practice in oral problem-solving through debate format and extemporaneous speaking. Includes principles of argumentation and analysis of propositions; use of tests of evidence, reasoning, and logic; detection of fallacies, structure of arguments, and methods of refutation and rebuttal. Students are expected to attend a minimum of two debate tournaments. It is recommended that students complete CMST 104 prior to enrollment.

CMST 198

Special Studies [RE] • 1.0–15.0 Credits

Formerly CMST 198, CMST 199

A class used to explore new coursework.

CMST 201

Studies In Media & Culture: Rotating Genre Study [RE] • 5.0 Credits

Introduces students to genre-based narrative theories in mass media studies. Each quarter a particular genre of media is selected and students critically analyze a given set of mass media artifacts, possibly including films, television shows, video games, advertisements, books, music videos, or toys. Based on this analysis, students learn to criticize and practically engage the ideologies inherent in their surrounding media environments.

CMST& 210

Interpersonal Communication [C] • 5.0 Credits

Formerly CMST& 210, SPE 111

This course is recommended for students seeking to improve their communication with friends, family, and co-workers. It is designed to heighten the students' awareness of personality styles and communication behaviors, and their respective impact on interpersonal and group communication. Credit not granted for both CMST 110 and CMST& 210.

CMST& 220

Public Speaking [C] • 5.0 Credits

Formerly CMST& 220, SPE 102

This is a basic course in speech that expands beyond the three-credit requirement for an AA degree. The goal of this course is to introduce, practice, and become comfortable speaking in front of people in the workplace and in the community. This course is recommended for students with no previous speech experience. Students are taught different forms of public speaking. Students learn to be more effective communicators and organize their ideas for effective and efficient oral communication. Credit not granted for both CMST 104 and CMST& 220.

CMST 240

Leadership Development [RE] • 5.0 Credits

Formerly CMST 240, SPE 240

A study in theory and practice to develop individual leadership skills for the students' personal, professional, and academic lives. Includes substantial experiential learning opportunities to practice leadership in action. **Prerequisite: Completion of ENGL& 101 with a 0.7 or better, or instructor permission.**

CMST 241

Applied Leadership I [RE] • 2.0 Credits

Formerly CMST 241, SPE 241

This course explores leadership skills, concepts, and theories as it relates to student involvement on campus.

CMST 242

Applied Leadership II [RE] • 2.0 Credits

Formerly CMST 242, SPE 242

A continuation of CMST 241, this course explores leadership skills, concepts, and theories as it relates to student involvement on campus.

CMST 243

Applied Leadership III • 2.0 Credits

Formerly CMST 243, SPE 243

A continuation of CMST 242, this course explores leadership skills, concepts, and theories as it relates to student involvement on campus.

CMST 246

Oral Interpretation [RE] • 5.0 Credits

Formerly CMST 246, SPE 246

Courses

Students are taught to use their voices more effectively for character interpretation and presentation. Demonstrations, class exercises, and oral reading assignments are employed.

CMST 256

PARL Procedures [RE] • 1.0–2.0 Credits

Formerly CMST 256, SPE 253

The theory and study of parliamentary procedures.

CMST 260

Multicultural Communication [C] • 5.0 Credits

Formerly CMST 260, SPE 260

Multicultural Communication teaches students culturally-sensitive methods of identifying basic problems involving communication failures across ethnic and racial settings. Students also learn to apply various multicultural approaches to behavior modification, racism, sexism, the valuing of cultural diversity, collaboration, and the move toward inherent pluralism. **Prerequisite: Completion of ENGL& 101 with a 0.7 or better.**

CMST 298

Special Studies [RE] • 1.0–15.0 Credits

Formerly CMST 298, CMST 299

A class used to explore new coursework.

CMST 320

Health Communication [RE] • 5.0 Credits

The purpose of this course is to develop a deeper understanding of how health communication concepts, theories, research methods, cases, and other practices can be applied to real-world health issues and problems. You will identify and develop ways in which practitioners can better the lives of those they support through effective and efficient communication. In this course, you will learn about the field of health communication and the approaches and action areas used to plan, implement, and evaluate health communication. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

CMST 415

Applied Professional Communication [RE] • 5.0 Credits

Students will study and apply effective professional workplace communication principles. Concepts include awareness and application of interpersonal and multicultural communication skills, leadership styles and application, small group dynamics, problem-solving, decision making and conflict management. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

Computer Applications

CA 100

Introduction to Microcomputers • 4.0 Credits

Introduces hardware and software concepts, operating systems and/or interface systems, Internet access, basic word processing, and spreadsheet software through hands-on experience. Keyboarding experience is recommended. \$11.40 lab fee.

CA 101

Introduction to Keyboarding [RE] • 2.0 Credits

Formerly AOT 101, BT 101, CA 101

This course is designed for students with limited or no keyboarding skills. Students will learn the fundamentals of touch typing of letters, numbers, symbols, and operational keys using a computer. \$11.40 lab fee.

CA 120

Introduction to Computer Applications [RE] • 3.0 Credits

This course is designed for students with limited or no computer skills. Students will gain hands-on experience with personal computer hardware, the Windows operating system, and file management systems. By the end of the course, students will possess the digital literacy skills needed to excel in both academic and professional environments. \$11.40 lab fee.

CA 140

Introduction to Microsoft Word [RE] • 1.0 Credit

Introductory class to Microsoft Word, a word processing software application that enables you to easily create both simple and complex documents. \$11.40 lab fee.

CA 145

Intermediate Microsoft Word Processing [RE] • 2.0 Credits

Formerly CA 145, CS 107

This course provides students with an understanding of basic and intermediate Word processing functions and applications using Microsoft Word. You will learn how to create and edit documents for a variety of purposes and situations including professional-looking reports, multi-column newsletters, resumes, and business correspondence. Upon completion of this class, you will have the opportunity to earn the Microsoft Office Specialist Certification (MO-100). It is recommended that students complete CA 140, CA 100, or CS 101 prior to enrollment.

CA 150

Introduction to Microsoft Excel [RE] • 1.0 Credit

Introductory class to Microsoft Excel, a spreadsheet application typically used to display and manipulate numerical data. \$11.40 lab fee.

CA 155

Intermediate Microsoft Excel [RE] • 2.0 Credits

Formerly CA 155, CS 108

This course provides students with an understanding of the fundamentals of creating and managing worksheets and workbooks using Microsoft Excel. You will learn how to create workbooks for a variety of purposes including professional-looking budgets, financial statements, team performance charts, sales invoices and data-entry logs. Upon completion of this class, you will have the opportunity to earn the Microsoft Office Specialist Certification (MO-100). It is recommended that students complete CA 150, CA 100, or CS 101 prior to enrollment.

CA 160

Introduction to Microsoft PowerPoint [RE] • 1.0 Credit

Introductory class to Microsoft PowerPoint, a presentation software application that allows you to combine text and graphics for on-screen presentations. \$11.40 lab fee.

CA 165

Intermediate Microsoft PowerPoint [RE] • 2.0 Credits

Formerly CA 103, CA 165

This course provides students with the fundamentals to create, edit and enhance presentations and slideshows using Microsoft PowerPoint. You will learn how to create and manage presentations, insert and format shapes and slides, create slide content, apply transitions and animations and manage multiple presentations. Upon completion of this class, you will have the opportunity to earn the Microsoft Office Specialist Certification (MO-100). It is recommended that students complete CA 160 or CS 101 prior to enrollment.

Courses

CA 170

Introduction to Microsoft Outlook [RE] • 1.0 Credit

Basic concepts of learning how to become more effective in your communication through understanding of email features and working with messages; how to view and manage your calendar, create/group contacts, schedule appointments, events, and tasks, and use of reminder options. \$11.40 lab fee.

CA 199

Special Studies [RE] • 1.0–5.0 Credits

A class used to explore new approaches to software applications.

CA 299

Special Studies [RE] • 1.0–5.0 Credits

A class used to explore new approaches to software applications.

Computer Science

CS 101

Intro to Computers & Information Technology • 5.0 Credits

CS 101 is a five-credit introductory class designed to meet the needs of all students as defined in CBC's "Using Information Technology & Tools Student Learning Outcome." The class emphasizes the cognitive aspects of dealing with Information Technology (IT): evaluating information, learning practical IT skills, solving problems, and dealing with information-related issues such as privacy, security, ethics, etc. Students also learn computer basics using Windows, Word, Excel, PowerPoint, email, and Internet skills to locate, present, and report information. \$35 virtual desktop fee. **Prerequisite: A grade of 2.0 or better in either MATH 40 or 50, or concurrent enrollment in MATH 50, or a grade of 1.0 or better in a higher math class, or appropriate placement.**

CS 102

Programming Fundamentals [M/S] • 5.0 Credits

An introduction to programming using current technologies. It is designed for those with little or no programming experience. Topics include: program development cycle, fundamentals of programming and logic, decisions, repetitions, controls, functions, and procedures. \$35 virtual desktop fee. **Prerequisite: A grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

CS 106

Database Systems • 5.0 Credits

This is a beginning database course in which students create, modify, and implement relational databases using Microsoft Access. Topics include: tables, queries, forms, reports, sharing information with other programs, data access pages, advanced queries, managing database objects, and creating macros and navigation forms. \$35 virtual desktop fee. **Prerequisite: A grade of 2.0 or better in either MATH 40 or 50, or a grade of 0.7 or better in a higher math class, or appropriate placement. It is also recommended that students complete CS 101 with a 2.5 or better prior to enrollment.**

CS 117

Computer Ethics • 2.0 Credits

Covers essential topics of information and technology ethics. Students will understand what to do and what not to do as a user and an employee. Topics include: ethics and information technology, IT configured societies, information flow, privacy and surveillance, digital intellectual property, and professional ethics in computing. Students work in small groups to discuss important issues based on scenarios given. \$35 virtual desktop

fee. **Prerequisite: A grade of 2.5 or higher in CS 101 or concurrent enrollment in CS 101, and a grade of 0.7 or higher in ENGL 99 or a higher ENGL class or placement above ENGL 99.**

CS 118

Customer Service [RE] • 3.0 Credits

Helps students develop the skills needed to present a professional image and to communicate effectively in everyday customer service transactions, as well as in difficult situations. Students learn about various types of customers and develop strategies for dealing with each. Emphasis is placed on verbal and nonverbal communication, listening to the customer, customer service in a diverse world, managing stress and time, encouraging customer loyalty, and recovering customers after a breakdown in service. \$35 virtual desktop fee. **Prerequisite: A grade of 2.0 or better in either MATH 40 or 50, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

CS 123

PC Hardware [RE] • 5.0 Credits

Students gain the knowledge, skills, and abilities essential to become a successful computer service technician as defined by experts from companies across the industry. Students learn how to troubleshoot and repair hardware problems and install components. Hardware topics include: power supply, CPUs and motherboards, memory, I/O busses, removable and fixed drives, optical drives, graphics and sound, and networking and printers. Other topics include: the DOS operating system, number systems, working safely and professionally, and the customer relations skills necessary for the industry. \$35 virtual desktop fee. **Prerequisite: Completion of CS 101 with a 2.5 or better, or concurrent enrollment.**

CS 127

Windows Configuration [RE] • 5.0 Credits

Prepares students to develop the skills needed to deploy and manage a Windows desktop operating system. Students learn about hardware management, network configuration, application management, Windows installation, mobile computing, and system monitoring and maintenance. \$35 virtual desktop fee. **Prerequisite: Completion of CS 101 with a 2.5 or better, or concurrent enrollment.**

CS& 131

Computer Science I C++ [M/S] • 5.0 Credits

Formerly CS 161, CS& 131

This class is the first in a series of three in which students learn the C++ programming language. C++ is an extension of C language, which includes both procedural and object-oriented programming. It is the basis for most PC-based windows programs. Students learn C++ keywords, control structures, functions, arrays, strings, and introduction to classes and objects. \$35 virtual desktop fee. **Prerequisite: A grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

CS 135

Cloud Fundamentals [RE] • 5.0 Credits

Cloud Fundamentals is intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, cloud core services, security, architecture, pricing, and support. **Prerequisite: Completion of CS 101 with a 2.5 or better.**

Courses

CS 140

Sharepoint [RE] • 5.0 Credits

Provides students with the knowledge and skills that are needed to use and manipulate fundamental features of SharePoint Server. Students are introduced to core functions of SharePoint Server to gain a deeper insight of the capabilities and use of these functions and features. This information will assist students in effectively applying and securing SharePoint in a business environment. \$35 virtual desktop fee. **Prerequisite: Completion of CS 101 and CS 228, both with a 2.5 or better.**

CS& 141

Computer Science I Java [M/S] • 5.0 Credits

Formerly CS 215, CS& 141

Java is an object-oriented programming language that is widely used to enhance information delivery on the web. Topics include: compiling and running a Java program, use of selection, loop structures, arrays, file processing, and introduction to classes and objects. Students learn how to write and debug Java programs with and without graphical user interfaces. \$35 virtual desktop fee. **Prerequisite: A grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

CS 150

Computer Security [RE] • 5.0 Credits

This class covers the basics of computer security. Students learn about virus protection, installing security patches, using firewalls to protect networks, cryptography and Public Key Infrastructure (PKI), and legal issues. \$35 virtual desktop fee. **Prerequisite: A grade of 2.5 or better in CS 101 and a grade of 2.0 or better in MATH 50, 60, or 62, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

CS 162

C++2 [RE] • 5.0 Credits

This is an intermediate C++ course that provides students an understanding of key object-oriented programming (OOP) theories and concepts, and how to create and manipulate objects in a GUI environment. Students learn advanced features of C++ including: arrays, strings, file processing, classes, inheritance, composition, pointers, virtual functions, templates, and introduction to linked lists. \$35 virtual desktop fee. **Prerequisite: Completion of CS& 131 with a 2.5 or better.**

CS 199

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework. \$35 virtual desktop fee.

CS 202

Programming Fundamentals 2 [RE] • 5.0 Credits

This is an intermediate programming course using current technologies. Students learn to write, design, and debug Windows applications using a variety of controls and events, procedures, functions, arrays, structures, files, classes/Object Oriented design, database programming, and calculations to solve problems. Class projects involve writing games and business applications. \$35 virtual desktop fee. **Prerequisite: Completion of CS 102 with a 2.5 or better.**

CS 206

Database Design [RE] • 5.0 Credits

An advanced course designed to help students understand concepts including: SQL, relational algebra, integrity constraints, relational database design, normalization, and physical database design. Students will gain hands-on experience designing a functional relational database. \$35 virtual desktop fee. **Prerequisite: A grade of 2.5 or better in CS 106 and**

a grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.

CS 217

Internship [RE] • 1.0–3.0 Credits

Provides students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. \$35 virtual desktop fee. Grade is pass/no credit. **Prerequisite: Current enrollment in the Computer Science program is required prior to enrollment. You must also have a department approved Job Placement into a Computer Science-related field and instructor permission.**

CS 221

SQL Server Administration [RE] • 5.0 Credits

This course provides students with the knowledge and skills to install, configure, administer, and troubleshoot Microsoft SQL Server client/server database management systems. It helps prepare students for the MCDBA Certificate. \$35 virtual desktop fee. **Prerequisite: A grade of 2.5 or better in CS 106 and CS 228, and a grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

CS 223

Unix/Linux [RE] • 5.0 Credits

This course helps prepare students for working with other operating systems. Students learn how to use UNIX/Linux, which is an industry standard, and widely used on the Internet. Covers basic user commands, customizing the user shell, the vi editor, and basic scripting. \$35 virtual desktop fee. **Prerequisite: A grade of 2.5 or better in CS 101, and a grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

CS 225

SQL Server Programming [RE] • 5.0 Credits

This course provides students with the knowledge and skills to implement a database solution using Transact SQL and Microsoft SQL Server. Topics include: manipulating data using Transact SQL, enforcing referential integrity, managing relationships, and implementing a physical database ensuring data integrity. \$35 virtual desktop fee. **Prerequisite: A grade of 2.5 or better in CS 106 and a grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

CS 228

Windows Server [RE] • 5.0 Credits

This course prepares students to work with Windows Server. This course covers topics related to installation, configuration, troubleshooting, and optimization of a Windows Server. Students learn to set up and maintain users, groups, and file systems. Students learn how to use critical thinking and troubleshooting tools to troubleshoot the server, printers, and workstations. This class helps to prepare students to pass one of the Windows exams. \$35 virtual desktop fee. **Prerequisite: A grade of 2.5 or better in CS 101, and a grade of 2.0 or better in MATH 50, 70 or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

CS 230

Active Directory [RE] • 5.0 Credits

This course is designed to provide students with the knowledge and skills necessary to install, configure, and administer Microsoft Windows Active Directory. The course also focuses on implementing Group Policy and

Courses

performing the Group Policy-related tasks that are required to centrally manage users and computers. \$35 virtual desktop fee. **Prerequisite:** A grade of 2.5 or better in CS 228 and a grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.

CS 231

Network Infrastructure [RE] • 5.0 Credits

This course prepares students to install, manage, monitor, configure, and troubleshoot DNS, DHCP, Remote Access, Network Protocols, IP Routing, and WINS in a Windows network infrastructure. In addition, this class prepares students to manage, monitor, and troubleshoot Network Address Translation and Certificate Services. It also prepares students to pass one of the MCSA/MCSE exams. \$35 virtual desktop fee. **Prerequisite:** A grade of 2.5 or better in CS 228 and a grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.

CS 232

Network Security [RE] • 5.0 Credits

This course builds on the experience users gain in previous network and security classes. The class is designed around the layered security framework concept including setting up perimeter defenses down to protecting your data. The class teaches how to implement the proper security measure at each layer to protect the network from a myriad of threats. \$35 virtual desktop fee. **Prerequisite:** A grade of 2.5 or better in CS 150 and CS 228, and a grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.

CS 236

Advanced Object Oriented Programming [RE] • 5.0 Credits

An advanced course in Java programming in which students create applications to solve problems using common algorithms and Object Oriented Design. Topics include: classes, methods, interfaces, inheritance, exceptions, stacks, queues, linked lists, recursion, and binary trees. \$35 virtual desktop fee. **Prerequisite:** Completion of CS& 141 with a 2.5 or better.

CS 245

Webpage Authoring Essentials [RE] • 5.0 Credits

The fundamentals and industry standards of web page design and implementation. This course will prepare students to design and publish a dynamic website. Students will differentiate between client-based website tasks and server-side tasks. Principles of web design, file management, HTML and data service topics will be introduced. Students will create an accessible website for an effective online presence based on a client need. **Prerequisite:** Completion of CS 101 with a 1.0 or better.

CS 250

HTML5-JavaScript/JQuery • 5.0 Credits

An introduction to dynamic client-side website development using JavaScript and JQuery. Students learn JavaScript to manipulate HTML and CSS elements, adding rich features to websites and mobile devices. Other topics include: JSON, HTML DOM, PHP, and Ajax. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 102 or CS& 131 or CS& 141 with a 2.5 or better, or instructor permission.

CS 260

Data Structures In C++ [RE] • 5.0 Credits

This course is the third in a series of three in which students learn the C++ programming language and how to implement and use different types of data-structures. This leads students to create data-driven programs and

algorithms. Students also learn more about linked lists, stacks, queues, binary trees, and binary search, recursion, and sorting. The course starts at a level that assumes a good working knowledge of C++. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 162 with a 2.5 or better.

CS 262

Game Programming Design and Development [RE] • 5.0 Credits

Helps students understand important fundamentals of how to develop game applications using object-oriented development techniques. Course projects involve developing, debugging, and optimizing games for multiple hardware platforms. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 102 or CS& 131 or CS& 141 with a 2.5 or better, or instructor permission.

CS 299

Special Studies [RE] • 1.0–5.0 Credits

A class used to explore new coursework. \$35 virtual desktop fee.

CS 301

Introduction to Information Systems [RE] • 5.0 Credits

Formerly CS 301, CSIT 301

The course is designed to help students understand the importance and elements of today's information technology (IT) systems. Topics include actual and contemporary examples to clearly illustrate how they can be applied to improve and strengthen IT organizations, IT security, and hands-on scenarios for class projects. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 206 and CS 250, both with a 2.5 or higher, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

CS 302

Principles of Computer Architecture and Computer Systems [RE] • 5.0 Credits

This course provides an in-depth exploration of computer systems, focusing on hardware architecture, operating systems, and the interaction between hardware and software. Students will gain a thorough understanding of CPU/ GPU functions, register sizes, and how hardware limitations impact program capabilities. By learning about hardware design, students will be equipped to optimize algorithms, improve memory access patterns, and exploit parallel processing, leading to faster and more resource-efficient code. The course also covers processor organization, memory, caches, and input/output systems, enabling students to write efficient code, diagnose performance bottlenecks, and design systems tailored to specific computational needs. This knowledge empowers students to develop applications that maximize the potential of modern computing architectures. **Prerequisite:** Students must be accepted into CBC's BS in CS program.

CS 316

Cloud Computing HTML5 and PHP [RE] • 5.0 Credits

Formerly CS 316, CSIT 316

This course in database-driven websites gives students an understanding of HTML5 with PHP (Hypertext Preprocessor). Students acquire web development techniques that use databases to create content with HTML form objects, database connections, and server side programming. Use of HTML5, MySQL, and PHP5 for programming turns simple static websites into dynamic, database-driven web applications. Course projects involve developing, debugging, PHP, and SQL. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 206 and CS 250, both with a 2.5 or higher, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

Courses

CS 321

Python for Data Processing [RE] • 5.0 Credits

Formerly CS 321, CSIT 311

This course is designed for students who have an object-oriented programming background. Students learn to use built-in data structures in Python computer language to perform complex data analysis. Students also learn to work with HTML, XML, and JSON data in Python to do basic data visualization. \$35 virtual desktop fee. **Prerequisite: Completion of CS 250 and either CS 236 or CS 260, all with a 2.5 or higher, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**

CS 330

Principles of Computation and Algorithm Analysis [RE] • 5.0 Credits

This course covers the theoretical foundations of computers and algorithms, blending theory with application to demonstrate how theoretical concepts inform the design of programs and systems. Students will explore Automata Theory and Turing Machines, which illustrate the limits of computation and the concept of self-modifying machines. You'll also study pushdown automata and context-free languages, tools for analyzing programming language structures, designing compilers, and enforcing coding rules. Additionally, the course delves into algorithms for processing data, highlighting that some problems are unsolvable by computers. Students will learn to classify problems, assess algorithm efficiency, and choose optimal algorithms for specific tasks.

CS 331

Big Data Analysis [RE] • 5.0 Credits

Formerly CS 331, CSIT 306

The course provides a comprehensive view on computing architectures in data analytics and data mining. Topics include big data characteristics and algorithms, analyzing tools, data mining techniques, massive databases processing, implementation of machine learning algorithms, and analytics environments. Students learn to conceptualize an analytic environment that is suited to the challenges of today's analytics demands. \$35 virtual desktop fee.

CS 401

Software Analysis and Design [RE] • 5.0 Credits

Formerly CS 401, CSIT 401

This course covers web development, service-oriented architecture, traditional, UML, and object-oriented approaches to information technology systems analysis and design. Real world case projects and technologies are provided throughout the course for hands-on exercises. Students apply the concepts learned to develop a conceptual, technical, and managerial foundation for systems analysis design and implementation as well as project management principles for systems development. \$35 virtual desktop fee. **Prerequisite: Completion of PROJ 100 with a 2.0 or better and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**

CS 411

Agile Methodology & ePortfolio Planning • 5.0 Credits

Formerly CS 411, CSIT 411

This course represents the integration of previous coursework and practical experience with a focus on authentic demonstration of competencies outlined by the program. This course also covers Agile Methodology practices for teamwork using Scrum techniques. Students use an open source ePortfolio to collect information on performance-based artifacts combined with metacognitive reflection and a professional statement of purpose that reflects their ability to make globally, socially, and ethically responsible information technology and systems decisions

that are aligned with the legal and organizational policy requirements. Students also reflect on a previous project and describe in writing how Scrum techniques could have been used to make their project more successful. \$35 virtual desktop fee. **Prerequisite: Completion of PROJ 100 and CS 401, both with a 2.0 or higher, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**

CS 416

Data Visualization [RE] • 5.0 Credits

Formerly CS 416, CSIT 416

This course introduces a data analytics tool used to prepare and analyze data for effective visualizations. Students learn theory and concepts of data analytics and how to display and share data in a meaningful way. Students also learn the principles of preparing, analyzing, and processing data to create desired data visualizations. \$35 virtual desktop fee. **Prerequisite: Completion of CS 331 with a 2.0 or higher, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**

CS 417

Contemporary Topics in Computer Science [RE] • 5.0 Credits

This course is an in-depth survey of new and emerging technologies from the field of computer science. Students will have an opportunity to study advanced topics which may include, but is not limited to, artificial intelligence, cloud computing, big data, Internet of Things (IoT), and blockchains. **Prerequisite: Completion of CS 135 with a 2.5 or better; completion of CS 321 and CS 331, both with a 2.0 or better, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**

CS 421

Software Development Capstone [RE] • 5.0 Credits

Formerly CS 421, CSIT 421

This course integrates all IT knowledge and skills learned in previous courses into a project. Emphasis is placed on secure information system design, process planning, procedure definition, business continuity, and systems security architecture. Students design and implement a comprehensive information system from the planning and design phase through execution. \$35 virtual desktop fee. **Prerequisite: Completion of CS 411 with a 2.0 or higher, or concurrent enrollment, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**

CS 440

Operating System Design & Internals [RE] • 5.0 Credits

In this course you will learn how Operating Systems (OS) function with a focus on Linux. Most computing devices have the capability to store and run multiple programs and the OS is a key component of every computer as it handles the tasks of starting and stopping programs, sharing the CPU between multiple programs that may be running simultaneously, and handling the movement of data between programs and devices such as the hard drives, network, keyboard, etc. Computer Science graduates should not only be able to understand how the OS functions and write code that runs efficiently on multiple OSs, but they should also be able to design and implement a simple OS that runs on a smart device and processes input and output from various sources. **Prerequisite: Acceptance into the BS in Computer Science degree program and completion of CSIA 430 with a 2.0 or better.**

Courses

Criminal Justice and Forensics

CJ& 101

Introduction to Criminal Justice [S/B] • 5.0 Credits

Formerly CJ 131, CJ& 101

This course provides an overview of the criminal justice system discussing law enforcement, the courts, corrections, juvenile justice, and current issues. This course examines the Constitutional requirements, historical development of the system, the agencies, processes, and theories within the criminal justice system. Emphasis is placed on how the various systems interrelate and interact with each other to attain the goal of an equitable delivery of crime-related public service.

CJ 104

Introduction to Policing [RE] • 5.0 Credits

This course examines the role of policing in American society. Theories and practices of policing from contemporary and historical perspectives are covered. This course also identifies political, social, organizational, and legal environments where the police perform their roles.

CJ& 105

Introduction to Corrections [RE] • 5.0 Credits

This course will examine the historical context, philosophical concepts, and major theories that have shaped corrections in the United States. Various sentencing options, correctional approaches and programs, the role of corrections in the larger criminal justice system, and contemporary correctional issues are discussed. Emphasis is placed on the effects of the corrections system on the individuals, families, and society.

CJ& 106

Juvenile Justice [RE] • 5.0 Credits

Formerly CJ 136, CJ& 106

This course will cover the history and philosophy of juvenile justice in America and the impact of present societal reforms on the juvenile justice system. This course will discuss the theories which support the creation, development, and continuance of juvenile justice systems, practices, and procedures in the United States.

CJ& 110

Criminal Law [RE] • 5.0 Credits

Formerly CJ 132, CJ& 110

This course is designed as an introduction into the study of criminal law and will review the difference between crimes against property, crimes against the public, and crimes against a person. This course will study the various mental states required for criminal responsibility and those defenses used in a criminal trial, along with definitions, classifications, elements, and penalties of crime and criminal responsibility.

CJ 134

Organization/Administration [RE] • 5.0 Credits

The principles of organization and administration of the modern law enforcement agency. Principles of management and operation of a law enforcement agency.

CJ 135

Traffic Control [RE] • 5.0 Credits

A study of the history of traffic control, routine and emergency traffic procedures. Fundamentals of traffic accident investigation are covered.

CJ 137

Constitutional Law [RE] • 5.0 Credits

A study of the provisions of the U.S. Constitution with primary emphasis on the Bill of Rights and the 14th Amendment and the application to law enforcement and the criminal justice system.

CJ 197

Internship [RE] • 1.0–5.0 Credits

A supervised, individual learning experience for students in the law enforcement environment. The experience shall consist of a minimum of six hours per week. The experience assignment is at the discretion of the agency where the student is placed. The agency will make an effort to give the student a well-rounded experience; the assignment may be terminated by either party at any time.

CJ 198

Special Projects [RE] • 1.0–3.0 Credits

A supervised, individual learning experience for students in the law enforcement environment. The experience shall consist of a minimum of six hours per week. The experience assignment is for the student to conduct a research project that will benefit the student in the criminal justice field.

CJ 199

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework.

CJ 222

Alcohol/Drug Pharmacology/Physiology [RE] • 3.0 Credits

Physical responses of the human body to alcohol and other drugs, current research findings, basic information, and terminology essential for working in the criminal justice field.

CJ 232

Criminal Investigation [RE] • 5.0 Credits

The fundamentals of criminal investigation, criminalistics, and investigative techniques. An overview of investigations of crimes against people and property, and the role of science in crime detection. **Prerequisite:** Completion of CJ& 101 with a 0.7 or better, or instructor permission.

CJ 234

Criminal Evidence [RE] • 5.0 Credits

This course relates to the rules of evidence affecting the admissibility of evidence into court in criminal or civil cases as they pertain to the law enforcement officer or other members of the criminal justice system. This course will focus on court proceedings as they pertain to evidence, witnesses, report writing, exclusionary rule, and search and seizure under the Fourth Amendment. **Prerequisite:** Completion of CJ& 101 with a 0.7 or better, or instructor permission.

CJ& 240

Intro to Forensic Science • 5.0 Credits

Formerly CJ 242, CJ& 240

An overview of the role of the forensic scientist in criminal investigation. Course subject matter focuses on the crime laboratory, instruments, and methods used by the forensic scientist in analyzing criminal evidence. Specialized careers in forensic science are reviewed.

CJ 299

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework.

Courses

Cyber Security

CSIA 200

Computer Forensics Fundamentals [RE] • 5.0 Credits

This course provides students with the fundamentals of computer forensics, cyber crime scene analysis, and electronic discovery, along with associated investigation tools and techniques. Students explore computer forensic theory and focus on various forensic skills including conducting security incident investigations, file system and storage analysis, and data hiding techniques. Students also learn about legal issues and standards. \$35 virtual desktop fee. **Prerequisite:** A grade of 2.5 or better in CS 150, and a grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.

CSIA 250

Networking Fundamentals [RE] • 5.0 Credits

This course focuses on implementing, managing, protecting, and troubleshooting small to medium size enterprise branch networks. Topics covered include OSI model, Cisco devices, wireless networks, switching, IP routing, troubleshooting routing, and advanced TCP/IP configuration. This course prepares students for the Cisco Certified Network Associate (CCNA) exam. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 228 and CS 231, both with a with a 0.7 or higher. CS 231 can be taken concurrently.

CSIA 300

Cyber Security and Information Assurance [RE] • 5.0 Credits

This course provides students with the tools and resources needed to develop an understanding of the CISSP certification body of knowledge. Using a variety of pedagogical features, students learn security basics such as security laws, access control, cryptography, and security architecture and design. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 150 and CS 231, both with a 0.7 or higher, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

CSIA 310

E-Commerce Security [RE] • 5.0 Credits

This course provides students with tools and resources they need to develop a thorough understanding of four major aspects of security: policies and procedures, technology orientation, computer and network security, and managing organizations securely. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 150, CS 206, and CS 232, all with a 0.7 or higher, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

CSIA 320

Ethical Hacking [RE] • 5.0 Credits

This course provides students with the tools and resources needed to develop an understanding of ethical hacking. Students are taken through an interactive environment where they are shown how to scan, test, hack, and secure information systems. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 232 with a 0.7 or higher, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

CSIA 330

Wireless Security [RE] • 5.0 Credits

This course provides students with the conceptual knowledge and hands-on skills needed to secure wireless technology. Topics include network security design models, managed wireless endpoints, WLAN discovery, intrusion, and attack techniques. It also details 802.11 protocol analysis,

wireless intrusion prevention systems (WIPS) implementation, and Layer 2 and Layer 3 VPNs. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 150 and CS 231 with a 2.5 or higher, concurrent enrollment in or completion of CSIA 300 with a 2.0 or higher, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

CSIA 410

Cryptology [RE] • 5.0 Credits

This course provides students with an operational understanding of basic cryptographic systems. Students learn about symmetric cryptography, block ciphers and secure hash functions, asymmetric cryptography, key exchange and public-key systems, and authentication and encryption in an adversarial model. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 150 and CS 231, both with a 0.7 or higher, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

CSIA 420

Cyber Crime and Terrorism [RE] • 5.0 Credits

This class begins with a broad introduction to the field of computer crime, discussing the history of computer crime, basic criminal techniques, and the relevant laws. It walks students through forensics, litigation, depositions, expert reports, trials, and how to select an appropriate expert witness. This class also covers specific techniques and tricks that hackers use and how to defend against such attacks. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 232 with a 0.7 or higher, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

CSIA 430

Unix Administration and Security [RE] • 5.0 Credits

Students study UNIX and Linux system administration and security. System administration topics include installation, kernel configuration and customization, user administration, package management and backup, automating and scheduling tasks, file system management and maintenance, and system initialization and services. Students also learn how to assess security on UNIX and Linux systems, take appropriate actions to correct security deficiencies, and prepare administrative reports. \$35 virtual desktop fee. **Prerequisite:** Completion of CS 232, CSIA 300, and CSIA 320, all with a 0.7 or higher, or concurrent enrollment, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

CSIA 440

Cyber Testing and Penetration [RE] • 5.0 Credits

This course covers a broad base of topics in advanced penetration testing and information security analysis. Students are exposed to techniques and tools to perform a thorough penetration test along with legal requirements, rules of engagement, how to plan and schedule a test, how to perform vulnerability analysis, external and internal penetration testing, and techniques to produce a professional report from the engagement. \$35 virtual desktop fee. **Prerequisite:** Completion of CSIA 300 and CSIA 320, both with a 0.7 or higher, and meets the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.

CSIA 450

Cyber Security Capstone [RE] • 5.0 Credits

This course integrates all the various cyber security knowledge and skills learned in previous courses into a project. Emphasis is placed on security policy, process planning, procedure definition, business continuity, and systems security architecture. Upon completion, students

Courses

should be able to design and implement comprehensive information security architecture from the planning and design phase through implementation. \$35 virtual desktop fee. **Prerequisite: Must be taken senior year, or after 25 credits of CSIA classes are taken, and meet the criteria for acceptance into a BAS/BSN program and completion of a two-year degree or equivalent.**

Dental Assisting

DAST 101

Introduction to Dental Assisting [RE] • 3.0 Credits

This course explores fundamental concepts related to dental assisting and provides a comprehensive introduction into the field of dental sciences. Areas of emphasis include: job description and work environment, the dental team, dental procedures and patient care, dental specialties, environmental hazards, operator equipment and furniture, and patient populations. **Prerequisite: Acceptance into the Dental Assisting program.**

DAST 102

Dental Sciences I [RE] • 3.0 Credits

This course introduces basic dental sciences and related foundational concepts for dental practice and patient care. Topics include etiology and treatment of oral disease, the disease process, patient assessment, and delivery of dental care. **Prerequisite: Acceptance into the Dental Assisting program.**

DAST 103

Head, Neck, & Dental Anatomy [RE] • 4.0 Credits

In this course, students will explore anatomy, physiology, histology, and pathophysiology related to the head, neck, and oral cavity. **Prerequisite: Acceptance into the Dental Assisting program.**

DAST 104

Introduction to Dental Radiology [RE] • 3.0 Credits

This course focuses on radiation physics, biology, and safety. Topics include recognition of anatomical landmarks, evidence of pathology, radiographic techniques, image quality, mounting, and film processing. **Prerequisite: Completion of DAST 101, DAST 111, DAST 102, DAST 112, and DAST 103, all with a 2.0 or better.**

DAST 105

Dental Sciences II [RE] • 5.0 Credits

Building on DAST 102, this course introduces students to patient care and assisting during dental procedures, including coronal polishing, moisture control, isolation methods, oral illumination techniques, fluoride application, and anesthesia preparation. **Prerequisite: Completion of DAST 101, DAST 111, DAST 102, DAST 112, and DAST 103, all with a 2.0 or better.**

DAST 106

Infection Control [RE] • 3.0 Credits

This course explores infection control and prevention in the dental setting, including asepsis and sterile technique, methods of disinfection and sterilization, Spaulding classification for medical devices, and standards for medical device handling. **Prerequisite: Completion of DAST 101, DAST 111, DAST 102, DAST 112, and DAST 103, all with a 2.0 or better.**

DAST 111

Introduction to Dental Assisting Lab [RE] • 3.0 Credits

This course accompanies DAST 101 and provides students an opportunity to learn and practice skills related to fundamental concepts related

to dental assisting. Areas of emphasis include: dental procedures and patient care, patient records, dental specialties, environmental hazards, ergonomics, dental equipment, instrumentation, and supplies. \$95 dental assisting lab fee. **Prerequisite: Acceptance into the Dental Assisting program.**

DAST 112

Dental Sciences I Lab [RE] • 3.0 Credits

This course accompanies DAST 102 and provides students an opportunity to apply principles of basic dental sciences to oral procedures. Areas of emphasis include: patient assessment, operator equipment setup and use, application of dental instrumentation, oral examinations, medical emergency interventions, and patient nutritional counseling. \$95 dental assisting lab fee. **Prerequisite: Acceptance into the Dental Assisting program.**

DAST 114

Introduction to Dental Radiology Lab [RE] • 2.0 Credits

This course accompanies DAST 104 and provides students an opportunity to apply concepts of radiographic imaging to dental patient care. Students perform radiographic film placement and proper exposure techniques. \$95 dental assisting lab fee. **Prerequisite: Completion of DAST 101, DAST 111, DAST 102, DAST 112, and DAST 103, all with a 2.0 or better.**

DAST 115

Dental Sciences II Lab [RE] • 3.0 Credits

This course accompanies DAST 105 and provides students an opportunity to practice skills related to dental assisting during patient care procedures, including coronal polishing, moisture control, isolation methods, oral illumination techniques, fluoride application, and anesthesia preparation. \$95 dental assisting lab fee. **Prerequisite: Completion of DAST 101, DAST 111, DAST 102, DAST 112, and DAST 103, all with a 2.0 or better.**

DAST 201

Dental Sciences III [RE] • 4.0 Credits

This course explores the role of the dental assistant in general dentistry, including dental materials, restorative techniques, permanent and interim restoration, and pharmacologic practices. **Prerequisite: Completion of DAST 104, DAST 114, DAST 105, DAST 115, and DAST 106, all with a 2.0 or better.**

DAST 202

Dental Sciences IV [RE] • 4.0 Credits

This course explores the role of the dental assistant in dental specialties, endodontics, prosthodontics, pediatric dentistry, oral surgery, orthodontics, and periodontics. **Prerequisite: Completion of DAST 104, DAST 114, DAST 105, DAST 115, and DAST 106, all with a 2.0 or better.**

DAST 203

Office Management [RE] • 2.0 Credits

This course explores the role of the dental assistant within the dental office, including records management, patient recalls, dental insurance, financial management, patient privacy standards, regulatory documentation, inventory management, professional leadership attributes, and interviewing skills. **Prerequisite: Completion of DAST 104, DAST 114, DAST 105, DAST 115, and DAST 106, all with a 2.0 or better.**

Courses

DAST 204

Dental Assisting Law & Ethics [RE] • 3.0 Credits

This course provides an understanding of ethical and legal concepts related to the practice of dental assisting, including: ethical dilemmas, organizational and professional issues, legal concepts, the law as related to the decision-making process in the dental setting, and the professional code of ethics. **Prerequisite:** Completion of DAST 201, DAST 211, DAST 202, DAST 212, and DAST 203, all with a 2.0 or better.

DAST 211

Dental Sciences III Lab [RE] • 3.0 Credits

This course accompanies DAST 201 and provides students an opportunity to apply principles of general dentistry within the role of the dental assistant, including dental materials, restorative techniques, permanent and interim restoration, and four-handed dentistry. \$95 dental assisting lab fee. **Prerequisite:** Completion of DAST 104, DAST 114, DAST 105, DAST 115, and DAST 106, all with a 2.0 or better.

DAST 212

Dental Sciences IV Lab [RE] • 2.0 Credits

This course accompanies DAST 202 and provides students an opportunity to practice dental assisting skill within the dental specialties, including endodontics, prosthodontics, pediatric dentistry, oral surgery, orthodontics, and periodontics. \$95 dental assisting lab fee. **Prerequisite:** Completion of DAST 104, DAST 114, DAST 105, DAST 115, and DAST 106, all with a 2.0 or better.

DAST 225

Dental Assistant Clinical Experience [RE] • 10.0 Credits

This course provides exposure to diverse chair-side clinical experiences within the dental clinic setting. Students perform assigned dental assistant duties under the supervision of facility personnel, clinical preceptors, licensed dentists, and clinical college faculty in accordance with patient safety standards and industry best practices. **Prerequisite:** Completion of DAST 201, DAST 211, DAST 202, DAST 212, and DAST 203, all with a 2.0 or better.

Dental Hygiene

DHYG 301

Dental Anatomy [RE] • 1.0 Credit

Formerly DHYG 110, DHYG 301

This course introduces students to fundamental concepts related to tooth anatomy and terminology. Areas of emphasis include crown and root morphology in primary and permanent dentitions, nomenclature, eruption sequence, temporomandibular joint, occlusion, malocclusion patterns, and movements. **Prerequisite:** Students must apply and be accepted into the CBC Dental Hygiene program prior to enrolling.

DHYG 302

Histology/Embryology [RE] • 2.0 Credits

Formerly DHYG 111, DHYG 302

This course is an introduction to the embryology and histology of the head and neck region. Builds on basic sciences and prepares for the additional study of dental sciences as they relate to the clinical practice of dental hygiene. **Prerequisite:** Students must apply and be accepted into the CBC Dental Hygiene program prior to enrolling.

DHYG 303

Oral Radiology I [RE] • 1.0 Credit

Formerly DHYG 112, DHYG 303

This course accompanies DHYG 304 and is the first in a two-quarter series that focuses on radiation physics, biology, protection of the patient when radiographs are taken, recognition of anatomical landmarks, evidence of pathology, and abnormalities. **Prerequisite:** Concurrent enrollment in DHYG 304. Students must apply and be accepted into the CBC Dental Hygiene program prior to enrolling.

DHYG 304

Oral Radiology I Lab [RE] • 1.0 Credit

Formerly DHYG 101, DHYG 304

This course accompanies DHYG 303 and is the first in a two-quarter series and provides students the opportunity to apply principles of patient protection, radiographic film placement, and proper exposure and developing techniques. Students will identify oral structures in radiographs. \$11.40 lab fee. **Prerequisite:** Concurrent enrollment in DHYG 303. Students must apply and be accepted into the CBC Dental Hygiene program prior to enrolling.

DHYG 305

Clinical Dental Hygiene Techniques I [RE] • 2.0 Credits

Formerly DHYG 113, DHYG 305

This course accompanies DHYG 306 and is the first in a series of clinical dental hygiene technique courses and introduces students to basic principles used in the practice of dental hygiene. Areas of emphasis include infection control standards (OSHA), universal precautions, patient assessment, and treatment standards. \$135 per quarter Dental Hygiene clinic fee. **Prerequisite:** Concurrent enrollment in DHYG 306. Students must apply and be accepted into the CBC Dental Hygiene program prior to enrolling.

DHYG 306

Clinical Dental Hygiene Techniques I Lab [RE] • 3.0 Credits

Formerly DHYG 102, DHYG 306

This course accompanies DHYG 305 and is the second in a series of clinical dental hygiene technique courses that provides students the opportunity to apply skills and knowledge in a pre-clinical setting. Areas of emphasis include: basic skills of infection control, patient assessment, and treatment in the pre-clinical setting. \$10.72 per quarter malpractice insurance fee. \$135 per quarter Dental Hygiene clinic fee. **Prerequisite:** Concurrent enrollment in DHYG 305. Students must apply and be accepted into the CBC Dental Hygiene program prior to enrolling.

DHYG 307

Dental Health Education [RE] • 1.0 Credit

Formerly DHYG 114, DHYG 307

This course explores the principles and practices of prevention and management of dental disease with emphasis on biofilm control, cardiology, patient motivation, oral hygiene education, and techniques. **Prerequisite:** Students must apply and be accepted into the CBC Dental Hygiene program prior to enrolling.

DHYG 308

Dental Materials [RE] • 1.0 Credit

Formerly DHYG 115, DHYG 308

This course accompanying DHYG 309 introduces students to history, composition, chemical and physical properties, and use of materials commonly used in the dental laboratory and dental operator. **Prerequisite:** Concurrent enrollment in 309 and completion of DHYG 301, DHYG 302, DHYG 303, DHYG 304, DHYG 305, DHYG 306, DHYG 307, DHYG 310, and DHYG 312 with a minimum grade of 2.0.

Courses

DHYG 309

Dental Materials Lab [RE] • 1.0 Credit

Formerly DHYG 103, DHYG 309

This course accompanies DHYG 308 and provides students an opportunity to practice skills related to common dental materials and procedures.

\$11.40 lab fee. **Prerequisite:** Concurrent enrollment in 308 and completion of DHYG 301, DHYG 302, DHYG 303, DHYG 304, DHYG 305, DHYG 306, DHYG 307, DHYG 310, and DHYG 12 with a minimum grade of 2.0

DHYG 310

Head and Neck Anatomy [RE] • 2.0 Credits

Formerly DHYG 116, DHYG 310

In this course students will study head and neck regions, identification of nerves, bones, muscles, and oral regions structure and function.

Prerequisite: Students must apply and be accepted into the CBC Dental Hygiene program prior to enrolling.

DHYG 311

Medical Emergencies In Dentistry [RE] • 2.0 Credits

Formerly DHYG 120, DHYG 311

This course focuses on the study of commonly encountered medical emergencies in the dental setting that may involve systemic disease and etiology, presentation, treatment, and effects of dental treatment on patients who may present with these diseases and other medical conditions. The associated emergency procedures required to treat medical emergencies in the dental setting will be covered, as well as cardio-pulmonary resuscitation, the use of an automated external defibrillator (AED), first aid and safety training. **Prerequisite:** Completion of DHYG 301, DHYG 302, DHYG 303, DHYG 304, DHYG 305, DHYG 306, DHYG 307, DHYG 310, and DHYG 312 with a minimum grade of 2.0.

DHYG 312

General Pathology [RE] • 2.0 Credits

Formerly DHYG 121, DHYG 312

In this course students will study systemic diseases and their etiology, presentation of signs and symptoms of disease manifestation, inflammatory process, immune response, and healing. Includes current recommended treatments, morbidity, mortality, and the impact of oral inflammation and disease on systemic health. **Prerequisite:** Students must apply and be accepted into the CBC Dental Hygiene program prior to enrolling.

DHYG 313

Oral Radiology II [RE] • 1.0 Credit

Formerly DHYG 122, DHYG 313

The course accompanies DHYG 314 and is the second in a series of oral radiology. Students will be introduced to radiographic quality, techniques, interpretation of errors, and pathology. **Prerequisite:** Concurrent enrollment in DHYG 314 and completion of DHYG 301, DHYG 302, DHYG 303, DHYG 304, DHYG 305, DHYG 306, DHYG 307, DHYG 310, and DHYG 312 with a minimum grade of 2.0.

DHYG 314

Oral Radiology II Lab [RE] • 1.0 Credit

Formerly DHYG 104, DHYG 314

The course accompanies DHYG 313 and is the second in a series of oral radiology labs. Students will have an opportunity to practice oral radiographic technique and apply knowledge to analyze radiographic technique and evaluation of films diagnostic quality and effectiveness. \$11.40 lab fee. **Prerequisite:** Concurrent enrollment in DHYG 313 and completion of DHYG 301, DHYG 302, DHYG 303, DHYG 304,

DHYG 305, DHYG 306, DHYG 307, DHYG 310, and DHYG 312 with a minimum grade of 2.0.

DHYG 315

Clinical Dental Hygiene Techniques II [RE] • 2.0 Credits

Formerly DHYG 123, DHYG 315

This course accompanies DHYG 316 and the second in a series of clinical dental hygiene technique courses and introduces students to dental hygiene treatment planning, effective communication with patients, preventive dental patient education, and clinical skill development.

Prerequisite: Concurrent enrollment in DHYG 316 and Completion of DHYG 301, DHYG 302, DHYG 303, DHYG 304, DHYG 305, DHYG 306, DHYG 307, DHYG 310, and DHYG 312 with a minimum grade of 2.0.

DHYG 316

Clinical Dental Hygiene Techniques II Lab [RE] • 4.0 Credits

Formerly DHYG 105, DHYG 316

This course accompanies DHYG 315 and the second in a series of clinical dental hygiene technique courses and introduces students to dental hygiene treatment planning, effective communication with patients, preventive dental patient education, and clinical skill development. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. \$135 per quarter Dental Hygiene clinic fee. **Prerequisite:** Concurrent enrollment in DHYG 315 and completion of DHYG 301, DHYG 302, DHYG 303, DHYG 304, DHYG 305, DHYG 306, DHYG 307, DHYG 310, and DHYG 312 with a minimum grade of 2.0.

DHYG 318

Restorative Dentistry I [RE] • 1.0 Credit

Formerly DHYG 125, DHYG 318

This course accompanies DHYG 319 and is the first in a series of courses in restorative dentistry. Students will be introduced to composition and physical properties of amalgam, amalgam's use as a dental restorative material, amalgam safety, proper handling, and placement of amalgam with an emphasis on occlusion. **Prerequisite:** Concurrent enrollment in DHYG 319 and completion of DHYG 308, DHYG 309, DHYG 311, DHYG 313, DHYG 314, DHYG 315, DHYG 316, and DHYG 322 with a minimum grade of 2.0.

DHYG 319

Restorative Dentistry I Lab [RE] • 1.0 Credit

Formerly DHYG 106, DHYG 319

This course accompanies DHYG 318 and is the first in a series of laboratory courses in restorative dentistry and provides students an opportunity to apply skills for safe placement, handling, and manipulation of amalgam restorative materials to complete Class I restorations. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. **Prerequisite:** Concurrent enrollment in DHYG 318 and completion of DHYG 308, DHYG 309, DHYG 311, DHYG 313, DHYG 314, DHYG 315, DHYG 316, and DHYG 322 with a minimum grade of 2.0.

DHYG 320

Pain Control In Dentistry [RE] • 2.0 Credits

Formerly DHYG 126, DHYG 320

This course accompanies DHYG 321 and includes the pharmacology and physiology of both local anesthetic agents and nitrous oxide sedation. Application of the knowledge of the nerves of the head, the physiology of nerve conduction, and the transmission of pain impulse are studied as well as the transient blockage of nerve transmission with local anesthetics. Knowledge of prevention and management of dental emergencies is included as well as the decision making of the selection of the appropriate injection to be given and the type of local anesthetic to be used. The use of nitrous oxide delivery and its application as an analgesic is also

Courses

included. **Prerequisite:** Concurrent enrollment in DHYG 321 and completion of DHYG 308, DHYG 309, DHYG 311, DHYG 313, DHYG 314, DHYG 315, DHYG 316, and DHYG 322 with a minimum grade of 2.0.

DHYG 321

Pain Control In Dentistry Lab [RE] • 2.0 Credits

Formerly DHYG 107, DHYG 321

This course accompanies DHYG 320 that gives students an opportunity to practice effective techniques in the delivery of nerve block and infiltration injections, including safe and effective delivery of nitrous oxide sedation. All injections and the delivery of nitrous oxide are completed on student partners. These skills are part of the expanded duties allowed for dental hygienists in Washington state. \$11.40 lab fee. **Prerequisite:** Concurrent enrollment in DHYG 320 and completion of DHYG 308, DHYG 309, DHYG 311, DHYG 313, DHYG 314, DHYG 315, DHYG 316, and DHYG 322 with a minimum grade of 2.0.

DHYG 322

Pharmacology [RE] • 2.0 Credits

Formerly DHYG 127, DHYG 322

This course explores the study of pharmacology as it affects the clinical practice of dentistry with an emphasis on drugs commonly used to treat medical conditions and their impact on dental treatment. Areas of emphasis include effects, administration, biotransformation, and toxicology as potential for emergency reactions, idiopathic reactions, and emergency treatment protocols. **Prerequisite:** Completion of DHYG 301, DHYG 302, DHYG 303, DHYG 304, DHYG 305, DHYG 306, DHYG 307, DHYG 310, and DHYG 312 with a minimum grade of 2.0.

DHYG 323

Oral Pathology [RE] • 2.0 Credits

Formerly DHYG 131, DHYG 323

This course introduces students to commonly encountered oral diseases including their etiology, presentation, recognition, treatment, impact on dental treatment, and the need for referral for further evaluation. Extensive and correct documentation is stressed as well as collaboration with a dentist for differential diagnosis. **Prerequisite:** Completion of DHYG 301, DHYG 302, DHYG 303, DHYG 304, DHYG 305, DHYG 306, DHYG 307, DHYG 310, and DHYG 312 with a minimum grade of 2.0.

DHYG 324

Periodontics I [RE] • 2.0 Credits

Formerly DHYG 132, DHYG 324

This course is the first of a two-quarter series on the study of periodontology. Students will explore fundamental concepts related to components of the gingival and periodontal structures, various health and disease states of the periodontium including peri-implantitis, contributing factors that cause gingivitis and periodontitis, development of disease, and oral-systemic link. **Prerequisite:** Completion of DHYG 318, DHYG 319, DHYG 320, DHYG 321, DHYG 323, DHYG 325, and DHYG 326, with a minimum grade of 2.0.

DHYG 325

Clinical Dental Hygiene Techniques III [RE] • 2.0 Credits

Formerly DHYG 134, DHYG 325

This course accompanies DHYG 326 and is the third in a series of clinical dental hygiene technique courses. Areas of emphasis include: dental hygiene techniques and the expanded development of clinical dental hygiene skills. \$10.72 per quarter malpractice insurance fee. **Prerequisite:** Concurrent enrollment in DHYG 326 and completion of DHYG 308, DHYG 309, DHYG 311, DHYG 313, DHYG 314, DHYG 315, DHYG 316, and DHYG 322, all with a minimum grade of 2.0.

DHYG 326

Clinical Dental Hygiene Techniques III Lab [RE] • 4.0 Credits

Formerly DHYG 108, DHYG 326

This course accompanies DHYG 325 and is the third in a series of clinical dental hygiene technique courses that provides students the opportunity to apply skills and knowledge during direct patient care. Areas of emphasis include patient assessment, instrumentation, treatment, and continued development of procedures and techniques introduced in pre-clinical courses. \$11.40 lab fee. \$135 per quarter Dental Hygiene clinic fee.

Prerequisite: Concurrent enrollment in DHYG 325 and completion of DHYG 308, DHYG 309, DHYG 311, DHYG 313, DHYG 314, DHYG 315, DHYG 316, and DHYG 322, all with a minimum grade of 2.0.

DHYG 327

Restorative Dentistry II [RE] • 1.0 Credit

Formerly DHYG 135, DHYG 327

This course accompanies DHYG 328 and is the second in the restorative series. This course introduces students to dental preparation design, isolation techniques, application of dental materials, amalgam restorations, and composite materials. **Prerequisite:** Concurrent enrollment in DHYG 328 and completion of DHYG 318, DHYG 319, DHYG 320, DHYG 321, DHYG 323, DHYG 325, and DHYG 326, with a minimum grade of 2.0.

DHYG 328

Restorative Dentistry II Lab [RE] • 2.0 Credits

Formerly DHYG 109, DHYG 328

This course accompanies DHYG 327 and is the second in the restorative series. This course provides students the opportunity to learn and practice skills related to placement and finishing of Class I composite and Class II amalgam restorations. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. **Prerequisite:** Concurrent enrollment in DHYG 327 and completion of DHYG 318, DHYG 319, DHYG 320, DHYG 321, DHYG 323, DHYG 325, and DHYG 326, with a minimum grade of 2.0.

DHYG 329

Patient Management [RE] • 2.0 Credits

Formerly DHYG 136, DHYG 329

In this course students study characteristics of individual patients, motivation, and interpersonal communication. Areas of emphasis include exposure to diverse cultures and their attitudes and approaches to medical and dental care, modification of treatment planning for the young, geriatric, medically or mentally compromised patient, and patients who exhibit special needs. **Prerequisite:** Completion of DHYG 318, DHYG 319, DHYG 320, DHYG 321, DHYG 323, DHYG 325, and DHYG 326, with a minimum grade of 2.0.

DHYG 330

Clinical Dental Hygiene Techniques IV [RE] • 1.0 Credit

Formerly DHYG 144, DHYG 330

This course accompanies DHYG 331 and is the fourth in a series of clinical dental hygiene technique courses and introduces students to dental hygiene techniques for the periodontally involved patient, advanced instrumentation techniques for root surfaces, powered scalers, treatment of the pregnant patient through menopause, geriatric patients, patients with dental prostheses, and edentulous patients. **Prerequisite:** Concurrent enrollment in DHYG 331 and completion of DHYG 318, DHYG 319, DHYG 320, DHYG 321, DHYG 323, DHYG 325, and DHYG 326, with a minimum grade of 2.0.

DHYG 331

Clinical Dental Hygiene Techniques IV Lab [RE] • 1.0–5.0 Credits

Formerly DHYG 147, DHYG 331

Courses

This course accompanies DHYG 330 and is a continuation of DHYG 326. This course provides students an opportunity to apply learned skills, critical evaluation of dental hygiene treatment needs, and delivery of care on a variety of patients. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. \$135 per quarter Dental Hygiene clinic fee. **Prerequisite:** **Concurrent enrollment in DHYG 330 and completion of DHYG 318, DHYG 319, DHYG 320, DHYG 321, DHYG 323, DHYG 325, and DHYG 326, with a minimum grade of 2.0.**

DHYG 401

Restorative Dentistry III [RE] • 1.0 Credit

Formerly DHYG 246, DHYG 401

This course accompanies DHYG 402 and is the third in the restorative series. Areas of emphasis include Class II composite restorations and restoring anterior teeth. **Prerequisite:** **Concurrent enrollment in DHYG 402 and completion of DHYG 324, DHYG 327, DHYG 328, DHYG 329, DHYG 330, and DHYG 331, with a minimum grade of 2.0.**

DHYG 402

Restorative Dentistry III Lab [RE] • 2.0 Credits

Formerly DHYG 220, DHYG 402

This course accompanies DHYG 401 and is the third in the restorative series. Students will have the opportunity to practice skills related to placement and finishing of Class II amalgam and composite restorations, Class V glass ionomer restorations, and restoring anterior teeth. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. **Prerequisite:** **Concurrent enrollment in DHYG 401 and completion of DHYG 324, DHYG 327, DHYG 328, DHYG 329, DHYG 330, and DHYG 331, with a minimum grade of 2.0.**

DHYG 403

Community Oral Health Research I [RE] • 2.0 Credits

This course presents students with foundational knowledge of community health. Topics include local and national organizations related to community health, oral health discrepancies, access to dental care, determinants of health, epidemiology, and disease prevention. Students will demonstrate an understanding of community health principles, examine social determinants affecting dental care access, analyze public health data, determine target populations for oral health promotion, and differentiate between health behavior theories and teaching methods. Additionally, students will evaluate current scientific literature to inform evidence-based decisions. **Prerequisite:** **Completion of DHYG 324, DHYG 327, DHYG 328, DHYG 329, DHYG 330, and DHYG 331, with a minimum grade of 2.0.**

DHYG 404

Nutrition In Dentistry [RE] • 1.0 Credit

Formerly DHYG 211, DHYG 404

This course reviews principles of nutrition with enhanced information on nutrition's relationship to oral health. Areas of emphasis include assessment of a patient's nutritional knowledge, eating habits, and impact that these have on the patient's overall oral health. **Prerequisite:** **Completion of DHYG 401, DHYG 402, DHYG 403, DHYG 406, DHYG 407, and DHYG 410 with a minimum grade of 2.0.**

DHYG 406

Clinical Dental Hygiene Techniques V [RE] • 1.0 Credit

Formerly DHYG 214, DHYG 406

This course accompanies DHYG 407 and is the fifth in a series of clinical dental hygiene technique courses. Topics include case presentations and study of clinical cases, advanced clinical techniques of local anesthesia, and the role of the dental hygienist in tobacco cessation. \$135 per quarter Dental Hygiene clinic fee. **Prerequisite:** **Concurrent enrollment in**

DHYG 407 and completion of DHYG 324, DHYG 327, DHYG 328, DHYG 329, DHYG 330, and DHYG 331 with a minimum grade of 2.0.

DHYG 407

Clinical Dental Hygiene Techniques V Lab [RE] • 6.0 Credits

Formerly DHYG 216, DHYG 407

This course accompanies DHYG 406 and is a continuation of DHYG 331. Areas of emphasis include: progressive clinical experience in patient assessment, dental hygiene treatment planning, continued development of clinical skills and knowledge, and restorative care on patients. \$10.72 per quarter malpractice insurance fee. \$135 per quarter Dental Hygiene clinic fee. **Prerequisite:** **Concurrent enrollment in DHYG 406 and completion of DHYG 324, DHYG 327, DHYG 328, DHYG 329, DHYG 330, and DHYG 331 with a minimum grade of 2.0.**

DHYG 408

Ethics and Jurisprudence, Practice Management [RE] • 2.0 Credits

Formerly DHYG 215, DHYG 408

This course provides an understanding of ethical and legal concepts related to the practice of dental hygiene including: professional code of ethics, ethical dilemmas, organizational and professional issues, legal concepts, and law as it relates to the practice of dental hygiene. Students will also explore the role of the dental hygienist within the dental office, dental insurance, professional leadership attributes, and career preparation. **Prerequisite:** **Completion of DHYG 401, DHYG 402, DHYG 403, DHYG 406, DHYG 407, and DHYG 410 with a minimum grade of 2.0.**

DHYG 409

Community Oral Health Research II [RE] • 2.0 Credits

In this course students will be introduced to public health concepts and their impact on community health research, design elements included in research including selection of research topic, exploration of community partners and potential stakeholders, program/project development, preparation for implementation, and selection of evaluation methods. Students will implement, evaluate, and present their program/project in DHYG 415. **Prerequisite:** **Completion of DHYG 401, DHYG 402, DHYG 403, DHYG 406, DHYG 407, and DHYG 410 with a minimum grade of 2.0.**

DHYG 410

Periodontics II [RE] • 2.0 Credits

Formerly DHYG 222, DHYG 410

This course is the second of a two-quarter series on periodontology and focuses on treatment of periodontal disease including classification, treatment planning, procedure coding for dental hygiene therapies, reevaluation, maintenance, retreatment, determination of referral for out of scope treatment needs, surgical concepts, and the patient's role in periodontal therapy. **Prerequisite:** **Completion of DHYG 324, DHYG 327, DHYG 328, DHYG 329, DHYG 330, and DHYG 331, with a minimum grade of 2.0.**

DHYG 411

Clinical Dental Hygiene Techniques VI [RE] • 1.0 Credit

Formerly DHYG 224, DHYG 411

This course accompanies DHYG 412 and is the sixth in a series of clinical dental hygiene technique courses. Topics include assessment of the periodontally involved patient, evaluation of continued care needs, appointment intervals, risk assessment, discussion, and determination of restorative needs and care. **Prerequisite:** **Completion of DHYG 401, DHYG 402, DHYG 403, DHYG 406, DHYG 407, and DHYG 410 with a minimum grade of 2.0.**

Courses

DHYG 412

Clinical Dental Hygiene Techniques VI Lab [RE] • 7.0 Credits

Formerly DHYG 218, DHYG 412

This course accompanies DHYG 411 and is a continuation of DHYG 407. Students have the opportunity to provide comprehensive clinical experiences in all phases of the dental hygiene process of care including clinical work that expands on procedures and techniques introduced in prior clinical courses including placement of restorations on patients. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. \$135 per quarter Dental Hygiene clinic fee. **Prerequisite: Completion of DHYG 401, DHYG 402, DHYG 403, DHYG 406, DHYG 407, and DHYG 410 with a minimum grade of 2.0.**

DHYG 413

Clinical Dental Hygiene Techniques VII [RE] • 1.0 Credit

Formerly DHYG 234, DHYG 413

This course accompanies DHYG 414 and is the final course in a series of clinical dental hygiene technique courses and provides expanded learning through discussion and exploration of patient scheduling and clinical practice in a variety of settings including community and public health clinics, private dental practices, and specialty practices. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Concurrent enrollment in DHYG 414 and completion of DHYG 404, DHYG 408, DHYG 409, DHYG 411, and DHYG 412 with a minimum grade of 2.0.**

DHYG 414

Clinical Dental Hygiene Techniques VII Lab [RE] • 9.0 Credits

Formerly DHYG 219, DHYG 414

This course accompanies DHYG 413 and is a continuation of DHYG 412. Students will have the opportunity to continue clinical practice in dental hygiene services in a clinical setting with an emphasis on completing the dental hygiene process of care, implementation of patient care for a variety of patients, and placement of restorations on patients. \$11.40 lab fee. \$135 per quarter Dental Hygiene clinic fee. **Prerequisite: Concurrent enrollment in DHYG 413 and completion of DHYG 404, DHYG 408, DHYG 409, DHYG 411, and DHYG 412 with a minimum grade of 2.0.**

DHYG 415

Community Oral Health Practicum [RE] • 2.0 Credits

This course is the final segment (capstone) in the community oral health series and provides students the opportunity to demonstrate their cumulative knowledge in the community health field by implementation and evaluation of a community program or project. This course takes place outside of the classroom in an experiential learning format and includes a final presentation of the students oral health program/project. \$11.40 lab fee. **Prerequisite: Completion of DHYG 404, DHYG 408, DHYG 409, DHYG 411, and DHYG 412 with a minimum grade of 2.0.**

DHYG 416

Educational Theory and Methodology [RE] • 2.0 Credits

In this course students will be introduced to educational methodology. Topics include: pre-assessment strategies to determine participants' knowledge level, creation of an overview and objectives to provide learners with a context for learning including giving targeted feedback, performance evaluation to enhance continual learning goals, selection among direct instruction, inquiry-based learning, and cooperative learning. **Prerequisite: Completion of DHYG 404, DHYG 408, DHYG 409, DHYG 411, and DHYG 412 with a minimum grade of 2.0.**

DHYG 417

Restorative Dentistry IV Lab [RE] • 1.0 Credit

This course is the final course in the restorative series and provides students an opportunity to practice skills related to placement and

finishing of Class II, III, and IV amalgam and composite restorations, cuspal build-ups, and restoring anterior teeth. **Prerequisite: Completion of DHYG 401, DHYG 402, DHYG 403, DHYG 407, and DHYG 410, all with a 2.0 or higher.**

Digital Marketing

MRKT 102

Introduction to Digital Marketing [RE] • 5.0 Credits

Provides an introduction to digital marketing concepts and how they can be used in a larger integrated marketing campaign. Students explore search engine marketing (SEM), search engine optimization (SEO), display advertising, online video, social media, mobile device marketing, content creation, e-commerce, and digital measurement/analytics.

MRKT 103

Social Media Strategy [RE] • 5.0 Credits

Students will learn the fundamentals of social media advertising and marketing, and how those skills impact a larger digital framework. This course is hands-on, and the curriculum is focused on the application of social media skills to craft an integrated marketing strategy and executive vision. **Prerequisite: Completion of BUS 265 with a 1.0 or higher.**

MRKT 104

Search Engine Strategy [RE] • 5.0 Credits

Students will learn the fundamentals of search engine marketing (SEM) and search engine optimization (SEO), and how those skills impact a larger digital framework. This course is hands-on, and the curriculum is focused on the application of search skills to craft an integrated marketing strategy and executive vision. **Prerequisite: Completion of BUS 265 with a 1.0 or higher.**

MRKT 150

Advertising [RE] • 5.0 Credits

This course presents the purpose of advertising. Aspects of social and economic influence on the overall marketing process, idea visualization, and the media plan, including the cost and results expected are covered. Management planning and control of advertising is emphasized. **Prerequisite: Completion of BUS 265 with a 1.0 or higher.**

MRKT 241

Measurement and Analytics [RE] • 5.0 Credits

Students will be introduced to information resources used in marketing. Students will develop proficiency with technology and its use in essential business applications and in marketing. Topics included are collecting and housing data sets, establishing business rules for data manipulation, aligning key performance indicators to larger business concerns, data visualization techniques, and interpreting and presenting findings to key decision makers. **Prerequisite: Completion of BUS 265, MRKT 102, AND CS 101, all with a 1.0 or higher.**

MRKT 251

Market Research [RE] • 5.0 Credits

This course presents basic research methods entailing procedures, questionnaire design, data analysis, and effectively communicating research results in the field of marketing. **Prerequisite: Completion of BUS 265 with a 1.0 or higher.**

MRKT 261

Online Video & TV Strategy [RE] • 5.0 Credits

Students will review the evolution from television to online platform video, including advertising. The class explores how marketing strategies

Courses

and video tactics support the larger digital framework. This course is hands-on, and the curriculum is focused on the application of video skills to craft an integrated marketing strategy and executive vision.

Prerequisite: Completion of BUS 265, MRKT 102, MRKT 150, all with a 1.0 or higher.

MRKT 271

Relationship Marketing [RE] • 5.0 Credits

Students will be introduced to the field of relationship marketing. It will promote students' proficiency with technology and its use in essential business applications and in marketing. Students will get practical, hands-on instruction along with case studies in topics that include the evolution from one-time sales to ongoing brand relationships, lifetime customer value, loyalty programs, customer service software, sales technologies, marketing automation, and customer relationship management (CRM) tools. **Prerequisite:** Completion of BUS 265, MRKT 102, AND CS 101, all with a 1.0 or higher.

Early Childhood Education

ECED& 100

Child Care Basics [RE] • 3.0 Credits

This course is designed to meet licensing requirements for early learning lead teachers and family home child care providers and the STARS 30 hour basics course recognized in the MERIT system. Topics: child growth/development, cultural responsiveness, community resources, guidance, health/safety/nutrition and professional practices.

ECED 102

Introduction to Curriculum [RE] • 3.0 Credits

Formerly ECE 102, ECED 102, ED 102, EDUC 102

Provides students with both a theoretical and practical understanding of the curriculum content in a developmentally appropriate setting for young children.

ECED 103

Art [RE] • 3.0 Credits

Formerly ECE 103, ECED 103

Provides the student with a basic understanding of the methods used for teaching visual art to young children in a developmentally appropriate manner. \$15 ECED miscellaneous supplies fee.

ECED& 105

Intro to Early Childhood Education [RE] • 5.0 Credits

Students will explore the foundations of early childhood education. Examine theories defining the field, issues, trends, best practices, and program models. Observe children, professionals and programs in action.

ECED& 107

Health/Safety/Nutrition [RE] • 5.0 Credits

Formerly ECE 230, ECED& 107

Introduction to implementation of equitable health, safety and nutrition standards for the growing child in group care. Focus on federal Child Care Block Grant funding (CCDF) requirements, Washington state licensing and Head Start Performance standards. Develop skills necessary to keep children healthy and safe, report abuse and neglect, and connect families to community resources. \$15 ECED miscellaneous supplies fee.

ECED 110

Preschool Seminar [RE] • 1.0–3.0 Credits

Provides an opportunity to participate in a short-term seminar relating to early childhood education.

ECED 112

Introduction to ELL Teaching Strategies [RE] • 3.0 Credits

Formerly ECE 112, ECED 112

Provides an overview of the philosophy and stages of language acquisition for English language learners in an early learning setting. A variety of instructional strategies are explored.

ECED 116

Eced Special Topics Symposium [RE] • 1.0–3.0 Credits

Formerly ECE 116, ECED 116

An opportunity to participate in a class dealing with special topics that relate to early childhood education but are not covered in depth in the existing curriculum.

ECED 117

Eced Seminar [RE] • 1.0–3.0 Credits

Formerly ECE 117, ECED 117

Provides an opportunity to participate in an intensive, short-term learning experience relating to early childhood education.

ECED 118

Skills Training [RE] • 1.0–3.0 Credits

Formerly ECE 118, ECED 118

Provides an opportunity to participate in a short-term skills training relating to early childhood education.

ECED 119

ECED Workshop [RE] • 1.0–3.0 Credits

Formerly ECE 119, ECED 119

An opportunity to participate in a workshop class relating to early childhood education.

ECED& 120

Practicum-Nurturing Relationships [RE] • 2.0 Credits

In an early learning setting students will engage in establishing nurturing, supportive relationships with all children and professional peers. Focus on children's health and safety, promoting growth and development, and creating a culturally responsive environment.

ECED 122

Math & Science [RE] • 3.0 Credits

Formerly ECE 122, ECED 122

Provides ideas for introducing developmentally appropriate math and science and concepts to young children. Students have an opportunity to develop and experience math and science learning activities.

ECED 124

Children's Literature [RE] • 3.0 Credits

Formerly ECE 120, ECED 124

Increases awareness of various types of literature for young children and explores meaningful ways to share high quality books in early care and education settings.

ECED 127

Music & Movement [RE] • 3.0 Credits

Formerly ECE 127, ECED 127

In this interactive class, students learn the importance of providing high quality music and movement activities in an early learning setting.

ECED& 132

Infants & Toddlers--Nurturing Care [RE] • 3.0 Credits

Formerly ECE 205, ECED& 132

Courses

Students will examine the unique developmental needs of infants and toddlers. Study the role of the caregiver, relationships with families, developmentally appropriate practices, nurturing environments for infants and toddlers, and culturally retentive care.

ECED& 134

Family Child Care Management [RE] • 3.0 Credits

Students will learn how to manage a family childcare program. Topics include licensing requirements, record-keeping, relationship building, communication strategies, guiding behavior, and promoting growth and development.

ECED& 138

Home Visitor/Family Engagement [RE] • 3.0 Credits

Plan and provide home visits and group activities. Promote secure parent-child relationships. Support families to provide high-quality early learning opportunities embedded in everyday routines and experiences.

ECED& 139

Administration of ECE [RE] • 3.0 Credits

Formerly ECE 215, ECED& 139

Students will develop administrative skills required to develop, operate, manage and improve early childhood education and care programs. Acquire basic business management skills. Explore resources and supports for meeting Washington state licensing and professional National Association for the Education of Young Children (NAEYC) standards.

ECED 141

Child Development Associate [RE] • 10.0 Credits

Formerly ECE 141, ECED 141

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential. This course is offered on an as-needed basis.

ECED 142

Child Development Associate [RE] • 1.0–10.0 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 143

Child Development Associate [RE] • 1.0–10.0 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 144

Child Development Associate [RE] • 1.0–10.0 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 145

Child Development Associate [RE] • 1.0–10.0 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 146

Child Development Associate [RE] • 1.0–10.0 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 147

Child Development Associate [RE] • 1.0–10.0 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 148

Child Development Associate [RE] • 1.0–10.0 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 149

Child Development Associate [RE] • 1.0–10.0 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED 151

Supervised Practicum [RE] • 3.0 Credits

Formerly ECE 151, ECED 151

Designed to be taken just before completion of an Early Childhood Education certificate or degree, this class must be taken in conjunction with ECED 152. In class, theory is combined with practical experience in an ECE setting. Emphasis is on improving teaching skills through self-evaluation. **Prerequisite: Concurrent enrollment in ECED 152.**

ECED 152

Supervised Practicum Lab [RE] • 1.0–6.0 Credits

Designed to be taken just before completion of an Early Childhood Education certificate or degree, this class must be taken in conjunction with ECED 151. The student is required to spend 33 hours working in an early childhood setting to complete class assignments. Grade is pass/no credit. **Prerequisite: Concurrent enrollment in ECED 151.**

ECED 153

Child Development Associate [RE] • 1.0–10.0 Credits

Provides the formal education hours required for Child Development Associate (CDA) candidates working in center-based infant and toddler, center-based preschool, or family home child care programs. Instruction

Courses

focuses on CDA Competency Goals and prepares students for the National CDA assessment and credential.

ECED& 160

Curriculum Development [RE] • 5.0 Credits

Formerly ECE 202, ECED& 160

Students will investigate learning theory, program planning, tools and methods for curriculum development promoting language, fine/gross motor, social-emotional, cognitive and creative skills and growth in children birth through age 8 utilizing developmentally appropriate and culturally responsive practice.

ECED& 170

Environments for Young Children [RE] • 3.0 Credits

This class focuses on the adult's role in designing, evaluating, and improving indoor and outdoor environments that ensure quality learning, nurturing experiences, and optimize the development of young children.

ECED& 180

Language & Literacy Development [RE] • 3.0 Credits

Formerly ECE 126, ECED& 180

This course examines teaching strategies for language acquisition and literacy skill development examined at each developmental stage (birth-age 8) through the four interrelated areas of speaking, listening, writing, and reading.

ECED& 190

Observation/Assessment [RE] • 3.0 Credits

Formerly ECE 121, ECED& 190

Students will collect and record observation and assessment data in order to plan for and support the child, the family, the group, and the community. Practice reflection techniques, summarizing conclusions, and communicating findings.

ECED 201

Multicultural Education [RE] • 3.0 Credits

Formerly ECE 201, ECED 201, ED 160, EDUC 160

Explores the theory and practice of implementing a culturally responsive and inclusive early childhood program.

ECED 216

Advanced Special Topics [RE] • 1.0–3.0 Credits

Formerly ECE 216, ECED 216

An opportunity to participate in advanced classes dealing with special topics that relate to early childhood education but are not covered in depth in the existing curriculum.

ECED 217

Advanced Seminar [RE] • 1.0–3.0 Credits

Formerly ECE 217, ECED 217

Provides an opportunity to participate in an advanced short-term learning experience relating to early childhood education.

ECED 218

Advanced Skills Training [RE] • 1.0–3.0 Credits

Formerly ECE 218, ECED 218

Provides an opportunity to participate in an advanced short-term skills training relating to early childhood education.

ECED 219

Advanced Workshop [RE] • 1.0–3.0 Credits

Formerly ECE 219, ECED 219

An opportunity to participate in an advanced workshop class relating to early childhood education.

ECED 221

Strategies for Teaching Special Needs [RE] • 3.0 Credits

Formerly ECE 221, ECED 221

An introduction to teaching methods that can be used with children who have special needs in an inclusive early care & education setting.

Prerequisite: Completion of EDUC& 203 with a 0.7 or higher.

ECED 222

Sign Language Level 1 [RE] • 3.0 Credits

Formerly ECE 222, ECED 222

An introduction to sign language using either the Signing Exact English (SEE) or American Sign Language (ASL) method. This course provides an opportunity for students to gain a better understanding of sign language, its application, and to build a basic signing vocabulary.

ECED 223

Sign Language Level 2 [RE] • 3.0 Credits

Formerly ECE 223, ECED 223

The level two sign language course broadens a student's knowledge of either Signing Exact English (SEE) or American Sign Language (ASL) and builds fluency and communication skills. **Prerequisite:** Completion of ECED 222 with a 0.7 or higher, or instructor permission.

ECED 224

Sign Language Level 3 [RE] • 3.0 Credits

Formerly ECE 224, ECED 224

Level three sign language broadens a student's knowledge of either Signing Exact English (SEE), or American Sign Language ASL, extending communication fluency and skills learned in the Level 1 or Level 2 sign language classes. **Prerequisite:** Completion of ECED 223 with a 0.7 or higher, or instructor permission.

ECED 251

Advanced Supervised Practicum [RE] • 1.0–3.0 Credits

Formerly ECE 251, ECED 251

Designed to be taken just before completion of an Early Childhood Education certificate or degree, this class combines the Early Childhood Education content learned in previous classes with practical application for students who need further experience. Emphasis is on improving personal teaching skills while gaining on-the-job experience working with professionals in an early learning setting.

ECED 252

Advanced Supervised Practicum Lab [RE] • 1.0 Credit

Designed to be taken just before completion of an Early Childhood Education certificate or degree, this class combines the Early Childhood Education content learned in previous classes with practical application for students who need further experience. Emphasis is on improving personal teaching skills while gaining on-the-job experience working with professionals in an early learning setting. Grade is pass/no credit.

ECED 280

Special Studies Lab [RE] • 1.0–3.0 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 281

Special Studies Lab [RE] • 1.0–15.0 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

Courses

ECED 282

Special Studies Lab [RE] • 1.0–15.0 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 283

Special Studies Lab [RE] • 1.0–15.0 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 284

Special Studies Lab [RE] • 1.0–15.0 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 285

Special Studies Lab [RE] • 1.0–15.0 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 286

Special Studies Lab [RE] • 1.0–15.0 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 287

Special Studies Lab [RE] • 1.0–15.0 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 288

Special Studies Lab [RE] • 1.0–15.0 Credits

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 289

Special Studies [RE] • 1.0–15.0 Credits

Formerly ECE 289, ECED 289

Designed to incorporate into the curriculum special learning opportunities in the field of early childhood education.

ECED 300

Social Studies for Teachers [RE] • 5.0 Credits

An overview of the main concepts in social studies for early childhood teachers including topics in history, civics, geography, economics, and global issues. **Prerequisite:** Admission into the BASTE program at CBC.

ECED 301

Inquiry Based Science for Teachers [RE] • 3.0 Credits

An overview of the main concepts in natural science for early childhood teachers including topics in earth/space science, life science, physical science, and engineering design. Lab included. **Prerequisite:** Admission into the BASTE program at CBC.

ECED 307

Health and Physical Education Learning Standards [RE] • 2.0 Credits

This course will prepare students to plan for comprehensive health and fitness education in early learning programs serving children birth to grade three who are culturally, linguistically, and ability diverse and their families, including the dimension of wellness such as physical, emotional, and social well-being. **Prerequisite:** Admission into the BASTE program at CBC.

ECED 325

Advanced Math Methods [RE] • 3.0 Credits

Student will develop a deep understanding of the development of spatial and mathematical learning across all strands: number & operations, algebra, geometry, measurement, and data analysis & probability. There will be an emphasis on the content included in the state early learning guidelines and standards for children birth through grade three and their families who are culturally, linguistically, and ability diverse. **Prerequisite:** Admission into the BASTE program at CBC.

ECED 340

Assessment and Evaluation [RE] • 5.0 Credits

This course will prepare student to select, administer, score, and interpret formal assessment tools. Evaluate students for placement into special education programs. Develop Individual Education Plans (IEPs), Individual Family Service Plans (IFSPs), and 504 plans for children birth to third grade who are culturally, linguistically, and ability diverse and their families. **Prerequisite:** Admission into the BASTE program at CBC.

ECED 365

Observations, Documentation, and Monitoring [RE] • 3.0 Credits

Students will develop skills and strategies for observing, documenting and monitoring children birth to grade three who are culturally, linguistically and ability diverse and their families. Strategies for tracking progress toward meeting Individual Education Plan (IEP) and Individual Family Service Plan (IFSP) goals will also be addressed. **Prerequisite:** Admission into the BASTE program at CBC.

ECED 370

Adaptations, Modifications, and Planning [RE] • 5.0 Credits

Students will use evidence based strategies to adapt and modify curriculum and environments for individual children birth to grade three who are culturally, linguistically, and ability diverse and their families. Create lesson plans for children based on Individual Education Plans (IEP), Individual Family Services Plans (IFSP) goals, and 504 plans. **Prerequisite:** Admission into the BASTE program at CBC.

ECED 385

Advanced Language and Literacy Methods [RE] • 3.0 Credits

Students will be able to refine teaching strategies for language acquisition and literacy skill development for children who are culturally, linguistically, and ability diverse at each developmental stage birth through grade three, through the four interrelated areas of speaking, listening, writing, and reading. There will be an emphasis on strategies for teaching reading and how to support each stage of literacy development across genres and purposes. Strategies for supporting families as they assist their children in learning language and literacy will also be addressed. **Prerequisite:** Admission into the BASTE program at CBC.

ECED 395

Equity and Social Justice [RE] • 3.0 Credits

Students will develop skills needed to effectively collaborate with others including school personnel, community agency personnel, and families to support children birth to third grade who are culturally, linguistically, and ability diverse and their families. Supervision of assistants and paraprofessionals will also be addressed. **Prerequisite:** Admission into the BASTE program at CBC.

ECED 479

Fall Student Teaching [RE] • 15.0 Credits

Students will gain experience working in an education setting with children birth through grade three who are culturally, linguistically, and ability diverse and their families under the supervision of a certificated

Courses

teacher with an emphasis on building relationships and guiding behavior. Grade is pass/no credit. **Prerequisite: Completion of ECED& 105 with a 0.7 or higher, admission into the BASTE program at CBC, department permission, and a criminal background check required.**

ECED 489

Winter Student Teaching [RE] • 15.0 Credits

Students will demonstrate effective teaching practice and experience working in an education setting with children birth through grade three who are culturally, linguistically, (including English language learners), and ability diverse and their families under the supervision of a certified teacher, with an emphasis on pedagogy in accordance with instructional frameworks in Washington state. Apply the use of technology for technology for assessment, instruction, and family engagement. Grade is pass/no credit. **Prerequisite: Completion of ECED& 105 with a 0.7 or higher, admission into the BASTE program at CBC, department permission, and a criminal background check required.**

ECED 499

Spring Student Teaching [RE] • 15.0 Credits

Students will gain experience working in an education setting, with children birth through grade three who are culturally, linguistically (including English language learners), and ability diverse and their families under the supervision of a certificated teacher, with an emphasis on using data to improve practices. Apply the use of technology for technology for assessment, instruction, and family engagement. Grade is pass/no credit. **Prerequisite: Completion of ECED& 105 with a 0.7 or higher, admission into the BASTE program at CBC, department permission, and a criminal background check required.**

Economics

ECON 110

Economic Trends, Issues and Policy [S/B] • 5.0 Credits

Formerly EC 110, ECON 110

An entry-level, general education course which introduces and surveys basic macroeconomic and microeconomic principles. This course emphasizes the causes and consequences of the business cycle on output, employment, and prices as well as, basic supply and demand analysis across different market structures. This course also analyzes the differential impacts on populations. Analysis includes the role of the government in the economy and whether policies ameliorate or worsen economic outcomes.

ECON 116

Economic Development of the United States • 5.0 Credits

Formerly EC 116, ECON 116

This class is a history of the American economy. It looks at the evolution of American economic institutions, from the colonial period, early statehood, the American Civil War, westward expansion, the impact of the two world wars, and the Great Depression that was between them. It looks at the regional and occupational specialization that enables the colonial economy to grow internally and to fit itself into the world economy that nurtured it.

ECON 199

Special Studies • 1.0–5.0 Credits

A class used to explore new coursework.

ECON& 201

Micro Economics [S/B] • 5.0 Credits

Formerly EC 202, ECON& 201

Economic theory and analysis as applied to consumer and producer behavior in markets. Emphasizes the allocation of resources and the distribution of income through the price mechanism, and deals with the microeconomic concepts of equilibrium in product and factor markets, perfect and imperfect competition, government intervention in the private sector, and international trade and finance. **Prerequisite: Completion of MATH 50 with a 2.0 or better, or completion of a higher math class with a 1.0 or better, or appropriate placement.**

ECON& 202

Macro Economics [S/B] • 5.0 Credits

Formerly EC 201, ECON& 202

This course studies the overall economy, how the equilibrium level of national income is determined, and its allocation among consumers, businesses, and the government. Particular attention will be paid to the impact of government fiscal and monetary policies on macroeconomic equilibrium and issues such as unemployment, inflation, economic fluctuations and growth, and government debt.

ECON 291

History of American Economic Development [S/B] • 1.0–5.0 Credits

Formerly EC 291, ECON 291

Concise overview of the basic elements of microeconomics and macroeconomics. Economic analysis is used to understand the major economic forces in American history with emphasis on those factors which aided growth and development. Economic theory is applied to understand and evaluate current social and economic problems in contemporary American society.

ECON 299

Special Studies • 1.0–5.0 Credits

A class used to explore new coursework.

ECON 305

Managerial Economics [S/B] • 5.0 Credits

The course covers allocation of resources, economic systems, economics institutions and incentives, markets structures and prices, productivity, international economics, the global marketplace, aggregate supply and demand, and public policy towards business. As a final project, students, using information from the class, prepare a report as to how economics impacts a specific business/company. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

ECON 310

Comparative Economic System • 5.0 Credits

ECON 310 first classifies and then examines the major economic systems of the world. The course focuses on a general understanding of how economic systems work and how economic theories of growth and development interact with government policy, history, and culture to explain economic performance of different countries. Economies examined in some detail include several advanced market capitalist countries (e.g., the former Soviet Union, Poland, and China), and other East Asian economies (e.g., South Korea, Malaysia, and India). The economies in Africa and Middle East are also covered. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

ECON 315

Economics of Healthcare [S/B] • 5.0 Credits

Covers the allocation, production, and distribution of healthcare in our economy. Examines how healthcare demand differs from that of other goods. Major topics include: cost and benefit evaluation methods, the

Courses

demand for medical care including the law of demand, short run and long run costs of medical care, supply and demand, market structures, and the role of government in healthcare. The various segments of the healthcare industry are also studied. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

Education

EDUC 101

Introduction to Education • 4.0 Credits

Formerly ED 101, EDUC 101

Students receive an overview of the history and philosophy of education, as well as develop an awareness of current educational requirements based on legislation for K-12 schools. Students also begin to develop a personal philosophy of education.

EDUC 108

Paraeducator In Schools [RE] • 3.0 Credits

Formerly ED 108, EDUC 108

Explore paraeducator roles and responsibilities in the delivery of educational services to students and certified/licensed staff. Demonstrate knowledge of selected core competencies for paraeducators in order to work effectively with a diverse student population.

EDUC 111

Introduction to Instructional Strategies [RE] • 5.0 Credits

Formerly ED 111, EDUC 111

An overview of instructional strategies including theory and practical application within the K-12 classroom.

EDUC 112

Introduction to ELA Teaching Strategies [RE] • 3.0 Credits

Formerly ED 112, EDUC 112

Provides an overview of the philosophy and stages of language acquisition for second language learners, K-12. Models and instructional strategies are explored and language assessment tools are examined.

EDUC& 114

Child Development [RE] • 3.0 Credits

Formerly ECE 106, EDUC& 114

A study of the physical, emotional, social, and cognitive development of children from conception through eight years of age and related theories. Emphasis is given to current early childhood brain development research.

EDUC& 115

Child Development [RE] • 5.0 Credits

Formerly ED 106, EDUC 106, EDUC& 115

Build a foundation for explaining how children develop in all domains, conception through early adolescence. Explore various developmental theories, methods for documenting growth, and impact of brain development. Topics addressed: stress, trauma, culture, race, gender identity, socioeconomic status, family status, language, and health issues.

EDUC 117

Seminar [RE] • 1.0–3.0 Credits

Formerly ED 117, EDUC 117

Provides an opportunity to participate in an intensive, short-term learning experience relating to the field of early childhood education.

EDUC 128

Introduction to Math Instruction [RE] • 5.0 Credits

Formerly ED 128, EDUC 128

An introduction to math instruction including math reform philosophy, theory, and practical application within the K-12 system.

EDUC& 130

Guiding Behavior [RE] • 3.0 Credits

Formerly ECE 104, EDUC& 130

Students will examine the principles and theories promoting social competence in young children and creating safe learning environments. Develop skills promoting effective interactions, providing positive individual guidance, and enhancing group experiences.

EDUC& 136

School Age Care [RE] • 3.0 Credits

Students will develop skills to provide developmentally appropriate and culturally relevant activities/care for children ages 5-12 in a variety of settings. Topics include: implementation of curriculum, preparation of environments, building relationships, guiding cognitive and social emotional development, and community outreach.

EDUC& 150

Child/Family/Community [RE] • 3.0 Credits

Formerly ECE 209, EDUC& 150

Students will integrate the family and community contexts in which a child develops. Explore cultures and demographics of families in society, community resources, strategies for involving families in the education of their child, and tools for effective communication.

EDUC 153

Paraeducation Supervised Practicum [RE] • 4.0 Credits

Designed to be taken just before completion of the paraeducation certificate, this class combines the paraeducation course content with practical application. Emphasis is on improving personal teaching skills while gaining on-the-job experience working with professionals in the field. Grade is pass/no credit.

EDUC 197

Field Experience [RE] • 1.0–2.0 Credits

Students have an opportunity to observe theory in action and to gain experience in the field of education. This class must be taken in conjunction with EDUC 101. Grade is pass/no credit.

EDUC 199

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework.

EDUC& 203

Exceptional Child • 3.0 Credits

Formerly ECE 107, EDUC& 203

A comprehensive introduction to the field of special needs children and their families, including an examination of legislative action, Individualized Education Program (IEP), handicapping conditions, child abuse, drug and alcohol effects, and socioeconomic, societal, and cultural factors that affect family functioning.

EDUC 299

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework.

Courses

Electronics

ELT 101

Basic Electricity [RE] • 5.0 Credits

This course provides an introduction to the basic concepts of electricity including series and parallel circuits, AC and DC currents, transformers, resistance, capacitors, multimeter use, and troubleshooting.

ELT 111

Introduction to Electricity [RE] • 5.0 Credits

Introduction to the basic concepts of electricity, electrical fundamentals, and electronics. Includes AC and DC currents, heaters and heat tracing, electrical supply and control components, and electronic systems.

Prerequisite: A grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.

ELT 124

Direct Current Circuits [RE] • 5.0 Credits

Basic principles of electricity and the applications of the fundamental laws to direct current networks. A study of electrical components, magnetism, inductance, capacitance, and elementary network analysis.

ELT 134

Alternating Current Circuits [RE] • 5.0 Credits

Fundamental principles of alternating current: sinusoidal and non-sinusoidal. A study of impedance, phase shift, coupling networks, transformers, and series and parallel resonance using standard vector notation. **Prerequisite:** Completion of ELT 124 with a 0.7 or higher.

ELT 154

Semiconductors and Op Amps [RE] • 5.0 Credits

Introduces semiconductor devices and associated circuits with diodes, special purpose diodes, and various types of transistors (BJT, FETs, Thyristors, etc.), then concludes with Operational Amplifiers (Op Amps). Circuit application and troubleshooting is applied with all components.

Prerequisite: Completion of ELT 134 with a 0.7 or higher.

ELT 171

Digital Fundamentals [RE] • 5.0 Credits

Builds upon basic instrumentation and control knowledge and skills from previous classes. Focuses on developing the knowledge and skills in number systems, digital logic circuits, implementation technology and logic functions, arithmetic circuits, and sequential logic circuit building blocks. **Prerequisite:** Completion of ELT 154 with a 0.7 or higher.

ELT 199

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework.

ELT 201

Basic Electronics [RE] • 5.0 Credits

This course covers the concepts of electrical fundamentals and electronics including Ohm's and Kirchhoff's Laws; series, parallel, and compound circuits; motors, relays, switches, inverters, converters; power distribution, wiring and routing; soldering, terminals, splicing; and troubleshooting.

ELT 211

Applied Electronics [RE] • 5.0 Credits

Broad-based course designed to apply knowledge and skills to the maintenance and operation of electrical components related to power

plant instrumentation and controls. **Prerequisite:** Completion of ELT 124 with a 0.7 or higher.

Emergency Medical Technician

EMT 101

Emergency Medical Technician-Basic [RE] • 12.0 Credits

This is the entry-level course to the Emergency Medical Service (EMS) profession and is designed for those who aspire to become an Emergency Medical Technician-Basic. This course focuses on: EMT roles and responsibilities, airway management, patient assessment, medical and trauma emergencies, anatomy and physiology, documentation, lifting and moving, and communications. This course also includes practical labs and a total of 10 hours of clinical experience in the Emergency department to provide direct hands-on experience with a variety of patients. Upon successful completion of this course, students are eligible to take the National Registry Certification Exam. In order to certify as an EMT in the state of Washington, the EMT candidate must affiliate with a state approved pre-hospital care organization. For more information, please see the Washington State Department of Health website. \$10.72 per quarter malpractice insurance fee. \$96 EMT lab fee. **Prerequisite:** Students must be accepted into CBC's EMT program prior to enrollment. Completion of ENGL 99 is strongly recommended.

Engineering Technology

ENT 111

Introduction to Engineering [RE] • 5.0 Credits

This course introduces students to the role of the engineer, engineering dimensions and standards, and the basic methodology of engineering problem-solving. \$35 science fee. **Prerequisite:** A grade of 2.0 or better in MATH 70 or 72, or concurrent enrollment in MATH 70 or 72 or a higher math class, or a grade of 0.7 or better in a higher math class, or appropriate placement, or instructor permission.

ENT 114

Introduction to Drafting [RE] • 4.0 Credits

Formerly ENT 114, ENT 116

Basic principles of drafting and introduction to CAD to include spatial visualization, line types, sketching, scale, orthographic projection, isometric drawings, sectional views, oblique lines and surfaces, auxiliary views and basic applications. \$35 science fee.

ENT 118

Spatial Visualization [RE] • 2.0 Credits

An overview of the techniques used to mentally manipulate 2-dimensional and 3-dimensional figures. Includes the basics of drafting such as line types, orthographic projection, isometric drawings, and basic applications. \$35 science fee.

ENT 121

Engineering Fundamentals W/ Lab [RE] • 4.0 Credits

Fundamental concepts relevant to many engineering disciplines, including: energy, vectors, force systems, free body diagrams, strength of materials, associated problem-solving, and basic design procedures. \$35 science fee. **Prerequisite:** Completion of ENT 111 with a 2.0 or better.

ENT 122

Materials [RE] • 3.0 Credits

An introduction to the materials which are used in the fabrication of construction projects including: foundations, wood, heavy timber frame

Courses

construction, wood light frame construction, exterior finishes, interior finishes, masonry, roofing, and glass. \$35 science fee.

ENT 124

Intermediate Drafting [RE] • 4.0 Credits

Formerly ENT 124, ENT 125

Intermediate principles of drafting and CAD to include spatial visualization, line types, sketching, scale, orthographic projection, isometric drawings, sectional views, oblique lines and surfaces, auxiliary views and intermediate applications. \$35 science fee. **Prerequisite:** A grade of 2.0 or better in ENT 114, or a grade of 2.0 or better in both ENT 118 and ENT 267, or instructor permission.

ENT 128

Architecture & Engineering Blueprint Reading [RE] • 2.0 Credits

An overview of the techniques used in reading construction drawings for architecture and engineering projects. \$35 science fee.

ENT 134

Surveying W/ Lab [RE] • 6.0 Credits

A course in plane surveying which includes: horizontal, vertical, and angular measurements, traversing, mapping, construction survey, land survey, and calculations. \$35 science fee. **Prerequisite:** Completion of MATH 113 or MATH& 142, both with a 2.0 or better, or appropriate placement, or instructor permission.

ENT 135

Statics [RE] • 5.0 Credits

Vectors, types of forces, vector addition, moments, conditions for equilibrium, free-body diagrams and conventions, coplanar force systems, and load analysis of basic trusses and frames. \$35 science fee. **Prerequisite:** Completion of MATH 113 or MATH& 142 with a 2.0 or better, or appropriate placement, and completion of ENT 121 with a 2.0 or better, or instructor permission.

ENT 136

Advanced Drafting [RE] • 4.0 Credits

Advanced principles of drafting and CAD to include 3D projects, plan and profile drawings, advanced views, advanced sections, and dimensioning. \$35 science fee. **Prerequisite:** Completion of ENT 124 with a grade of 2.0 or better, or instructor permission.

ENT 214

Strength of Materials [RE] • 5.0 Credits

A study of stress and deformation of materials. Topics include: axial and torsional loading, stress-strain relationships, shearing stresses, temperature stresses, and engineering applications. \$35 science fee. **Prerequisite:** Completion of ENT 135 with a 2.0 or better, or instructor permission.

ENT 216

Mechanical Drafting & Design [RE] • 5.0 Credits

Fundamentals of design, assembly drawings, dimensioning systems, and a mechanical design/drafting project. The primary emphasis of this course is the application of CAD to mechanical and 3-D drawings using AutoCAD. \$35 science fee. **Prerequisite:** Completion of ENT 136 with a 2.0 or better, or instructor permission.

ENT 219

Construction Estimating [RE] • 1.0 Credit

An overview of the techniques used in estimating material quantities in construction projects. \$35 science fee. **Prerequisite:** Completion of ENT 111, ENT 122, and ENT 128, all with a 2.0 or better, or instructor permission.

ENT 224

Structures [RE] • 5.0 Credits

Load analysis and design of basic structural members using timber and steel. \$35 science fee. **Prerequisite:** Completion of ENT 214 with a 2.0 or better, or instructor permission.

ENT 226

Architectural/Structural Drafting • 5.0 Credits

A drafting and design course covering construction techniques, architectural drawings, organization of drawing sets, and design projects. \$35 science fee. **Prerequisite:** Completion of ENT 136 with a 2.0 or better, or instructor permission.

ENT 229

Construction Specifications [RE] • 2.0 Credits

A study of construction specifications using the CSI format. \$35 science fee. **Prerequisite:** A grade of 2.0 or higher in ENT 219, and a grade of 2.0 or higher or concurrent enrollment in ENGL&101, or instructor permission.

ENT 236

Design [RE] • 5.0 Credits

Various individual and team projects with specific criteria and constraints assigned. The completed projects are formally presented using both oral and written reporting techniques. \$35 science fee. **Prerequisite:** Completion of ENT 224 and ENT 226, both with a 2.0 or higher.

ENT 238

Electricity [RE] • 5.0 Credits

An introductory course in electricity which includes: basic electrical theory and mathematical relationships, series and parallel circuits, DC and AC circuit components, power generation and distribution. \$35 science fee. **Prerequisite:** Completion of MATH& 141 with a 2.0 or higher, and completion of either PHYS& 115 or PHYS& 222 both with a 2.0 or higher, or instructor permission.

ENT 267

Autocad I W/Lab [RE] • 3.0 Credits

This course utilizes AutoCAD for computer-aided drafting (CAD). The course shows how to use AutoCAD to set up drawings, additional draw and edit commands, dimensioning, and text. Students utilize drafting and editing techniques to efficiently produce their drawings. \$35 science fee. **Prerequisite:** Concurrent enrollment in ENT 118, or completion of ENT 118 with a 2.0 or higher, or instructor permission.

English

ENGL 90

Writing Express [RE] • 1.0–3.0 Credits

Formerly ENG 90, ENGL 90

An intensive composition course designed to prepare students for college reading and writing. Successful completion of this course makes the student eligible for ENGL& 101. Grade is pass/no credit.

ENGL 91

Grammar Skills [RE] • 5.0 Credits

Formerly ENG 91, ENGL 91

A review of basic grammar including sentence writing and editing, sentence structure, usage, and mechanics. Grade is pass/no credit.

Prerequisite: Placement into ENGL 91.

Courses

ENGL 95

English Review [RE] • 5.0 Credits

Formerly ENG 95, ENGL 95

A study of basic grammar and beginning paragraph writing. This is a review class to better prepare students to continue to more advanced English courses. Grade is pass/no credit.

ENGL 97

Special Studies [RE] • 5.0 Credits

A class used to explore new coursework.

ENGL 98

Writing Prep I [RE] • 5.0 Credits

Formerly ENG 98, ENGL 98

This course is designed to teach the basics of writing well-developed and grammatically correct single and multiple paragraph papers. Grade is pass/no credit. **Prerequisite: Completion of ENGL 91 with a 0.7 or higher, or placement into ENGL 98.**

ENGL 99

Writing Prep II [RE] • 5.0 Credits

Formerly ENG 99, ENGL 99

An intensive composition course designed to prepare students for college reading and writing. Successful completion of this course makes the student eligible for ENGL& 101. Grade is pass/no credit.

ENGL& 101

English Composition I [C] • 5.0 Credits

Formerly ENG 101, ENGL& 101

Study and application of the principles of writing clear exposition with emphasis on organizing unified and coherent essays. **Prerequisite: A passing grade in either ENGL 90 or ENGL 99, or placement into ENGL& 101.**

ENGL& 102

Composition II [C] • 5.0 Credits

Formerly ENG 201, ENGL& 102

An advanced expository writing course focusing on research essays and other aspects of college writing. **Prerequisite: Completion of ENGL& 101 with a 1.0 or better.**

ENGL 103

Writing In The Workplace [RE] • 5.0 Credits

Formerly ENG 103, ENGL 103

This course is designed to teach writing tasks encountered in the workplace including resumes, business letters, memos, reports, instructions, and policies. **Prerequisite: A passing grade in either ENGL 90 or ENGL 99, or placement into ENGL& 101.**

ENGL& 111

Intro to Literature [H] • 5.0 Credits

Formerly ENGL& 111, LIT 150

This course focuses on reading and analyzing prose, poetry, and drama and is designed to help students develop a method of reading and evaluating literature. **Prerequisite: Eligible for ENGL& 101 or currently enrolled in ENGL 99.**

ENGL 140

The Cinema [H] • 5.0 Credits

Formerly ENGL 140, LIT 140

The study of cinema and its narrative function; presentation of alternative modes of narrative structure; comparative analyses of original texts and

their filmic adaptations. **Prerequisite: Completion of ENGL 99 with a 0.7 or higher, or concurrent enrollment in ENGL99.**

ENGL 160

Women's Literature [H] • 5.0 Credits

Formerly ENGL 160, LIT 160

This course is a study of the ways women represent female experience and question cultural norms through the literary arts. **Prerequisite: Eligible for ENGL& 101 or currently enrolled in ENGL 99.**

ENGL 180

Multicultural Literature [H] • 5.0 Credits

Formerly ENGL 180, LIT 180

Introduction to the multicultural literatures of the Americas (i.e., African American literature, Native American literature, Hispanic American literature, Asian American literature, etc). **Prerequisite: Eligible for ENGL& 101 or currently enrolled in ENGL 99.**

ENGL 195

Bible As Literature [H] • 5.0 Credits

Formerly ENGL 195, LIT 195

Readings from the Old Testament and New Testament, in appropriate cultural, historical, and literary contexts. **Prerequisite: Eligible for ENGL& 101 or currently enrolled in ENGL 99.**

ENGL 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

ENGL 203

Mythology [H] • 5.0 Credits

Formerly ENGL 203, LIT 203

The theory of mythology and the use of Greco-Roman myths in art and literature. **Prerequisite: Eligible for ENGL& 101 or currently enrolled in ENGL 99.**

ENGL 210

Intro to Linguistics [H] • 5.0 Credits

Formerly ENG 210, ENGL 210

An introduction to the study of human language from the standpoint of sounds and sound patterns, word formation, and sentence structure. Students learn about the similarities and differences among the world's languages and are introduced to the various sub-disciplines of the field of linguistics. **Prerequisite: Completion of ENGL& 101 with a 0.7 or higher, or concurrent enrollment in ENGL& 101.**

ENGL& 220

Intro to Shakespeare [H] • 5.0 Credits

Formerly ENGL& 220, LIT 270

Introduction to Shakespeare's artistic writings. Emphasis is on understanding the culture, language, and ideas. **Prerequisite: Eligible for ENGL& 101 or currently enrolled in ENGL 99.**

ENGL& 235

Technical Writing [C] • 5.0 Credits

Formerly ENG 105, ENG 205, ENGL& 235

This course emphasizes students' technical communication skills for use in the workplace and other academic settings. Students employ various methods of analyzing and writing for different audiences and purposes. Students also use traditional and online resources for problem-solving, research, documentation, and editing. **Prerequisite: Completion of ENGL& 101 with a 1.0 or better.**

Courses

ENGL& 236

Creative Writing I [H] • 5.0 Credits

Formerly ENG 240, ENGL& 236

A study of creative writing, emphasizing diverse styles and techniques. It is strongly recommended that students complete ENGL& 101 prior to enrollment.

ENGL& 237

Creative Writing II [H] • 5.0 Credits

Formerly ENG 241, ENGL& 237

A continuation of ENGL& 236. **Prerequisite:** Completion of ENGL& 236 with a 0.7 or higher.

ENGL& 244

American Literature I [H] • 5.0 Credits

Formerly ENGL& 244, LIT 225

A survey of American literature from the founding of Jamestown to the Civil War Era. **Prerequisite:** Eligible for ENGL& 101 or currently enrolled in ENGL 99.

ENGL& 245

American Literature II [H] • 5.0 Credits

Formerly ENGL& 245, LIT 226

A survey of American literature from Civil War to World War I. **Prerequisite:** Eligible for ENGL& 101 or currently enrolled in ENGL 99.

ENGL& 246

American Literature III [H] • 5.0 Credits

Formerly ENGL& 246, LIT 227

A survey of American literature from World War I to the present. **Prerequisite:** Eligible for ENGL& 101 or currently enrolled in ENGL 99.

ENGL& 254

World Literature I [H] • 5.0 Credits

Formerly ENGL& 254, LIT 205

A survey of world literature from ancient times through the Roman Empire. **Prerequisite:** Eligible for ENGL& 101 or currently enrolled in ENGL 99.

ENGL& 255

World Literature II [H] • 5.0 Credits

Formerly ENGL& 255, LIT 206

A survey of world literature emphasizing European Medieval and Renaissance and Enlightenment literature. **Prerequisite:** Eligible for ENGL& 101 or currently enrolled in ENGL 99.

ENGL& 256

World Literature III [H] • 5.0 Credits

Formerly ENGL& 256, LIT 207

A survey of world literature emphasizing Romanticism, Realism, and Modernism. **Prerequisite:** Eligible for ENGL& 101 or currently enrolled in ENGL 99.

ENGL 257

English Grammar [H] • 5.0 Credits

Formerly ENG 255, ENGL 257

An introduction to the terms, concepts (including phonemics, morphology, and syntax), and analytical methods of English grammar. **Prerequisite:** Completion of ENGL& 101 with a 0.7 or higher, or concurrent enrollment in ENGL& 101.

ENGL 264

English Literature I [H] • 5.0 Credits

Formerly ENGL 264, LIT 264

A survey of English literature from Beowulf to 1640. **Prerequisite:** Eligible for ENGL& 101 or currently enrolled in ENGL 99.

ENGL 265

English Literature II [H] • 5.0 Credits

Formerly ENGL 265, LIT 265

A survey of English literature from 1640 to 1800. **Prerequisite:** Eligible for ENGL& 101 or currently enrolled in ENGL 99.

ENGL 266

English Literature III [H] • 5.0 Credits

Formerly ENGL 266, LIT 266

A survey of English literature from 1800 to the present. **Prerequisite:** Eligible for ENGL& 101 or currently enrolled in ENGL 99.

ENGL 275

The Lord of The Rings [H] • 5.0 Credits

Formerly ENGL 275, LIT 275

Students study J.R.R. Tolkien's trilogy and Peter Jackson's films, analyzing their literary, theological, and philosophical elements. Students read the novels in their entirety over the course of the quarter. **Prerequisite:** Eligible for ENGL& 101 or currently enrolled in ENGL 99.

ENGL 280

Lesbian, Gay, Bisexual, Trans, Queer Studies [H] • 5.0 Credits

Formerly ENGL 280, LIT 280

An introduction to the interdisciplinary field of lesbian/gay/bisexual/transgender/queer studies from a historical and multicultural perspective. Works of fiction, poetry, drama, nonfiction, and film/television are used to understand connections between sexual orientation, gender identity, and the humanities. **Prerequisite:** Eligible for ENGL& 101 or currently enrolled in ENGL 99.

ENGL 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

ENGL 315

Writing for Health Professionals [C] • 5.0 Credits

This course provides writing instruction for students preparing for careers in the health sciences. Students develop skills needed to research health-related topics and communicate technical information in genres appropriate for diverse audiences, such as health professionals, patients, clients, and the public. **Prerequisite:** A grade of 2.0 or better in either ENGL& 101 or ENGL& 102 or ENGL& 235, and acceptance into a BAS/BSN program, completion of a two-year degree, or instructor approval.

ENGL 410

Professional & Organizational Communication [C] • 5.0 Credits

A study of the skills necessary to communicate effectively in the workplace. Topics include selection of the proper channel and medium for information delivery, business etiquette, and professionalism. Students analyze and prepare correspondence, proposals, and reports. **Prerequisite:** Completion of ENGL& 101 with a 0.7 or higher, and acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.

Courses

English Language Acquisition

ELA 9

ELA Ed Interviewing [RE] • 0.5–3.0 Credits

Formerly ELA 9, ESL 9

The purpose of this course is to improve learner retention, persistence, and performance through research-proven goal-setting, problem-solving, evaluation, intervention, and self-awareness strategies. \$25 per quarter BeDA tuition.

ELA 10

ELA Level 1 [RE] • 1.0–18.0 Credits

Formerly ELA 10, ESL 10

For people who have had little or no formal English instruction and who have little or no ability to communicate in English. Emphasis is on basic literacy, fundamental speaking and listening skills, and an introduction to computer use. \$25 per quarter BeDA tuition.

ELA 20

ELA Level 2 [RE] • 1.0–18.0 Credits

Formerly ELA 20, ESL 20

For people who have had some formal English language instruction but whose ability to communicate is very limited. Emphasis is on basic survival needs, beginning reading and writing skills, and an increased familiarity with computer skills. \$25 per quarter BeDA tuition.

ELA 30

ELA Level 3 [RE] • 1.0–18.0 Credits

Formerly ELA 30, ESL 30

For people who read and write some English and are able to communicate with native speakers with some difficulty. Emphasis is on developing students' reading, writing, communication, and computer skills. \$25 per quarter BeDA tuition.

ELA 40

ELA Level 4 [RE] • 1.0–18.0 Credits

Formerly ELA 40, ESL 40

Designed for persons who are fairly literate in English, can handle their jobs using simple oral and written instructions, and can communicate with native speakers with little difficulty. Emphasis is on improving the students' speaking, listening, reading and writing skills, along with use of various computer software. \$25 per quarter BeDA tuition.

ELA 50

ELA Level 5 [RE] • 1.0–18.0 Credits

Formerly ELA 50, ESL 50

Designed for persons who are functionally literate in English, can handle their jobs with oral and written instructions, and can communicate with native speakers with little difficulty. Emphasis is on strengthening students' speaking, listening, reading and writing skills, and performing additional computer skills. \$25 per quarter BeDA tuition.

ELA 60

ELA Level 6 [RE] • 1.0–18.0 Credits

Formerly ELA 60, ESL 60

Designed for persons who are literate in English, can handle their jobs with oral and written instructions, and can communicate with native speakers. Emphasis is on speaking, listening, reading, and writing skills, with continued use of computers and other technologies. \$25 per quarter BeDA tuition.

ELA 90

I-BEST Studies [RE] • 1.0–10.0 Credits

Formerly ELA 90, ESL 90

This course integrates Washington English Language Acquisition level 5 and 6 reading, writing, speaking, and listening standards and indicators with a college-level course. Example: Child Development Associate, Nursing Assistant Certified, or Phlebotomy. \$25 per quarter BeDA tuition.

ELA 199

Special Studies [RE] • 1.0–7.0 Credits

Formerly ELA 199, ESL 199

A class used to explore new coursework. \$25 per quarter BeDA tuition.

Environmental Science

ENVS& 101

Intro to Environmental Science W/Lab [M/S] • 5.0 Credits

Formerly ENVS 100, ENVS& 101

A multidisciplinary course designed to provide both the non-science and science major the background necessary to understand environmental problems that have arisen due to human activities. Topics include: food chains, energy production, nutrient cycles, forest and wildlife management, population demographics, air and water pollution, ozone depletion, and global warming. Lab and lecture must be taken concurrently. \$25 science fee.

ENVS 174

Intro to Meteorology and The Atmosphere [M/S] • 5.0 Credits

An introduction to meteorology, weather, climate, and the atmospheric processes related to air pollution and climate change. Topics include: atmospheric structure, solar radiation, clouds, precipitation, pressure, fronts, hurricanes, air pollution, climate, and global climate change. \$25 science fee. **Prerequisite: A grade of 2.0 or better in MATH 70 or 72, or a grade of 0.7 or better in a higher math class (excluding MATH 100, MATH& 107 and MATH& 146), or appropriate placement.**

ENVS 310

Environmental Issues [M/S] • 5.0 Credits

This course provides an interdisciplinary exploration of current environmental challenges through the lens of environmental science, sustainability, and public policy. Students investigate major issues such as climate change, conservation, sustainable business practices, agriculture, energy use, and waste management. Emphasis is placed on scientific inquiry, critical evaluation of environmental problems, and the social, economic, and ethical dimensions of sustainability. \$25 science fee.

Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.

Exercise Science

EXSC 101

Introduction to Exercise Science [PE] • 3.0 Credits

Students examine the science of health and human movement with its associated professional sub-disciplines. These include exercise physiology, exercise psychology, physical activity epidemiology, biomechanics, motor development, K-12 physical education, and sports management. Students explore the various professional and educational requirements for occupations in these sub-disciplines. \$35 science fee.

Courses

EXSC 201

Anatomical Kinesiology [RE] • 5.0 Credits

This course will introduce students to anatomical concepts and physical laws as applied to human movement emphasizing the effects of individual and environmental variables. Includes analyses of normal and pathological gait. \$35 science fee. **Prerequisite: Completion of BIOL& 241 with a 0.7 or higher.**

EXSC 202

Personal Training [RE] • 5.0 Credits

Personal Training is a comprehensive course designed to prepare students to become certified Personal Trainers. Students learn to properly screen clients for safe participation in an exercise program, utilize different tools for assessing a clients' fitness level, and identify appropriate assessment techniques for a wide variety of clientele. Students learn components of program design for resistance training, cardiovascular training, and flexibility. \$35 science fee.

EXSC 203

Exercise Science Practicum [RE] • 2.0 Credits

Students work in conjunction with Exercise Science instructors to provide individual planning and programming for a variety of populations. Students will also observe professionals in Exercise Science related fields in a variety of settings. \$35 science fee. **Prerequisite: Completion of EXSC 202 with a 0.7 or higher, or instructor permission.**

Expanded Functions Dental Auxiliary

EFDA 100

Intro to Expanded Functions Dental Auxiliary [RE] • 2.0 Credits

This course introduces the principles and practices of expanded function dental assisting, including legal and ethical aspects of dental practice, infection control and safety, and oral health promotion and disease prevention. Students will also learn about the supportive services allowed under dentist supervision, such as dental radiography, charting, and basic laboratory procedures. Upon completion of the course, students will be prepared to advance to more advanced coursework in the EFDA program. \$400 Dental Lab Supply fee. **Prerequisite: Acceptance into the Expanded Functions Dental Auxiliary Program.**

EFDA 101

Restorative Dentistry [RE] • 3.0 Credits

This course covers the fundamentals of restorative dentistry, including dental anatomy, cariology, restorative classifications, and occlusion. Students will learn the basics of cavity preparation and restoration, and the properties and characteristics of restorative materials, both direct and indirect. The course also covers the principles of occlusion and its influence on dental treatment planning. Upon completion, students will be prepared to apply these concepts to expanded function procedures in subsequent coursework. **Prerequisite: Acceptance into the Expanded Functions Dental Auxiliary Program.**

EFDA 102

Amalgam Restorations [RE] • 2.0 Credits

This course is designed to provide students with a thorough understanding of amalgam as a restorative material, including its composition, physical properties, and clinical applications. Students will learn about the safety considerations related to amalgam handling and placement, as well as proper techniques for amalgam restoration. The course is designed to accompany EFDA 112 and will prepare students for expanded function procedures that involve the use of amalgam.

Prerequisite: Completion of EFDA 100, EFDA 101, EFDA 104, EFDA 114, and EFDA 123 with a minimum grade of 2.0.

EFDA 104

Composite Restorations [RE] • 2.0 Credits

This course is designed to provide students with the knowledge and skills necessary for working with composite resin and glass ionomers in dental restorations. Topics covered include the composition and physical properties of these materials, proper handling and placement techniques, and patient management. Emphasis is placed on practical, hands-on experience to develop proficiency in composite restoration procedures. **Prerequisite: Completion of EFDA 100, EFDA 101, EFDA 102, EFDA 112, and EFDA 123, all with a 2.0 or better.**

EFDA 105

Dental Impressions [RE] • 2.0 Credits

This course is designed to provide students with a comprehensive understanding of dental impressions. Topics covered include the fundamentals of preliminary and final impressions, as well as bite registrations. Through a combination of lectures, case studies, and hands-on demonstrations, students will learn about the materials and techniques used to take accurate and reliable impressions, including tray selection and placement, mixtures, and manipulation. By the end of this course, students will have the knowledge and skills needed to prepare for and take high-quality dental impressions. **Prerequisite: Completion of EFDA 100, EFDA 101, EFDA 104, EFDA 114, and EFDA 123 with a minimum grade of 2.0.**

EFDA 112

Amalgam Restorations Lab [RE] • 3.0 Credits

This laboratory course is designed to accompany EFDA 102 and provides students with hands-on experience in the safe placement, handling, and manipulation of amalgam restorative materials. Students will learn to apply the principles of amalgam restoration and to perform clinical procedures under the supervision of a licensed dentist or dental hygienist. Upon completion of the course, students will be prepared to perform expanded function procedures that involve the use of amalgam restorative materials. **Prerequisite: Completion of EFDA 100, EFDA 101, EFDA 104, EFDA 114, and EFDA 123 with a minimum grade of 2.0.**

EFDA 114

Composite Restorations Lab [RE] • 3.0 Credits

This hands-on laboratory course is designed to build on the knowledge and skills gained in EFDA 104, providing students with the opportunity to apply safe placement, handling, and manipulation techniques to complete composite restorations. Working under the supervision of experienced dental professionals, students will practice composite restoration procedures on a variety of dental models and patient simulations. By the end of this course, students will have developed the proficiency and confidence needed to provide high-quality composite restorations in a clinical setting. **Prerequisite: Acceptance into the Expanded Functions Dental Auxiliary Program.**

EFDA 115

Dental Impressions Lab [RE] • 2.0 Credits

This hands-on laboratory course builds on the theoretical knowledge gained in EFDA 105, providing students with the opportunity to practice taking accurate and reliable dental impressions. Working under the supervision of experienced dental professionals, students will learn to apply the materials and techniques covered in EFDA 105 to take preliminary and final impressions, as well as bite registrations. Through a combination of patient simulations and dental models, students will develop the proficiency and confidence needed to provide high-quality

Courses

dental impressions in a clinical setting. **Prerequisite:** Completion of EFDA 100, EFDA 101, EFDA 104, EFDA 114, and EFDA 123 with a minimum grade of 2.0.

EFDA 123

EFDA Clinical Practice I [RE] • 3.0 Credits

This course provides students with hands-on clinical experience in the dental clinic setting. Under the supervision of licensed dentists, students will perform assigned expanded function duties, applying industry best practices and patient safety standards. The course is designed to help students build their skills in a real-world setting, and to prepare them for the practical demands of the expanded functions dental auxiliary role. **Prerequisite:** Acceptance into the Expanded Functions Dental Auxiliary Program.

EFDA 126

EFDA Clinical Practice II [RE] • 4.0 Credits

This course is designed to provide students with hands-on, chair-side clinical experience in a dental clinic setting. Working under the supervision of licensed dentists, students will perform a variety of expanded functions dental auxiliary duties, including but not limited to restorative procedures and preventive services. Students will be expected to apply their knowledge of patient safety standards and industry best practices, while developing the skills and confidence needed to succeed as a professional dental auxiliary. EFDA 126 is the second in a two-part series of clinical practice courses, following EFDA 123. Together, these courses form a comprehensive clinical experience for the expanded functions dental auxiliary. **Prerequisite:** Completion of EFDA 100, EFDA 101, EFDA 104, EFDA 114, and EFDA 123 with a minimum grade of 2.0.

Fire Science

FS 100

Introduction to Fire Service [RE] • 1.0 Credit

This course is designed to give students a broad understanding of the fire service in the United States. The course focuses on history, organization, and the primary components that make up the various forms of fire protection services in America today. This course is required for those students having no previous exposure to the fire service such as Tri-Tech Fire Science courses or IFSAC FF I certification.

FS 111

Fire Administration [RE] • 3.0 Credits

Management in the fire service explores the skills and techniques used by competent management in business, government, and voluntary organizations, with particular emphasis on their application to the fire service. **Prerequisite:** Completion of FS 100, FS 121, FS 131, FS 141, FS 151, FS 211, FS 231, FS 241, and FS 251, all with a 1.0 or better.

FS 121

Fire Tactics [RE] • 3.0 Credits

Discussion of basic firefighting tactics of company response, including size-up rescue, exposure, ventilation and fire problems, and tactics used.

FS 131

Introduction to Fire Inspections [RE] • 3.0 Credits

A course designed to give the new inspector or firefighter a basic concept of inspections that deal with fire hazards, authority to inspect, and how to conduct a pre-fire plan.

FS 141

Chemistry of Hazardous Materials [RE] • 3.0 Credits

This course is a survey of hazardous materials, their physical properties, chemical properties, and how they relate to emergency first responders who are called to manage events related to the release of hazardous materials. This course is intended for individuals who are majoring in Fire Science or who are enrolled in the Washington State Firefighter Apprenticeship program.

FS 151

Hazardous Materials for First Responders [RE] • 3.0 Credits

This course is a survey of hazardous materials, their physical properties, chemical properties, and how they relate to emergency first responders who are called to manage events related to the release of hazardous materials. This course is intended for individuals who are majoring in Fire Science or who are enrolled in the Washington State Firefighter Apprenticeship program.

FS 193

Fire Science Independent Studies [RE] • 4.0 Credits

A class used to explore new coursework or for a specific topic of special interest. Grade is pass/no credit.

FS 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

FS 211

Building Construction [RE] • 3.0 Credits

This course is designed to give the firefighter an understanding of the basics of building construction as it pertains to the fire service. This class is designed to prepare the student for assessing construction types and weaknesses for structural firefighting.

FS 222

Fire Tactics II [RE] • 3.0 Credits

This course includes planning, implementing, and evaluating basic and advanced fire tactics at the command officer level. **Prerequisite:** Completion of FS 121 with a 0.7 or higher.

FS 231

Fire Protection Equipment [RE] • 3.0 Credits

This course is designed to give students a clear understanding of the principles and limitations of fire suppression and detection systems, and their role in fire department emergency operations.

FS 241

Fire Investigation [RE] • 3.0 Credits

This course includes methods of determining the area of fire origin, fire causes, fire spread, and the aspects of fire behavior; recognizing accidental and incendiary fires and securing and preserving evidence. Witness interrogation methods, arson laws, court procedures, and review of case histories are discussed.

FS 251

Fire Service Hydraulics [RE] • 3.0 Credits

This course is designed to give the firefighter an understanding of municipal water systems, principles of fluids, water in motion, formulas for calculating water flow and pressure, fire flow requirements, and basic fire stream calculations. This course prepares students, in part, for fire apparatus pump operations.

Courses

FS 293

Fire Science Independent Studies [RE] • 1.0–10.0 Credits

A class used to explore new coursework or for a specific topic of special interest. Grade is pass/no credit.

FS 299

Special Studies [RE] • 1.0–10.0 Credits

A class used to explore new coursework.

First Year Introduction

FYI 101

First Year Introduction [RE] • 1.0 Credit

FYI is an introduction to academic culture and student success strategies, as well as expectations, resources, procedures, and policies of CBC. FYI supports students in their transition to college. FYI is required for all degree- and certificate-seeking students in the first quarter of classes. \$100 FYI fee; not applicable to Running Start. Grade is pass/no credit.

French

FRCH& 121

French I [H] • 5.0 Credits

Formerly FR 101, FRCH& 121

Introduction to the French language including conversational skills, reading, writing and grammar, and French culture including geography, customs, daily life, and heritage. Designed for the novice learner of French, with little or no proficiency in the French language. It is recommended that students complete at least ENGL 99 prior to enrollment.

FRCH& 122

French II [H] • 5.0 Credits

Formerly FR 102, FRCH& 122

Introduction to the French language including conversational skills, reading, writing and grammar, and French culture including geography, customs, daily life, and heritage. **Prerequisite: Completion of FRCH& 121 with a 0.7 or higher, or instructor permission.**

FRCH& 123

French III [H] • 5.0 Credits

Formerly FR 103, FRCH& 123

Introduction to the French language including conversational skills, reading, writing and grammar, and French culture including geography, customs, daily life, and heritage. **Prerequisite: Completion of FRCH& 122 with a 0.7 or better, or instructor permission.**

FRCH 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

FRCH 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

General Engineering

ENGR& 111

Engineering Graphics 1 • 3.0 Credits

Formerly ENGR& 111, GE 101

Principles of mechanical drawing: geometric construction, orthographic projection, sectional views, auxiliary views, isometric and oblique drawings, dimensions, threads, fasteners, and lettering. \$25 science fee.

ENGR 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.

ENGR& 214

Statics • 5.0 Credits

Formerly ENGR& 214, GE 281

Analysis of force systems in static equilibrium. Topics include: force vectors, equilibrium of particles and rigid bodies, structural analysis, distributed forces, friction, center of gravity, moments of inertia. \$25 science fee. **Prerequisite: A grade of 2.0 or better in MATH& 151 or a grade of 0.7 or better in a higher math class, and either PHYS& 241/231 or PHYS& 221 with a grade of 2.0 or better.**

ENGR& 215

Dynamics • 5.0 Credits

Formerly ENGR& 215, GE 291

Analysis of motion of particles and rigid bodies. Topics include: kinematics of particles and rigid bodies, kinetics of particles and rigid bodies, Newton's laws, work and energy, impulse, and momentum. \$25 science fee. **Prerequisite: Completion of ENGR& 214 with a 2.0 or better.**

ENGR& 224

Fundamentals of Thermodynamics [RE] • 5.0 Credits

A calculus-based engineering class concerning heat and heat transfer. This course covers the thermodynamic properties of matter, ideal and real gases, work and heat, and the laws of thermodynamics and their applications. \$25 science fee. **Prerequisite: Completion of PHYS& 223 with a 2.0 or higher.**

ENGR& 225

Mechanics of Materials [RE] • 5.0 Credits

A calculus-based engineering class concerning the mechanics of deformable bodies. This course covers the concepts of stress, strain, axial loads, torsion and bending, properties of materials and combined stress. \$25 science fee. **Prerequisite: Completion of ENGR& 214 with a 2.0 or higher.**

ENGR 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.

Geography

GEO 101

Physical Geography [M/S] • 5.0 Credits

Physical Geography provides an introduction to the physical earth. It may include processes, which impact the earth; it may also include the relationship between humans and the earth. Study of the physical areas and environment of the earth. Topics include the weather, climate, water cycle, soils, and land form studies. The class also covers how humans influence and are influenced by their physical environment. \$25 science fee.

GEO 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.

Courses

GEO 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.

Geology

GEOL& 101

Intro to Physical Geology W/ Lab [M/S] • 5.0 Credits

Formerly GEL 101, GEOL& 101

Composition and structure of the earth. Study and identification of common minerals and the three major rock groups. Plate tectonics concept of the evolution of surface features of continents. A study of volcanic, seismic, weathering, and groundwater processes. Outline of geologic development of the Pacific Northwest, including field studies. Lecture and lab must be taken concurrently. \$25 science fee.

Prerequisite: A grade of 2.0 or better in MATH 40, or a grade of 0.7 or better in a higher math class, or appropriate placement.

GEOL& 103

Historical Geology W/ Lab [M/S] • 5.0 Credits

Formerly GEL 203, GEOL& 103

Assessment of the history and development of the earth's physical environment and its inhabitants. An historical and chronologic analysis of the origin of the earth, including the development of the earth through time and discussion based on the paleontologic, sedimentologic, and stratigraphic record. Study of distinctive fossil groups for each geologic period and applications for correlation and reconstruction of regional geologic history. Lecture and lab must be taken concurrently. \$25 science fee. **Prerequisite:** Completion of GEOL& 101 with a 0.7 or better, or instructor permission.

GEOL& 110

Environmental Geology W/ Lab [M/S] • 5.0 Credits

Formerly GEL 211, GEOL& 110

Relationships of human activities with earth materials and processes. Earthquakes, volcanic activity, mass wasting, subsidence, surface water, mineral resources, waste disposal, water pollution, and a heavy emphasis on groundwater may all be included. Students are expected to make interpretations and draw conclusions from scientific data such as graphs, charts, and maps. Lecture and lab must be taken concurrently. Field trips may be included as a part of the laboratory experience. \$25 science fee. **Prerequisite:** Completion of GEOL& 101 with a 0.7 or better, or instructor permission.

GEOL 115

Geology of The National Parks • 5.0 Credits

The U. S. national parks and wilderness monuments preserve spectacular natural wonders. Their beauty is a direct result of their underlying geology. In this course, we explore the processes and forces by which the park lands were formed and transformed over geologic time, and their current geologic significance. This includes volcanism, plate tectonics, mountain-building, and alpine glaciations. \$25 science fee.

GEOL 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.

GEOL 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.

Health Education

HE 110

Concepts of Fitness [PE] • 2.0 Credits

Physiological, kinesiological, and energy aspects of movement activities and exercises related to health and physical fitness. The course is lecture/lab.

HE 160

Diet, Exercise & Weight Control [PE] • 2.0 Credits

Class is designed to promote and achieve knowledge in the areas of diet, exercise, and weight management for today's lifestyles as it relates to the students' total well-being.

HE 161

HIV/AIDS Issues and Strategies [PE] • 2.0 Credits

A comprehensive overview of the virus HIV and AIDS, including: biological, epidemiological, historical, universal precautions, economic, legal, ethical, social, and behavioral aspects.

HE 162

HIV/AIDS Education [PE] • 1.0 Credit

Formerly HE 162

This lab is designed to provide additional information on HIV/AIDS and activities that prepare students to give presentations about health issues related to HIV/AIDS to classes and other student groups on campus.

HE 170

Health and Wellness [PE] • 3.0 Credits

Study of current health and wellness issues and problems of the college-age student. Emphasis is on lifestyles, risk factors, and preventing disease and illness with a wellness lifestyle.

HE 171

Exercise Prescription [PE] • 2.0 Credits

This course is the study of the history, current trends, and research regarding proper protocols for designing individual workout programs based on needs and experience of individuals.

HE 172

Exercise Prescription Lab [PE] • 1.0 Credit

Formerly HE 172

Lab to be taken concurrently with HE 171.

HE 199

Special Studies • 1.0–15.0 Credits

An experimental class to be used to explore new approaches and applications to Health Education.

HE 210

Sports Nutrition [PE] • 3.0 Credits

This course is an introduction to terms, concepts, and research regarding proper nutrition for athletes and active individuals. In addition, supplementation and aids to enhance performance are studied.

HE 215

Health and Fitness for Life [PE] • 3.0 Credits

This course is designed to provide students with the necessary knowledge and skills to maintain a healthy fitness level throughout the lifespan. Students will develop, implement, and modify an exercise program geared to their specific fitness and wellness goals. This class requires students to exercise in the fitness center. \$35 science fee.

Courses

HE 220

Drugs and Health [PE] • 3.0 Credits

This course is designed to achieve physiological knowledge and awareness of chemical use and abuse as it relates to the student's total well-being.

HE 230

First-Aid Safety [RE] • 3.0 Credits

Designed to help students learn first-aid skills and accident prevention. Advanced first-aid and CPR card given for successful completion.

HE 232

Sports Psychology [PE] • 3.0 Credits

An introduction to terms, concepts, and research regarding the psychological area of sports. The history, current trends, and legal issues regarding the field of sports psychology are studied.

HE 240

Stress Management [PE] • 3.0 Credits

A study of the causes of human stress and how to manage or minimize this stress. Theories, implications, and practical applications are emphasized.

HE 250

Sports Management [PE] • 3.0 Credits

This course is an introduction to the history, current global perspectives, trends, and research regarding the field of sports management. Students gain an understanding of marketing, organization, and financial aspects of sports management.

Health Physics

HPHYS 300

Radiation Physics I [RE] • 5.0 Credits

This course is intended to teach students the basic fundamentals of health physics beginning with a review of physical principles, atomic and nuclear structure, radiation sources, radioactive decay series and differential equations, and the physical theory of interaction of radiation with matter. Students will develop skills by learning how to use available resources such as Brookhaven National Laboratory National Nuclear Data Center, Oak Ridge National Laboratory Radiological Toolbox and national Health Physics Society membership resources. **Prerequisite: Acceptance into the Health Physics BAS program at CBC.**

HPHYS 305

Radiation Physics II [RE] • 5.0 Credits

This course is intended to teach students advanced fundamentals of health physics beginning with radiation exposure, dosimetric quantities, radiation biology, standards and guidance relating to radiation safety, radiation detector theory and measurement counting statistics. Students will develop skills by learning how to use available resources, such as Brookhaven National Laboratory's National Nuclear Data Center, Oak Ridge National Laboratory's Radiological Toolbox and national Health Physics Society membership resources. **Prerequisite: Completion of HPHYS 300 with a 2.5 or higher, or instructor permission.**

HPHYS 310

Nuclear Forensics [RE] • 5.0 Credits

This course explores the chemical, physical and nuclear aspects associated with nuclear material production and identification. Topics will include nuclear fuel cycle, analysis of recovered material, nuclear policy and

nuclear forensic case histories. **Prerequisite: Acceptance into the Health Physics BAS program at CBC.**

HPHYS 315

Radiological and Nuclear Emergency Response [RE] • 5.0 Credits

This course is intended to teach students the national framework for responding to incidents involving radiological and nuclear materials and the role of historical impacts on shaping policy and accident analysis. A description of the National Contingency Plan and how it envelopes the EPA, investigative units, medical management of patients, response and recovery, societal issues, and factors affecting decision making. **Prerequisite: Completion of HPHYS 305 with a 2.5 or higher, or instructor permission.**

HPHYS 320

Environmental Radioactivity [RE] • 5.0 Credits

This course is intended to teach students the sources of natural and technologically enhanced radioactivity in the environment. Basic environmental transport methods and software will be explored and applied to determine dose to a worker and a member of the public based on a composite of real-world situations, in a hypothetical setting, that have historically occurred in the health physics industry. **Prerequisite: Completion of HPHYS 305 with a 2.5 or higher, or instructor permission.**

HPHYS 325

Reactor Health Physics [RE] • 5.0 Credits

This course is intended to teach students about the health physics challenges of nuclear power reactors, research reactors, and proposed future reactors (small modular reactors, microreactors, fusion reactors). The course will include a discussion on historic reactor and critical assembly accidents. **Prerequisite: Completion of HPHYS 305 with a 2.5 or higher, or instructor permission.**

HPHYS 350

Health Physics Seminar [RE] • 2.0 Credits

This course is intended to cover a broad spectrum of topics in contemporary health physics (e.g., state and federal regulations, waste disposal, emergency response, dosimetry, IAEA activities, nuclear nonproliferation, radiation oncology, etc.) delivered by field experts. Additionally, the students will increase their knowledge of employment opportunities and learn basic skills, such as resume writing and interview techniques. **Prerequisite: Acceptance into the Health Physics BAS program at CBC.**

HPHYS 397

Special Studies Lecture [RE] • 1.0–5.0 Credits

A class used to explore new coursework or for a specific topic of interest. **Prerequisite: Acceptance into the Health Physics BAS program at CBC and instructor permission.**

HPHYS 398

Special Studies Lab [RE] • 1.0–5.0 Credits

A class used to explore new coursework for a specific topic of interest. **Prerequisite: Acceptance into the Health Physics BAS program at CBC and instructor permission.**

HPHYS 399

Special Studies Field Based Experience [RE] • 1.0–5.0 Credits

A class used to explore new coursework or for a specific topic of special interest. **Prerequisite: Acceptance into the Health Physics BAS program at CBC and instructor permission.**

Courses

HPHYS 400

External Dosimetry [RE] • 5.0 Credits

This course is intended to teach students external radiation protection, point kernel techniques, shielding calculations including National Council on Radiation Protection and Measures (NCRP) 147, and external dosimetry measurement techniques. Students will develop skills by learning how to use industry shielding software and available resources, such as Oak Ridge National Laboratory's Radiological Toolbox. **Prerequisite: Completion of HPHYS 305 with a 2.5 or higher, or instructor permission.**

HPHYS 405

Internal Dosimetry [RE] • 5.0 Credits

This course is intended to teach students internal radiation protection based on international recommendations that include International Commission on Radiological Protection (ICRP), National Council on Radiation Protection and Measurements (NCRP) and journal publications. Furthermore, the course will include discussion and applications of Medical Internal Radiation Dose (MIRD) methods for calculating internal dose. Students will develop skills by learning how to use industry dosimetry software, such as Integrated Modules for Bioassay Analysis (IMBA) and Oak Ridge National Laboratory's Radiological Toolbox.

Prerequisite: Completion of HPHYS 305 with a 2.5 or higher, or instructor permission.

HPHYS 410

Radiation Biology [RE] • 5.0 Credits

This course is intended to teach students molecular mechanisms of radiation interaction, cell survival curves, cellular radiosensitivity, dose fractionation, acute radiation syndrome, medical countermeasures, radiation carcinogenesis, teratogenesis, and radiation protection. Students will develop skills by learning how to use applicable sections of the Oak Ridge National Laboratory's Radiological Toolbox. **Prerequisite: Completion of HPHYS 305 with a 2.5 or higher, or instructor permission.**

HPHYS 415

Radiation Detection and Measurement & Lab [RE] • 5.0 Credits

This course is intended to teach students the basic physics principles and applications of radiation detecting instruments, with laboratory exercises. The course emphasizes techniques and instrumentation for nuclear radiation detection and measurements as they relate to health physics (radiation safety) and nuclear physics. Laboratory exercises implement classroom knowledge through experience with various counting systems. **Prerequisite: Completion of HPHYS 305 with a 2.5 or higher, or instructor permission.**

HPHYS 420

Medical Health Physics [RE] • 5.0 Credits

This course is intended to provide students an introduction to the field of Medical Health Physics. Topics in this course will include the diagnostic and therapeutic use of x-rays and nuclear medicine, radiation protection and regulation, radiation accidents, waste management and disposal. **Prerequisite: Acceptance into the Health Physics BAS program at CBC.**

HPHYS 425

Nuclear and Radiological Regulatory Framework [RE] • 5.0 Credits

This course is intended to teach students the formation of the nuclear and regulatory environment in the United States and the role of Independent Domestic and International Consensus Standards. **Prerequisite: Acceptance into the Health Physics BAS program at CBC.**

HPHYS 430

CHP Exam Preparation and Problem Solving [RE] • 5.0 Credits

This course is intended to prepare students to take the nationally recognized Certified Health Physicist (CHP) exam with an emphasis on problem-solving skills. This course reviews all general areas of health physics and is recommended for students who are completing the Health Physics BAS program. This course reviews the fundamentals of health physics beginning with radiation physics, environmental radioactivity, internal dosimetry, external dosimetry, instrumentation, regulations, counting statistics, and nonionizing radiation. Students will develop skills in problem-solving techniques and techniques applicable to the industry. **Prerequisite: Completion of HPHYS 305 with a 2.5 or higher, or instructor permission.**

HPHYS 450

Health Physics Seminar II [RE] • 1.0 Credit

This second seminar in the series is intended to expand knowledge spectrum of topics in contemporary health physics, delivered by field experts, and explore local employment opportunities. **Prerequisite: Acceptance into the Health Physics BAS program at CBC.**

Health Sciences

HSCI 101

Introduction to Healthcare [RE] • 5.0 Credits

This course introduces students in the School of Health Sciences pathway to the healthcare profession and various careers in medicine, nursing, and allied health. Topics include historical and modern contexts of healthcare, healthcare occupations, ethical considerations for healthcare professionals, and an information related to the various health sciences programs offered at Columbia Basin College.

HSCI 102

Medical Office Specialist I [RE] • 5.0 Credits

This course emphasizes effective written, verbal, and non-verbal communication, ensuring optimal patient interactions. Students will learn about patient education, the nuances of medical law and ethics, and the foundational aspects of medical records, including an introduction to electronic medical records. Additional topics include administrative tasks such as appointment scheduling, coordinating outpatient procedures, managing patient referrals, and effectively utilizing electronic medical records in a modern healthcare context. **Prerequisite: Students must be accepted into CBC's Medical Office Specialist program prior to enrolling.**

HSCI 103

Medical Office Specialist II [RE] • 4.0 Credits

Building on foundational knowledge of the medical office environment, this course delves deeper into the intricacies of medical office operations. Students will explore the basics of medical coding and billing, gaining insight into the reimbursement process. In tandem, the course introduces essential computer skills and familiarizes students with the Microsoft Office Suite, emphasizing practical applications in a medical office setting. To ensure a holistic approach to career preparedness, students are also equipped with job-seeking strategies tailored to healthcare administration. **Prerequisite: Completion of MA 140 or HSCI 102 with a minimum grade of 2.0 and acceptance into CBC's Medical Office Specialist program.**

HSCI 122

Medical Office Specialist Clinical [RE] • 5.0 Credits

Formerly HSCI 122, MRHI 195

Courses

An immersive clinical experience, HSCI 122 offers students a hands-on opportunity to apply their academic knowledge within real-world medical office settings. With 165 contact hours, students will engage directly with healthcare professionals and patients, gaining invaluable insights and skills in day-to-day operations, patient interactions, and administrative responsibilities. Whether in a medical office or a related healthcare facility, this clinical placement ensures students are well-prepared for their roles as medical office specialists, merging theory with practice. **Prerequisite: Completion of MA 140 or HSCI 102 with a minimum grade of 2.0 and acceptance into CBC's Medical Office Specialist program.**

HSCI 147

Medical Terminology [RE] • 5.0 Credits

Formerly AOT 147, HIT 147, HSCI 147

Provides a basic background of medical terminology for the medical office. Major topics to be studied are: cells and oncology, tissues and the integumentary system, skeletal system, muscular system, nervous system, special senses, glands, cardiovascular system; blood and lymphatic-immune systems, respiratory system; digestive system; urinary system, reproductive system, pregnancy and human development; general diseases, lab tests, diagnoses, surgery, pharmacology, and therapy. Emphasis is placed on identifying and labeling word parts, defining and building medical terms, basic anatomy, and becoming familiar with common diseases of the systems.

HSCI 199

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework.

HSCI 201

Foundations of Addiction & Substance Use Disorders [RE] • 5.0 Credits

This course provides an in-depth exploration of addiction, encompassing its biological, psychological, and social components. Students will delve into the pharmacological effects of various substances, understanding their impact on the brain and behavior. The course also covers theories of addiction, examining how different disciplines approach the concept of addiction, and the various factors that contribute to substance use disorders.

HSCI 202

Treatment Methods and Counseling Techniques [RE] • 5.0 Credits

This course focuses on the diverse treatment methodologies and effective counseling strategies for individuals with substance use disorders. Emphasis is placed on developing practical counseling skills, both for individual and group settings. Students will explore evidence-based treatment methods, learn to tailor interventions to client needs, and gain insights into the dynamics of the therapeutic relationship in addiction treatment.

HSCI 203

Cultural Competence in Substance Use Disorder Counseling [RE] • 5.0 Credits

Addressing the vital role of cultural competence in substance use disorder counseling, this course explores the impact of cultural diversity in treatment settings. Students will learn about effective strategies for working with diverse populations, including an understanding of HIV/AIDS interventions. The course emphasizes the importance of culturally responsive care and the development of skills to work effectively across various cultural contexts.

HSCI 204

Clinical Skills for Substance Use Disorders [RE] • 5.0 Credits

This course is designed to equip students with essential clinical skills for effective substance use disorder evaluation and treatment. Topics include

comprehensive service coordination, advanced clinical documentation techniques, and application of various screening and assessment tools. Students will learn to formulate detailed treatment plans and develop competency in managing complex cases in substance use disorder counseling.

HSCI 205

Professional Ethics and Law in Substance Use Disorder Counseling [RE] • 5.0

Credits

Focusing on the ethical and legal frameworks governing substance use disorder counseling, this course covers the principles of confidentiality, professional responsibilities, and regulatory compliance. Students will engage with case studies to understand the application of ethical codes and legal requirements, preparing them to navigate the complexities of professional practice in this field.

HSCI 206

Psychopathology and Relapse Prevention [RE] • 5.0 Credits

This course covers the intersection of psychopathology with substance use disorders, focusing on common co-occurring mental health conditions and strategies for relapse prevention. Students will learn to apply psychological theories to addiction, design interventions for co-occurring disorders, and develop comprehensive relapse prevention plans tailored to individual needs.

HSCI 207

Case Management and Community Education [RE] • 5.0 Credits

This course offers insights into effective case management practices and the design of community education programs focused on substance use disorders. Students will explore approaches to adolescent-specific treatment needs and coordinate with community resources for comprehensive care. The course emphasizes the development of skills for effective intervention and education strategies to support individuals and communities affected by substance use disorders.

HSCI 293

Current Topics • 1.0–15.0 Credits

This course is an elective credit for on-the-job firefighting training and experience.

HSCI 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

HSCI 301

Foundations of Public Health [RE] • 5.0 Credits

This course presents foundational knowledge of public health, including historical contributions, ethical and moral concepts, organizational structure, and societal, environmental, and behavioral factors that impact health and community health outcomes. **Prerequisite: Acceptance into the Bachelor of Applied Science in Community Health Program.**

HSCI 302

Epidemiology [RE] • 5.0 Credits

This course explores basic concepts of epidemiology within multiple dimensions of healthcare. Topics include population health, disease and prevention, distributions of diseases, and evaluation of public health data. **Prerequisite: Acceptance into the Bachelor of Applied Science in Community Health Program and completion of MATH& 146 with a minimum grade of 2.0.**

Courses

HSCI 303

Healthcare Leadership [RE] • 5.0 Credits

This course examines the leadership characteristics and competencies required to plan and implement effective community health programs and systems that meet the needs of diverse populations of patients, individuals, and stakeholders. **Prerequisite:** Acceptance into the Bachelor of Applied Science in Community Health Program.

HSCI 304

Health Policy [RE] • 5.0 Credits

This course explores health policy and the impact of government on healthcare delivery and access. **Prerequisite:** Acceptance into the Bachelor of Applied Science in Community Health Program.

HSCI 401

Behavioral & Cultural Issues in Public Health [RE] • 5.0 Credits

This course helps students understand and respond to health discrepancies and issues of health access that persist among vulnerable populations. Students will explore cultural and behavioral factors that influence the management and delivery of community health services. **Prerequisite:** Acceptance into the Bachelor of Applied Science in Community Health Program.

HSCI 402

Public Health Education [RE] • 5.0 Credits

This course prepares students to promote health and prevent disease among members of the community through educational efforts and programs that respond to factors influencing the multi-dimensional aspects of health. **Prerequisite:** Acceptance into the Bachelor of Applied Science in Community Health Program.

HSCI 403

Health Systems & Healthcare Delivery [RE] • 5.0 Credits

This course explores the various organizations and patient care settings in which health services are delivered and analyzes related purposes, general function, delivery methods, and legal/ethical issues. **Prerequisite:** Acceptance into the Bachelor of Applied Science in Community Health Program.

HSCI 409

Community Health Capstone [RE] • 5.0 Credits

In this course, students will demonstrate their cumulative knowledge in the community health field by designing and implementing a project with a focus on high-level inquiry. **Prerequisite:** Acceptance into the Bachelor of Applied Science in Community Health Program and instructor permission.

Healthcare Administration

HCAD 303

Human Resource Management in Healthcare [RE] • 5.0 Credits

Formerly AMGT 303, AMGT 420, HCAD 303, HCAD 420
This course examines the evolving role of human resource management and its increasing importance as a driver of organizational performance. Students learn about the broad responsibilities of human resource departments, from ensuring compliance with government regulations and handling compensation & benefits, to managing diversity and organizational culture. The importance of learning the business, resisting isolation, effectively communicating reasons for change, and ensuring alignment with the organization's strategic objectives is explored. Students are also introduced to the growing role of data analysis in HR decision-making. This course is cross-listed with AMGT 303. Students

completing HCAD 303 may not receive graduation credit for AMGT 303. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite:** Completion of BUS& 101 with a 2.0 or better, and acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.

HCAD 401

Legal Issues in Healthcare [RE] • 5.0 Credits

Formerly AMGT 330, AMGT 401, HCAD 330, HCAD 401
This course explores the state and federal laws and regulations that affect management behavior and organizational practices in various organizational settings. Material covered includes torts and crimes, traditional and sales and lease contracts, business organizations, employment law, products liability, labor relations, and professional liability. The course will pay special attention to issues surrounding business start-up and intellectual property. This course is cross-listed with AMGT 401. Students completing HCAD 401 may not receive graduation credit for AMGT 401. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite:** Completion of AMGT 360, BUS& 101, CS 101, ENGL 410 or ENGL 315, and CMST 415, all with a 2.0 or better. Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.

HCAD 402

Healthcare Information & Data Analytics [RE] • 5.0 Credits

Formerly AG 340, AG 402, AMGT 340, AMGT 402, HCAD 315, HCAD 402, NRS 315
This course focuses on the information resource of management and introduces the fundamental concepts of data analytics. The course focuses on data analytic methods in framing and answering strategic questions facing decision makers in a variety of business sectors. The course will introduce theories and methods for analysis and communication of various kinds and types of data. This course will introduce various analytical techniques that are practical and feasible while being relevant and ethically and legally viable. The course promotes proficiency with technology and its essential managerial applications. This course is cross-listed with AG 402, AMGT 402, and NRS 315. Students completing HCAD 402 may not receive graduation credit for AG 402, AMGT 402, or NRS 315. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite:** Completion of AMGT 360, BUS& 101, CS 101, ENGL 410 or ENGL 315, and CMST 415, all with a 2.0 or better. Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.

HCAD 404

Healthcare Operations Management & Evaluation [RE] • 5.0 Credits

Formerly AG 310, AG 404, AMGT 310, AMGT 404, HCAD 310, HCAD 404
This course focuses on the operations level of management within an organization or enterprise. The course highlights the importance of the ongoing daily nature of organizational functionality through areas including capacity planning, inventory management, quality control, and supply chain management. Students are tasked with collaboratively examining an assigned company's operations within their preferred academic and career interests in an empowered student-led process resulting in a comprehensive presentation of information. This course is cross-listed with AG 404 and AMGT 404. Students completing HCAD 404 may not receive graduation credit for AG 404 or AMGT 404. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite:** Completion of AMGT 360, BUS& 101, CS 101, ENGL 410 or ENGL 315, and CMST 415, all with a 2.0 or better. Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.

Courses

HCAD 480

Healthcare Administration Capstone [RE] • 5.0 Credits

Formerly AG 480, AMGT 480, HCAD 480

This course provides the opportunity for students to demonstrate that they have learned the material and concepts from the program and can apply it in the real world. It provides students the opportunity to do a comprehensive analysis of an on-going business or organization and develop a long range, strategic plan including implementation and recommendations for change or to explore the development of a new entrepreneurial venture and measure its feasibility in a comprehensive manner. This course is cross-listed with AG 480 and AMGT 480. Students completing HCAD 480 may not receive graduation credit for AG 480 or AMGT 480. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite: Instructor permission required.**

History

HIST 107

Chicano History [S/B] • 5.0 Credits

Formerly HIS 107, HIST 107

This course is an introduction to the history of peoples of Mexican origin in the United States beginning with the period before the arrival of the Europeans and ending with an examination of contemporary issues such as immigration, acculturation/assimilation, and political representation facing the Chicano community during the contemporary period.

HIST 108

History of Immigration In The U.S. [S/B] • 5.0 Credits

Formerly HIS 108, HIST 108

This course provides an overview of the history of immigration (voluntary and involuntary) in the United States and examines the factors that led people from Europe, Asia, Africa, Latin America, and other parts of the world to migrate to the U.S. The course also examines and compares the experience of the various groups once they are in the United States.

HIST 110

History of Modern East Asia [S/B] • 5.0 Credits

Formerly HIS 110, HIST 110

A history of East Asia. Major emphasis is on the history of China, an analysis of modernization in Japan, and issues of colonialism and nationalism in East Asia.

HIST 111

Colonial Latin America [S/B] • 5.0 Credits

The primary objective of the course is to familiarize students with the major phases in colonial Latin American history, including the conquest of the indigenous people, the imposition of Catholicism, the insertion of Latin America into the world market, the introduction and development of African slavery, independence movements, and the creation of new societies resulting from the mixing of indigenous, Iberian, and African cultures.

HIST 112

Modern Latin America [S/B] • 5.0 Credits

Formerly HIS 112, HIST 112

A survey of the political, social, and economic history of Latin America from the last decades of the nineteenth century to the present.

HIST 113

Mexico Since Independence [S/B] • 5.0 Credits

This course provides students with an overview of the history of modern Mexico from the first movements towards independence at the beginning of the 19th century to the economic, political, and cultural struggles which the nation faces at the start of the 21st century.

HIST 115

Intro to Middle East History & Society [S/B] • 5.0 Credits

Formerly HIS 115, HIST 115, SOC 115

This course will introduce students to the sociology and history of the Middle East as one of the most diverse regions in the world. Specifically, it examines the historical development as well as the current transformation of social, cultural, economic, and political systems of Middle Eastern societies. Topics will be examined using a macro-sociological approach which analyzes both their internal dynamics and their role and place in the world. **Prerequisite: This course is cross-listed with SOC 115. Students completing HIST 115 may not receive graduation credit for SOC 115.**

HIST& 126

World Civilizations I [H] • 5.0 Credits

Formerly HIS 101, HIST& 126

A study of world civilizations from their origins through late antiquity. Emphasis is placed upon Western, East Asian, and South Asian civilizations. Philosophies, religions, and political and social systems are covered.

HIST& 127

World Civilizations II [H] • 5.0 Credits

Formerly HIS 102, HIST& 127

The development of world civilizations from the end of the classical age to the beginning of the modern. Political, social, economic, and cultural development are covered with emphasis upon Europe, Asia, and Africa.

HIST& 128

World Civilizations III [H] • 5.0 Credits

Formerly HIS 103, HIST& 128

An examination of the major civilizations of the world from the birth of the modern age to the present. Emphasis is on the development of the modern nation-state, international relations, socio-economic developments, and shifting patterns of thought.

HIST& 146

U.S. History I [S/B] • 5.0 Credits

Formerly HIS 104, HIST& 136, HIST& 146

Survey of American history from the colonial period through the Civil War. Emphasis is placed on Native Americans, early colonial development, the American Revolution, the building of the nation, territorial expansion, slavery, and the Civil War.

HIST& 147

U.S. History II [S/B] • 5.0 Credits

Formerly HIS 105, HIST& 137, HIST& 147

Survey of U.S. history from the Civil War through World War II. Emphasis is placed on Reconstruction, industrialization, immigration, American foreign policy, Progressive Reform, the twenties, the Great Depression, the New Deal, and World War II.

HIST& 148

U.S. History III [S/B] • 5.0 Credits

Survey of U.S. History from World War II to the present. Emphasis is placed on the Cold War era, Vietnam, Civil Rights, the liberal consensus, the rise of modern conservatism, minority relations, the 1990s, and post 9-11 American society.

Courses

HIST 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

HIST 212

American Military History from the Colonial Period to the Present [S/B] • 5.0 Credits

This course covers the development of American military policies, organizational patterns, tactics, and weaponry, from beginnings as a seventeenth-century frontier defense force to the global conflicts and military commitments of the twenty-first century. Explores the interaction and tension between need for an effective military force and concept of civilian control of that force as well as the impact of culture and society upon the military and vice versa.

HIST& 214

Pacific Northwest History • 5.0 Credits

Formerly HIS 251, HIST& 214

A general history of the Pacific Northwest with particular emphasis on Washington state. Special emphasis is given to Indian culture, Indian-White relations, settlement, race relations, industrialization, and changes created by WWI and WWII.

HIST& 215

Women in U.S. History [H] • 5.0 Credits

An introductory survey of women in U.S. history from pre-colonial times to the present. This course explores women's experiences, including historical attitudes about women's place in society and the realities of life and work for women. This course also explores how female roles in family, work, politics, and culture have changed over time. Emphasizes the diversity among women in terms of race, ethnicity, class, and sexuality.

Prerequisite: This course is cross-listed with WS 215. Students completing HIST& 215 may not receive graduation credit for WS 215.

HIST 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

Horticulture

HORT 202

Cultivated Plants W/Lab [RE] • 5.0 Credits

The goal of the course is to introduce students to the morphology, anatomy, growth, and development of agronomic and horticultural crops. \$35 science fee.

HORT 203

Crop Growth & Development W/ Lab [RE] • 5.0 Credits

Basic scientific principles of crop growth and development, including external abiotic (light, temperature, water, and nutrients) influences and their interaction with internal influences (genes, proteins, and hormones) from the cellular to the whole plant level. Consideration of how the application of such scientific knowledge has and can lead to crop improvement for efficient and sustainable crop production is emphasized. \$35 science fee.

HORT 235

Greenhouse Production and Management W/ Lab • 3.0 Credits

This course covers the operation and management of greenhouses and other controlled environments used in crop/horticultural production with emphasis on system design and construction, lighting methods and intensity, heating and cooling systems, growing media, plant

nutrition, water quality and irrigation systems. This course also offers basic understanding of greenhouse production of plants, cultural control and practices specific to greenhouse production. \$35 science fee.

HORT 242

Hydroponic Technology w/ Lab [RE] • 4.0 Credits

This hands-on intensive course will introduce students to soilless hydroponic crop production. The course will provide information on key components of hydroponic crop production including plant growth and nutrition, growing systems, and cultural practices. Students will apply concepts to the growth of hydroponic crops in a commercial greenhouse setting. \$35 science fee.

HORT 251

Plant Propagation W/ Lab [RE] • 5.0 Credits

An introduction to the methods of plant propagation including methods of propagating by true seed, bulbs, divisions, layering, cuttings, budding, grafting, and micro-propagation. Emphasis is placed on the basic principles necessary to furnish an adequate understanding for commercial and industrial application. \$35 science fee.

Hospitality

HSP 102

Lodging Operations [RE] • 2.0 Credits

This course offers an overview of hotel room division operations, focusing on key departments such as front office, housekeeping, engineering, night audit, security, revenue management, etc. Students will explore essential procedures, industry technologies, and hotel management software. Students will also learn demand management strategies and techniques for optimizing hotel occupancy and efficiency.

HSP 105

ServeSafe Training and Certification [RE] • 2.0 Credits

This course prepares students for ServSafe certification by providing essential knowledge of food safety and sanitation practices in the food service industry. Topics include foodborne illnesses, personal hygiene, proper food handling, safe storage, temperature control, and cleaning and sanitizing procedures. Upon successful completion of coursework and in-class review, students will be prepared to take the ServSafe Food Manager Certification exam.

HSP 107

Guest Service Professional [RE] • 2.0 Credits

This course is an introduction to the duties and primary functions of a guest service professional to maintain the highest level of service excellence. Successful completion of this course results in a certified guest service professional credential.

HSP 108

Hospitality Internship [RE] • 1.0–6.0 Credits

Students serve an internship with a company that offers the application of classroom learning with on-the-job experiences in the hospitality industry. The student will be placed with an employer where the environment will build on the student's area of career interest and prepare them to be productive employees. Grade is pass/no credit.

HSP 110

Introduction to Hospitality [RE] • 5.0 Credits

This course offers an overview of the hospitality industry, exploring key sectors such as restaurants, beverages, lodging, meeting and event planning, travel, etc. The course also covers the diverse functions of

Courses

hospitality sectors, leading-edge issues, trends, career opportunities, and essential leadership and management skills necessary for success in the field.

HSP 115

Food and Beverage Management [RE] • 5.0 Credits

This course introduces students to the hospitality food service industry, exploring its diverse operations and the essential skills for effective management. Topics include an overview of food and beverage outlets, food service marketing, menu analysis, and pricing strategies. Students will also examine service standard operating procedures, various service styles, food and beverage sourcing, and beverage management and understand the industry's key functions and best practices.

Human Development

HDEV 100

College Success [RE] • 3.0 Credits

Formerly ED 100, EDUC 100, HDEV 100

This course is designed to assist students in learning effective techniques for having a college experience that is successful both academically and personally. Topics include: time management, test-taking, communication skills, learning styles, and campus resources. The development of critical thinking skills are incorporated throughout the course. \$8 LASSI test fee.

HDEV 101

Creating Academic Success [RE] • 4.0 Credits

A mandatory course for all first-quarter students new to college (excluding those in the Running Start, Welding, Automotive, and Short-Term Certificate programs). Designed to help students identify and understand the fundamental characteristics and learning strategies needed to achieve their goals for college and beyond. Students explore the role that personal responsibility, behaviors, and beliefs play in academic and personal achievement. Students utilize campus tools and resources to develop academic plans that support their career and educational goals.

Prerequisite: Below college-level placement into any two of three assessed subject areas: math, reading, and English composition.

HDEV 102

College Connections [RE] • 3.0 Credits

A mandatory class for all new to college first quarter students (Except Running Start, Welding and Automotive students). A seminar exploration of Columbia Basin College, college-level skills, behaviors, and expectations. Designed to empower students with a holistic, strengths-based approach to navigate career and college success. Students develop the skills necessary to perform academic planning and campus navigation.

Prerequisite: College-level placement into any two of three assessed subject areas: math, reading, and English composition. It is also recommended that students have computer skills and the ability to navigate online prior to enrollment.

HDEV 110

Academic CPR [RE] • 1.0 Credit

Academic CPR is a course designed for students who have been dismissed from CBC. This course focuses on providing students with the tools and resources to raise their grades so that they may become academically successful and ultimately meet their educational goals. Some of the topics covered are: learning styles, an examination of personal academic records, time management, study strategies, developing problem-solving skills, self-exploration, career interests, and the creation of an action plan to achieve sound educational goals. Successful completion (i.e. earning a 3.0 grade or higher) in this course allows students in dismissal status to return

to CBC prior to sitting out four quarters and to enroll without a substantial tuition penalty. Permission is required to enroll in this course.

HDEV 120

Career Experience [RE] • 1.0–15.0 Credits

This course focuses on experiential learning to assist students in developing educational and occupational goals. Topics include professionalism, networking strategies, innovative approaches to job seeking, and effective use of online resources in professional development. Students "try on a career" through job shadowing and conduct informational interviews with individuals in occupations that interest them. These real world experiences allow students to develop professionally and generate solid career possibilities that will increase the likelihood of making satisfying occupational choices. \$120 student success fee.

HDEV 124

Dependable Strengths [RE] • 1.0–15.0 Credits

Discover core strengths to increase confidence and employability using the Dependable Strengths Articulation Process (DSAP). Students plan for a successful future by identifying core strengths from past experiences that aid in overall life and career satisfaction. Students explore the connection between their strengths and career choice. Topics include highly effective approaches to well-being and resiliency and more.

HDEV 128

Maximizing Choices [RE] • 1.0–15.0 Credits

Introduces effective decision making and goal setting models as they pertain to choosing a college major, a career, and other key life decisions. Students practice using these models in various decisions, from every day ones, to those that will lay the foundation for determining their educational, career, and life goals.

HDEV 135

College Major/Career Planning [RE] • 3.0 Credits

Formerly ED 135, EDUC 135, HDEV 135

This course is designed to assist students in gaining insight into interests, values, personality, strengths, and the decision-making processes necessary for choosing a college major and planning a career. This course is for those who are choosing, changing, or confirming their educational goals. Topics include growing career opportunities, job hunting techniques, goal-setting, and tools for success. \$28 per quarter HDEV testing fee.

HDEV 199

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework.

Human Geography

GEOG& 200

Human Geography [S/B] • 5.0 Credits

An introduction to the use of human geography as a framework with which to critically analyze and understand the world, both on a micro and macro level. CBC's course in human cultural geography provides an introduction to the ways in which human groups think about, arrange, and modify their physical habitats. This geographic knowledge is a basic means to understanding one's own world and the worlds of others.

Courses

Industrial Drawing

DRW 106

Mechanical Drawing for Vocational Application [RE] • 3.0 Credits

A basic course in the technique of sketching and drawing. Welding students learn to create orthographic, oblique, and isometric renderings. This course also teaches dimensioning for the welding shop fabrication drawings. **Prerequisite:** Acceptance into the Welding Technology program.

Industrial Hygiene Technology

IHT 100

Osha-10 [RE] • 1.0 Credit

Provides the Occupational Safety and Health Administration (OSHA) 10-hour safety awareness training certification. \$100 OSHA-10 lab fee.

Industrial Technology

INT 101

Forklift Operations [RE] • 1.0 Credit

This course provides training and preparation for powered forklift and pallet jack equipment operation in warehouse and industrial settings.

INT 103

Basic HVAC [RE] • 3.0 Credits

This course provides a basic understanding of the installation, operation, service, maintenance, and troubleshooting of various types of heating, ventilation, air conditioning, and refrigeration systems. Instructor permission is required to enroll.

INT 105

Precision Measurement [RE] • 1.0 Credit

This course provides knowledge and skills for using tapes, rules, and calipers including various features, sizes, variations, and the technology behind the tool.

INT 130

Logistics Technician [RE] • 6.0 Credits

This course provides an overview of the world of supply chain logistics and good workplace habits in the context of the industry, including global supply chain life cycle, logistics environment, material handling equipment and safety, safety principles, quality control teamwork, communication, and using computers. \$406 Logistics Technician lab fee.

Instrumentation and Control

IC 201

Instrumentation I [RE] • 5.0 Credits

The first of three courses focused on the in-depth knowledge required for specific jobs tailored to the instrumentation and control maintenance discipline. It builds upon the general and system component knowledge gained in the first level of the program. Both generic and plant specific equipment are included in the instruction. **Prerequisite:** Completion of ELT 154 with a 2.0 or better, or concurrent enrollment, or instructor permission.

IC 202

Instrumentation II [RE] • 5.0 Credits

The second of three courses focused on the in-depth knowledge and skills needed to maintain instrumentation in a nuclear power plant. Includes training on specific components of the power plant. **Prerequisite:** Completion of ELT 154 and IC 201 with a 2.0 or better, or instructor permission.

IC 203

Instrumentation III [RE] • 5.0 Credits

The third of three courses focused on the in-depth knowledge and skills needed to maintain instrumentation in a nuclear power plant. Includes training on specific components of the power plant. **Prerequisite:** Completion of IC 202 with a 2.0 or better, or instructor permission.

IC 230

PLC Programming & Computer Interfacing [RE] • 5.0 Credits

Designed to prepare the instrumentation maintenance technician to program, trouble shoot, and maintain Programmable Logic Controllers (PLCs) and computer interfaces associated with the nuclear power plant. **Prerequisite:** Completion of ELT 171 with a 0.7 or higher.

IC 250

Instrumentation & Control for Operators [RE] • 5.0 Credits

Basic introduction to instrumentation and control processes for operators. Topics include basic control circuits, pneumatic devices, sensors, and hydraulic controls. **Prerequisite:** Completion of NT 111 with a 0.7 or higher, and either ELT 111 or ELT 124 with a 0.7 or higher.

IC 260

Process Instrumentation [RE] • 5.0 Credits

Topics build upon basic instrumentation knowledge and skills in previous course. Focus is on developing the knowledge and skills related to valve operations and components associated with strainers and filters. **Prerequisite:** Completion of IC 250 with a 0.7 or higher.

Intercultural Studies

ICS 100

Cultural and Historical Linked to Travel • 1.0–3.0 Credits

An introduction to the history, culture, geography, art, and language of a country or countries, to be followed by a required trip to the area studied for an immersion experience.

ICS 120

Survey of Hispanic Culture [H] • 5.0 Credits

An introduction to the culture and civilization of the Spanish-speaking world; taught in English.

ICS 125

Native American Culture [H] • 5.0 Credits

Formerly HIST& 219, ICS 125

An introduction to the history and culture of Native American peoples. The situation of Native Americans in contemporary society is also discussed with particular focus on issues of tribal sovereignty.

ICS 130

Survey of Asian American Culture [H] • 5.0 Credits

An introduction to the history and people of Asian descent in the United States. This class covers the ethnic, national, cultural, and religious diversity of Americans who trace their culture and/or origins to Asia as well as the immigration and acculturation of members of these populations.

Courses

ICS 135

Survey of African American Cultures [H] • 5.0 Credits

Formerly HIS 106, HIST& 220, ICS 135

An introduction to the history of African Americans in the United States beginning with a study of the ancestors in Africa and ending with a discussion of the issue facing the African American community today.

ICS 199

Special Studies • 1.0–5.0 Credits

A class used to explore new coursework.

ICS 200

Intercultural Leadership [H] • 5.0 Credits

This class is ultimately a journey into self-discovery. It utilizes elements of poetry, personal narrative and reflective writing to help students discover their personal story and in time their voice. It does so with the purpose of fostering human connection and enhancing student engagement and leadership skills. By incorporating elements of leadership, personal expression, and vulnerability students will have opportunities to see themselves more clearly in their educational journeys. Not staking a claim, but rather claiming a stake in remembering, reliving, and retelling their lives and histories.

ICS 220

Globalization [S/B] • 5.0 Credits

Formerly ICS 220, SOC 220

Sociological analysis of the global interconnectedness of things, people, and ideas. Topics include economic development and trade, immigration and citizenship, human rights, transmission of culture and knowledge, and new technologies including the internet. Emphasis on understanding the significance of social forces and inequalities in shaping globalization processes. **Prerequisite: This course is cross-listed with SOC 220. Students completing ICS 220 may not receive graduation credit for SOC 220.**

ICS 222

Columbia Basin Cultures [H] • 5.0 Credits

A study of the history and contemporary situation of the Columbia Basin with special attention paid to Native Americans, Hispanic Americans, Asian Americans, and African Americans. Important topics include early settlement, labor relations, race relations, and historic and modern patterns of migration.

ICS 255

Race and Ethnic Relations [S/B] • 5.0 Credits

Relationships among various ethnic and racial groups in America, patterns of immigration, assimilation and mobility, and inter-ethnic conflicts and coalitions are examined. Although the perspective is historical, contemporary data is used to explore the question of the persisting impact of ethnicity. Special attention is paid to the relationship between ethnicity and social class.

ICS 299

Special Studies • 1.0–5.0 Credits

A class used to explore new coursework.

ICS 310

American Diversity [H] • 5.0 Credits

This course examines race, ethnicity, class, gender, disability, sexuality, and other forms of diversity, with the goal of understanding how diversity is changing the contours of American society and reshaping the American workplace. Students explore diversity with an aim towards applying that knowledge to workplace and social relationships in our pluralistic society.

By the end of the course, students will have a greater understanding of the diverse context of American society and will be conversant in the ongoing debates regarding race, class, gender, disability, and sexuality in our society today. Finally, students will become aware of their own cultural assumptions, perspectives, and habits so that they might engage respectfully with others who do not share their opinions, viewpoints, and cultural worldview. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

ICS 320

Culture and Health [H] • 5.0 Credits

This course examines race, ethnicity, class, gender, disability, sexuality, and other forms of diversity, with the goal of understanding how these factors can affect health and the delivery of health care to members of a pluralistic society. Students will explore this diversity with an aim towards applying the knowledge to the health care workplace and other social interactions. By the end of the course, students will have a greater understanding of the diverse context of American society and will be able to apply these concepts when interacting with their diverse patients and clients. Finally, students will become aware of their own cultural assumptions, perspectives, and habits so that they might engage respectfully with others who do not share their opinions, viewpoints, and cultural worldview. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

Japanese

JAPN& 121

Japanese I [H] • 5.0 Credits

Formerly JAPN& 121, JPSE 101

Introduction to the Japanese language including speaking and listening skills, reading, writing, and grammar, and the Japanese culture including geography, customs, daily life, and heritage. Designed for the novice learner of Japanese, with little or no proficiency in the Japanese language. It is recommended that students complete at least ENGL 99 prior to enrollment.

JAPN& 122

Japanese II [H] • 5.0 Credits

Formerly JAPN& 122, JPSE 102

Introduction to the Japanese language including speaking and listening skills, reading, writing, and grammar, and the Japanese culture including geography, customs, daily life, and heritage. **Prerequisite: Completion of JAPN& 121 with a 0.7 or higher, or instructor permission.**

JAPN& 123

Japanese III [H] • 5.0 Credits

Formerly JAPN& 123, JPSE 103

Introduction to the Japanese language including speaking and listening skills, reading, writing, and grammar, and the Japanese culture including geography, customs, daily life, and heritage. **Prerequisite: Completion of JAPN& 122 with a 0.7 or higher, or instructor permission.**

JAPN& 221

Japanese IV [H] • 5.0 Credits

Formerly JAPN& 221, JPSE 201

Extensive practice in all four language skills (reading, writing, speaking, and listening). This course includes cultural readings and includes an in-depth review of basic Japanese grammar, expansion of basic vocabulary, and a broadening of students' understanding of Japanese culture.

Courses

(including geography, customs, daily life, and heritage). **Prerequisite:** Completion of JAPN& 123 with a 0.7 or higher, or instructor permission.

JAPN& 222

Japanese V [H] • 5.0 Credits

Formerly JAPN& 222, JPSE 202

Extensive practice in all four language skills (reading, writing, speaking, and listening). This course includes cultural readings and in-depth review of basic Japanese grammar, expansion of basic vocabulary, and a broadening of students understanding of Japanese culture.

Prerequisite: Completion of JAPN& 221 with a 0.7 or higher, or instructor permission.

JAPN& 223

Japanese VI [H] • 5.0 Credits

Formerly JAPN& 223, JPSE 203

Extensive practice in all four language skills (reading, writing, speaking, and listening). The course includes cultural readings and in-depth review of basic Japanese grammar, expansion of basic vocabulary, and a broadening of students understanding of Japanese culture.

Prerequisite: Completion of JAPN& 222 with a 0.7 or higher, or instructor permission.

JAPN 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

Logistics & Supply Chain Resilience

LSCR 100

Introduction to Logistics [RE] • 5.0 Credits

This course will cover the function of logistics and its impact on industries and the global economy. It will survey the various modes as well as the risks and challenges of a worldwide logistics enterprise. The course also introduces tools, techniques, and technology employed in logistics.

LSCR 101

Intro to Purchasing and Supply Chain Management [RE] • 5.0 Credits

This course covers the role of Purchasing and Supply Chain Management in the management of goods, services, information, and finance, across the globe from raw material inputs to delivery of products and services to customers and end consumers. The course introduces the integration of operations, logistics, and supply chain management that is critical for competing in the global marketplace.

LSCR 150

Introduction to Supply Chain Resilience [RE] • 5.0 Credits

The course examines common elements identified in disruptions to the supply chain, typical responses, and the importance of maintaining a resilient supply chain in a global economy. The course covers topics such as capability to respond, agility and adaptation, and developing a recovery plan. **Prerequisite:** Completion of LSCR 100 and LSCR 101 with a 1.0 or better.

LSCR 220

Supply Chain Analytics [RE] • 5.0 Credits

This course explores the concepts, principles and analysis used to plan, organize, and manage the supply chain and logistics. Important analytical analysis methods used in the supply chain are covered including data visualization, demand forecasting and planning resource, allocation simulations, outsourcing analysis, inventory control models,

transportation, and network optimization. **Prerequisite:** Completion of LSCR 100 and LSCR 101 with a 1.0 or better.

LSCR 230

Contract Management [RE] • 5.0 Credits

This course covers the contract management process through the different phases of Pre-Award, Award, and Post-Award. The class will explore policies, common practices, techniques in negotiation, the roles and responsibilities of the contract manager, and the importance of contract management in the context of supply chain and logistics.

LSCR 240

Enterprise Resource Planning Systems [RE] • 5.0 Credits

Examines multiple systems common to the business enterprise and their application in supply chain and logistics. Topics include enterprise integration of processes and data, inventory management, master scheduling, and material and capacity planning. **Prerequisite:** Completion of LSCR 101 with a 1.0 or better.

LSCR 250

Advanced Supply Chain Resilience [RE] • 5.0 Credits

This course explores more advanced techniques in supply chain resilience such as continuous improvement models, cybersecurity, crisis response, natural disaster and pandemic planning, physical security, and navigating the political environment. The course explores the importance of partnerships, supplier development, capacity planning and forecasting, multi-sourcing, nearshoring, and supplier diversity. **Prerequisite:** Completion of LSCR 100, LSCR 101, and LSCR 150 with a 1.0 or better.

LSCR 260

Contemporary Topics in Global Supply Chain Management [RE] • 5.0 Credits

The course covers recent trends, challenges, methods, policies, and the importance of importing and exporting to the global economy. This course introduces the idea of international trade which impacts logistics and supply chain management. **Prerequisite:** Completion of LSCR 100 and LSCR 101 with a 1.0 or better.

LSCR 280

Logistics and Supply Chain Resilience Capstone [RE] • 5.0 Credits

Analyze data and case studies and resolve issues presented in supply chain management cases, specifically related to supply chain risk management, and logistics problems, and develop a reaction plan.

Prerequisite: Completion of LSCR 100, LSCR 101, LSCR 150, LSCR 220, LSCR 230, LSCR 240, LSCR 250, and LSCR 260, all with a 1.0 or better.

Maintenance

MNT 110

Fundamentals of Maintenance [RE] • 7.0 Credits

Formerly AGET 110, MNT 110

Introduces skills and knowledge required by all service technicians including: precision measurement, environmental and safety regulation compliance; safety and personal protection equipment, fastener identification; hand and power tool identification, use and safety; lifting and blocking, torque wrench use; tapping, threading and thread inserts. Students demonstrate the ability to follow written instruction, complete business forms, and perform basic math skills. Includes a review of the student rights and responsibilities. \$11.40 lab fee. **Prerequisite:** Completion of RDG 99 and ENGL 99 both with a 0.7 or better, and either MATH 50 with a 2.0 or better or a grade of 0.7 or better in a higher math class, or appropriate placement.

Courses

MNT 111

Intro to Machine Operations [RE] • 7.0 Credits

Formerly MNT 111, MOP 111

This course is designed to give students skills using measuring instruments and the concepts of machining with a metal lathe.

MNT 210

Hydraulic and Pneumatic Systems • 7.0 Credits

Formerly AGET 210, MNT 210

This course is designed to teach the systems operation and the testing, adjusting, maintenance, and repair procedures for pneumatic and hydraulic systems including load sensing pressure compensated systems, electro-hydraulic systems, and hydrostatic systems. Students identify system components and discuss their operation and application. Students identify different systems, trace the flow through the systems, and state the systems operation and application. Students use onboard diagnostic systems, T adapter kits, digital volt/ohm meters, flow meters, pressure gauges, and manufacturer specific tools to diagnose hydraulic and pneumatic system malfunctions. \$11.40 lab fee.

Manufacturing Technology

MT 102

Solidworks(R) I [RE] • 4.0 Credits

This course is an introduction to SolidWorks(R) design software. The intent is to guide students through the software so they develop an understanding of how parts are designed as well as the concepts of blueprint construction/reading. The principles of geometric construction and constraints such as perpendicularity, concentricity, and parallelism are stressed so students are able to understand the workings of a precision model. \$25 Solidworks fee. \$11.40 lab fee. **Prerequisite: Completion of BPR 105 with a 2.0 or higher, or instructor permission.**

MT 111

Introduction to Manual Machining [RE] • 4.0 Credits

This course is designed to give students skills in using measuring instruments and concepts of machining with a metal lathe. Upon completion of this course, students should know how to turn and measure diameters within .001", cut threads, knurl, and cut tapers. \$7 per credit machine shop fee. **Prerequisite: Acceptance into the Manufacturing Technology program.**

MT 112

Introduction to Manual Machining Lab [RE] • 1.0–7.0 Credits

Formerly MT 112

Work on projects using the lathe to practice the concepts taught in the class. \$7 per credit machine shop fee. \$11.40 lab fee. **Prerequisite: Acceptance into the Manufacturing Technology program.**

MT 121

Intermediate Manual Machining Techniques [RE] • 4.0 Credits

This course is designed to build skills and knowledge on vertical and horizontal milling machine. Upon completion, students should be able to set up a milling machine to cut features with a tolerance of .001". \$7 per credit machine shop fee. **Prerequisite: Completion of BPR 105, MT 111, and MT 112, all with a 2.0 or higher, or instructor permission.**

MT 122

Intermediate Manual Machining Techniques Lab [RE] • 1.0–7.0 Credits

Formerly MT 122, MT 132

Work on projects using the lathe and milling machine to practice the concepts taught in class. \$7 per credit machine shop fee. \$11.40 lab fee.

Prerequisite: Completion of BPR 105, MT 111, and MT 112, all with a 2.0 or higher, or instructor permission.

MT 131

Advanced Manual Machining [RE] • 4.0 Credits

This course is designed to allow students to learn about job planning, scheduling, and estimating parts as well as producing a product suggested by the instructor. \$7 per credit machine shop fee. **Prerequisite: Completion of MT 102, MT 121, and MT 122, all with a 2.0 or better, or instructor permission.**

MT 132

Advanced Manual Machining Lab [RE] • 1.0–7.0 Credits

Formerly MT 122, MT 132

Work on projects using the lathe and milling machine to practice the concepts taught in class. \$7 per credit machine shop fee. \$11.40 lab fee. **Prerequisite: Completion of MT 102, MT 121, and MT 122, all with a 2.0 or better, or instructor permission.**

MT 193

Independent Study [RE] • 1.0–15.0 Credits

A class used to explore new coursework or for a specific topic of special interest. \$7 per credit machine shop fee. Grade is pass/no credit.

Prerequisite: Acceptance into the Manufacturing Technology program.

MT 202

Solidworks(R) II [RE] • 4.0 Credits

This course prepares students to take the Certified SolidWorks(R) Associate Exam. \$25 Solidworks fee. **Prerequisite: Completion of MT 102 with a 2.0 or higher, or instructor permission.**

MT 211

Introduction to CNC Machining [RE] • 4.0 Credits

This course is designed to build skills and knowledge in Computer Numerical Controlled (CNC) milling. Upon completion of this course, students should be able to program, set up, and operate a CNC milling machine. \$7 per credit machine shop fee. **Prerequisite: Acceptance into the Manufacturing Technology program.**

MT 212

Introduction to CNC Machining Lab [RE] • 1.0–7.0 Credits

Formerly MT 212

Work on projects using the lathe and milling machine to practice the concepts taught in class. \$7 per credit machine shop fee. \$11.40 lab fee. **Prerequisite: Acceptance into the Manufacturing Technology program.**

MT 221

Intermediate CNC Machining and Programming [RE] • 4.0 Credits

This course is designed to build skill and knowledge in CNC. Upon completion of this course, students should be able to program, set up, and operate CNC equipment. \$7 per credit machine shop fee. **Prerequisite: Completion of MT 211 and MT 212 with a 2.0 or higher, or instructor permission.**

MT 222

Intermediate CNC Machining and Programming Lab [RE] • 1.0–7.0 Credits

Formerly MT 222

Work on projects using the CNC to practice the concepts taught in class. \$7 per credit machine shop fee. \$11.40 lab fee. **Prerequisite: Completion of MT 211 and MT 212 with a 2.0 or higher, or instructor permission.**

Courses

MT 231

Advanced CNC Machining Technologies [RE] • 4.0 Credits

This course is designed to build skill and knowledge in Computer Aided Manufacturing (CAM). Upon completion of this course, students should be able to draw a part in a solid modeling software, write a program with the CAM system, and machine the part on a CNC. \$7 per credit machine shop fee. **Prerequisite:** Completion of MT 221 and MT 222 with a 2.0 or higher, or instructor permission.

MT 232

Advanced CNC Machining Technologies Lab [RE] • 1.0–7.0 Credits

Formerly MT 232

Work on projects using SolidWorks(R), CAM system, and CNC milling machine to practice the concepts taught in class. \$7 per credit machine shop fee. \$11.40 lab fee. **Prerequisite:** Completion of MT 221 and MT 222 with a 2.0 or higher, or instructor permission.

Mathematics

MATH 50

Quantitative Literacy [RE] • 5.0 Credits

This course is designed to engage students in complex and realistic situations involving the mathematics of quantity, change and relationships, spatial reasoning, geometric investigations, probability and statistics. Intermediate algebra topics include linear and nonlinear models, ratios, proportions, percents and dimensional analysis. Note that this course will not satisfy the intermediate algebra requirement of the University of Washington. \$11.40 math lab fee. \$10 math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite:** A grade of 2.0 or better in MATH 40, or a grade of 0.7 or better in a higher math class, or appropriate placement.

MATH 60

Algebra I [RE] • 5.0 Credits

This course includes linear equations and applications, linear inequalities, compound linear inequalities, absolute value equations and inequalities, graphing linear equations in two variables, slope and intercepts, finding the equation of a line, functions and relations, graphs of basic functions, systems of linear equations in two variables, systems of inequalities in two variables, adding and subtracting polynomials, polynomial multiplication and division. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite:** A grade of 2.5 or better in MATH 40, or a grade of 0.7 or better in a higher math class, or appropriate placement.

MATH 62

Algebra I Supported [RE] • 7.0 Credits

This course includes linear equations and applications, linear inequalities, compound linear inequalities, absolute value equations and inequalities, graphing linear equations in two variables, slope and intercepts, finding the equation of a line, functions and relations, graphs of basic functions, systems of linear equations in two variables, systems of inequalities in two variables, adding and subtracting polynomials, polynomial multiplication and division. Additional two hours per week of the course will provide review for essential prerequisite material. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite:** A grade of 2.0 or better in MATH 40, or a grade of 0.7 or better in a higher math class, or appropriate placement.

MATH 70

Algebra II [RE] • 5.0 Credits

This course includes factoring polynomials and solving polynomial equations, rational expressions, complex fractions, rational equations and inequalities, radical expressions, simplifying expressions with radicals and rational exponents, radical equations and functions, complex numbers, methods for solving quadratic equations and applications, exponential and logarithmic properties and equations. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center.

Prerequisite: A grade of 2.5 or better in MATH 60 or 62, or a grade of 0.7 or better in a higher math class, or appropriate placement.

MATH 72

Algebra II Supported [RE] • 7.0 Credits

This course includes factoring polynomials and solving polynomial equations, rational expressions, complex fractions, rational equations and inequalities, radical expressions, simplifying expressions with radicals and rational exponents, radical equations and functions, complex numbers, methods for solving quadratic equations and applications, exponential and logarithmic properties and equations. Additional two hours per week of the course will provide review for essential prerequisite material. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite:** A grade of 2.0 or better in MATH 60 or 62, or a grade of 0.7 or better in a higher math class, or appropriate placement.

MATH 100

Algebraic Tools for Vocational Application [RE] • 5.0 Credits

Formerly MATH 100, MTH 100

Designed to introduce the student to the tools and concepts necessary to solve mathematical problems applicable to the student's trade. Topics include ratios and proportions, percentages, measurement, applying formulas, basic algebra concepts, geometry, and basic triangle trigonometry. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite:** Acceptance into CBC's Automotive, Welding Technology, or Manufacturing Technology program, or instructor permission.

MATH 106

Business Mathematics [RE] • 5.0 Credits

Formerly MATH 106, MTH 106

Mathematical concepts used in business such as interest, annuities, mortgages, investments, and taxes. Required by some majors for the AAS degree; does not satisfy math requirement for AA degree. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite:** A grade of 2.0 or better in MATH 50, or a grade of 0.7 or better in a higher math class, or appropriate placement.

MATH& 107

Math In Society [M/S] [Q/SR] • 5.0 Credits

Formerly MATH& 107, MTH 110, MTH 130

This course is designed for students who have successfully completed intermediate algebra coursework. This course will introduce students to mathematical applications in a variety of disciplines and will satisfy the quantitative/symbolic reasoning requirement for the AA degree. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite:** A grade of 2.0 or better in MATH 50, 70,

Courses

or 72, or a grade of 0.7 or better in MATH 106 or a higher math class (except MATH 108), or appropriate placement.

MATH 108

Math for Early Childhood Education [RE] • 5.0 Credits

Formerly MATH 108, MTH 108

An elementary introduction to problem-solving, fractions and decimals, probability and statistics, geometry and measurement, and functions and graphs. Intended for early childhood and para education majors only. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: A grade of 2.0 or better in MATH 40, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

MATH 113

Geometry/Trigonometry [M/S] • 5.0 Credits

Formerly MATH 113, MTH 103, MTH 113

Areas and volumes of basic geometric figures, approximations, ratio and proportions, literal equations, scientific notation, vectors, logarithms, complex numbers, trigonometric functions, and graphs of trigonometric functions. Recommended for students intending to take PHYS& 114. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: A grade of 2.0 or better in MATH 70 or 72, or a grade of 0.7 or better in a higher math class (excluding MATH 100, MATH& 107 and MATH& 146), or appropriate placement.**

MATH& 141

Precalculus I [M/S] [Q/SR] • 5.0 Credits

Formerly MATH& 141, MTH 104, MTH 154

Designed to prepare students for entry into basic calculus. Precalculus I together with Precalculus II is designed to prepare students for entry into the calculus sequence: MATH& 151, MATH& 152, MATH& 153, and MATH& 254. The topics include: absolute value, complex numbers, linear and quadratic equations, rational, polynomial, exponential and logarithmic functions, inverse functions, theory of equations, and sequences and series. Students completing MATH& 141 may not receive graduation credit for MATH& 144. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: A grade of 2.0 or better in MATH 70 or 72, or a grade of 0.7 or better in a higher math class (excluding MATH 100, MATH& 107 and MATH& 146), or appropriate placement.**

MATH& 142

Precalculus II [M/S] [Q/SR] • 5.0 Credits

Formerly MATH& 142, MTH 105, MTH 155

Precalculus II is the second quarter of the precalculus sequence. Precalculus II is predominantly trigonometry. The topics include trigonometric functions and their inverses, solving triangles, circular functions, identities, conditional equations, complex numbers in polar form, conic sections, parametric and polar equations, systems of equations, matrices and determinants, and vectors. Students completing MATH& 142 may not receive graduation credit for MATH& 144. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: Completion of MATH& 141 with a 2.0 or better, or a higher math course with a 0.7 or better, or appropriate placement.**

MATH& 144

Precalculus I & II [M/S] [Q/SR] • 5.0 Credits

Formerly MATH& 144, MTH 107, MTH 157

Precalculus I & II is a condensed, accelerated combination of Precalculus I and Precalculus II. Selected topics from Precalculus I and Precalculus II are covered in one quarter, allowing the better prepared student to complete the precalculus preparation in one quarter rather than two. The topics include polynomial, rational, logarithmic, and circular functions. Also, analytic geometry, complex numbers, vectors, and sequences and series. Students completing MATH& 144 may not receive graduation credit for MATH& 141 and/or MATH& 142. \$11.40 Math lab fee.

MATH& 146

Introduction to Stats [M/S] [Q/SR] • 5.0 Credits

Formerly MATH& 146, MTH 143

A course especially suited for the non-physical science major such as business, medical professionals, behavioral sciences, computer science, etc. A study of both descriptive and inferential statistics, including: measures of central tendency, random variables, probability, probability distributions, sampling methods, confidence intervals, hypothesis testing, estimation, linear regression, and correlation. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: A grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

MATH 147

Finite Math [M/S] [Q/SR] • 5.0 Credits

Formerly MATH 147, MTH 147, MTH 200

A course especially suited for students in behavioral, managerial, and social sciences. Topics include: matrices, systems of linear equations and inequalities, finance, probability and counting techniques, exponential, and logarithmic functions. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: A grade of 2.0 or better in MATH 70 or 72, or a grade of 0.7 or better in a higher math class (excluding MATH 100, MATH& 107 and MATH& 146), or appropriate placement.**

MATH& 148

Business Calculus [M/S] [Q/SR] • 5.0 Credits

Formerly MATH& 148, MTH 210

Designed for non-physical science majors such as business, management, behavioral science, and social science. Topics include: relations, functions, exponential and logarithmic functions, derivatives and their applications, integrals and their applications, and functions of several variables. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: A grade of 2.0 or better in one of the following courses: MATH 70 or MATH 72 or MATH 147, or appropriate placement. It is also recommended that students complete MATH& 141 prior to enrollment.**

MATH& 151

Calculus I [M/S] [Q/SR] • 5.0 Credits

Formerly MATH& 151, MTH 201, MTH 231

The first course in the sequence for students whose major field of study requires a full year of calculus. Topics include: limits of algebraic and trigonometric expressions and exponential and logarithm functions; the derivatives of algebraic, trigonometric functions, and their inverses; exponential and logarithm functions; hyperbolic functions and their inverses; applications of the derivative, and an introduction to

Courses

antiderivatives and the definite and indefinite integral. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: A grade of 2.0 or better in MATH& 142, or appropriate placement.**

MATH& 152

Calculus II [M/S] [Q/SR] • 5.0 Credits

Formerly MATH& 152, MTH 202, MTH 232

A continuation of MATH& 151. Topics include: the fundamental theorem of calculus; techniques of integration; trigonometric integrals and substitution; applications of the definite integral including areas, average values, and volumes; improper integrals; and parametric equations, polar coordinates, arc length, and surface area with polar functions. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: A grade of 2.0 or better in MATH& 151, or a grade of 0.7 or better in a higher math class.**

MATH& 153

Calculus III [M/S] [Q/SR] • 5.0 Credits

Formerly MATH& 153, MTH 203, MTH 233

A continuation of MATH& 152. Topics include: infinite sequences and series; Maclaurin, Taylor, and power series; conic sections, vectors, and the calculus of vector functions in two and three dimensions with applications. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: A grade of 2.0 or better in MATH& 152, or a grade of 0.7 or better in a higher math class.**

MATH& 171

Math for Elementary Education I [M/S] • 5.0 Credits

Formerly MATH 121, MATH& 171, MTH 121, MTH 211

An introduction to problem-solving principles and strategies, sets and logic, numeration systems, properties of the real number system and its subsystems, and applications of mathematics. Primarily for elementary education majors. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: A grade of 2.0 or better in MATH 70 or 72, or a grade of 0.7 or better in a higher math class (excluding MATH 100, MATH& 107 and MATH& 146), or appropriate placement.**

MATH& 172

Math for Elementary Education II [M/S] [Q/SR] • 5.0 Credits

Formerly MATH 122, MATH& 172, MTH 122, MTH 212

An informal approach to the basic ideas of geometry; including construction, congruence and similarity, transformations, symmetry, measurement, and coordinate geometry. This course satisfies the quantitative skills requirement for the AA degree, provided that MATH& 171 (previously MATH 121) has also been successfully completed. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: Completion of MATH& 171 with a 2.0 or better.**

MATH& 173

Math for Elementary Education III [M/S] [Q/SR] • 5.0 Credits

Formerly MATH 123, MATH& 173

An elementary introduction to algebraic reasoning, probability, and statistics. Primarily for elementary education majors. This course satisfies the quantitative skills requirement for the AA degree, provided that MATH& 171 has been successfully completed. \$11.40 Math lab fee.

\$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: Completion of MATH& 171 with a 2.0 or better.**

MATH 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center.

MATH 243

Linear Algebra [M/S] [Q/SR] • 5.0 Credits

Formerly MATH 243, MTH 213, MTH 243

Designed for physical science majors in fields such as mathematics, engineering, and physics. Topics include vectors, matrices and determinants, lines and planes in 3-space, linear systems, vector spaces, linear transformations, eigenvalues, and eigenvectors. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: A grade of 2.0 or better in MATH& 151, or a grade of 0.7 or better in a higher math class.**

MATH 246

Discrete Structures [M/S] [Q/SR] • 5.0 Credits

Formerly MATH 246, MTH 216, MTH 246

An introduction to discrete mathematics, trees, graphs, elementary logic, and combinatorics with applications to computer science. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: Completion of MATH& 141 with a 2.0 or better, or a higher math class with a minimum grade of 0.7. A knowledge of computers, programming, and calculus is beneficial but is not required.**

MATH& 254

Calculus IV [M/S] [Q/SR] • 5.0 Credits

Formerly MATH& 254, MTH 204, MTH 234

An introduction to the calculus applied to functions of two or three variables. Topics include: functions of several variables, partial derivatives, directional derivatives, multiple integration, integration using cylindrical and spherical coordinates, vector fields, line integrals, surfaces and surface integrals, Green's Theorem, Stoke's Theorem, and the Divergence Theorem. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: Completion of MATH& 153 with a 2.0 or better, or a higher math class with a 0.7 or better.**

MATH 255

Differential Equations [M/S] [Q/SR] • 5.0 Credits

Formerly MATH 255, MTH 254

Beginning course in differential equations. Topics include first order methods, linear differential operators, Laplace transforms, series methods, and numerical techniques. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center. **Prerequisite: A grade of 0.7 or better in MATH& 153 or a higher math class, or concurrent enrollment in MATH& 153 or a higher math class.**

MATH 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$11.40 Math lab fee. \$10 Math course fee for supplies and to provide tutoring for students. Students are encouraged to access tutoring at the Academic Success Center.

Courses

Medical Assistant

MA 111

Pharmacology I [RE] • 5.0 Credits

Provides a basic knowledge of pharmacology including the legal ethical issues, the terms and abbreviations, the involvement of governmental agencies, the role of the providers and allied health professional, reading, interpreting and documenting the medication orders; and the effects of medication and common drugs used with each body system including antineoplastics, analgesics, antipyretics, nutritional supplements, and alternative medicines and immunizations. **Prerequisite: Acceptance into the Medical Assistant program at CBC.**

MA 114

Human Body Structure, Function, and Diseases I [RE] • 4.0 Credits

Formerly MA 114, MRHI 114

This is the first of two structure and function classes introducing cellular function, organ systems of the body, the anatomy and physiology of the integumentary, skeletal, muscular, nervous, endocrine systems, and the senses. Common diseases related to each of these body systems is presented as well as pathology and expected medical treatment. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Completion of HSCI 147 with a 0.7 or higher and acceptance into the Medical Assistant program at CBC.**

MA 115

Clinical Procedures Theory I [RE] • 4.0 Credits

This class provides a theoretical foundation in medical asepsis, infection control, vital signs, phlebotomy, cardiopulmonary procedures, colon procedures, introduction to the clinical laboratory, urinalysis, and a theoretical foundation for the gynecological exam, prenatal care, pediatric exams, and office emergencies. **Prerequisite: Completion of MA 111, MA 114, and MA 140, all with a 0.7 or higher. This course to be taken concurrently with MA 116 (lab course).**

MA 116

Clinical Procedures Lab I [RE] • 4.0 Credits

Formerly MA 116

This lab class provides for a practice in basic patient exam techniques, procedures, lab tests, and injections commonly performed in the physician's office or clinic. \$11.40 lab fee. **Prerequisite: Completion of MA 111, MA 114, and MA 140, all with a 0.7 or higher. This course to be taken concurrently with MA 115 (theory course).**

MA 140

Admin. Medical Assistant Office Procedures I [RE] • 5.0 Credits

This course defines the front office roles and responsibilities in a medical office. Major topics covered are a history of the medical assistant profession; written, verbal, and non-verbal communication; patient education; medical law and ethics, the medical record and introduction to the electronic medical record; and performing daily administrative office duties including: appointment scheduling, coordinating outpatient procedures, managing referrals for patients, and utilizing the computer and electronic medical record. \$11.40 lab fee. **Prerequisite: Acceptance into the Medical Assistant program at CBC.**

MA 141

Career Development for Medical Assistants [RE] • 2.0 Credits

This class covers professionalism in a medical office, successful job search, interview techniques, the importance of networking, and how to be successful on the job. **Prerequisite: Completion of MA 115, MA 116, MA 211, and MA 214, all with a 0.7 or higher.**

MA 211

Pharmacology II [RE] • 5.0 Credits

This is the second of two pharmacology classes. This class includes the administration of medication including: safety and quality assurance, enteral, percutaneous, and parenteral routes of medication; measurement, conversions of medications for administration, calculating dosages and solutions, and immunization schedules. **Prerequisite: Completion of MA 111, MA 114, and MA 140, all with a 0.7 or higher.**

MA 214

Human Body Structure, Function, and Diseases II [RE] • 4.0 Credits

Formerly MA 214, MRHI 214

This is the second of two body structure, function, and disease courses and includes: the circulatory system, lymphatic system and immunity, the respiratory system, the digestive system, nutrition and metabolism, the urinary system, fluid and electrolyte balance, acid-base balance, the reproductive system, genetics, growth and development, mental disorders, and disorders and conditions resulting from trauma. Common diseases are presented for each of these body systems as well as pathology and expected medical treatment. **Prerequisite: Completion of MA 111, MA 114, and MA 140, all with a 0.7 or higher.**

MA 215

Clinical Procedures Theory II [RE] • 4.0 Credits

This class provides a theoretical foundation in physical agents to promote tissue healing, radiology, sterilization and disinfection, minor office surgery, eye and ear assessment and procedures, the physical examination, hematology, blood chemistry and serology, and medical microbiology. **Prerequisite: Completion of MA 115, MA 116, MA 211, and MA 214, all with a 0.7 or higher. This course to be taken concurrently with MA 216 (lab course).**

MA 216

Clinical Procedures Lab II [RE] • 4.0 Credits

Formerly MA 216

This class provides for a practice in basic patient exam techniques, procedures, lab tests, and basic sterile techniques commonly performed in the provider's office or clinic. \$11.40 lab fee. **Prerequisite: Completion of MA 115, MA 116, MA 211, and MA 214, all with a 0.7 or higher. This course to be taken concurrently with MA 215 (theory course).**

MA 240

Admin. Medical Assistant Office Procedures II [RE] • 6.0 Credits

This course expands on front office roles and responsibilities of an Administrative Medical Assistant. Major topics covered include: patient account management, medical billing, medical banking services and procedures, management of practice finances, and the use of computers in the medical office including electronic medical record, and safety and emergency practices. **Prerequisite: Completion of MA 115, MA 116, MA 211, and MA 214, all with a 0.7 or higher.**

MA 241

Externship Seminar • 2.0 Credits

This course is to be taken concurrently with the externship for Medical Assistants. The seminar provides current information regarding workplace issues, technologies, and advancements in healthcare pertinent to the externship experience. Students engage in discussions based on their experiential learning opportunities within the externship. Grade is pass/no credit. **Prerequisite: Successful completion of all other Medical Assistant courses with a GPA of 2.0 or better.**

Courses

MA 242

Externship • 6.0 Credits

Formerly MA 242

This class provides an opportunity to apply the theory learned in the classroom setting to a healthcare setting through practical, hands-on experience. \$10.72 per quarter malpractice insurance fee. **Prerequisite:** Successful completion of all other Medical Assistant courses with a GPA of 2.0 or better.

Medical Imaging Technology

IMAGE 225

Mammography [RE] • 4.0 Credits

Preparation for certification by the ARRT in mammography. In addition to didactic education, this course includes laboratory sessions in a mammography department. This course fulfills MQSA requirements of eight hours of digital education in mammography modality while performing mammography exams and 40 hours of Initial Training. Training in breast anatomy, physiology, positioning, compression, quality assurance/quality control techniques, and imaging of patients with breast implants. \$10.72 per quarter malpractice insurance fee. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program or ARRT Certified Radiologic Technologist.

IMAGE 229

Mammography Clinical [RE] • 4.0 Credits

Preparation for certification by the ARRT in mammography. This course includes clinical and laboratory sessions while in a mammography department. Special education in mammographic examinations under the supervision of a qualified mammographer. Training in breast anatomy, physiology, positioning, compression, quality assurance/quality control techniques, and imaging of patients with breast implants. This course requires documented performance of 25 examinations that include eight hours of training in each mammography modality while performing mammography exams. Documentation includes time sheets and competencies to be verified by the student and the clinical site. Students are assigned to a mammography clinical site to complete 132 hours. These hours are required to satisfy clinical competency requirements with MQSA and eligibility with ARRT to sit for the ARRT advanced-level exam in mammography. \$10.72 per quarter malpractice insurance fee. \$25.65 dosimetry badge fee. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program or ARRT Certified Radiologic Technologist.

IMAGE 250

Cross Sectional Anatomy [RE] • 3.0 Credits

Course presents normal human anatomy in various planes using CT and MRI images. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 251

Advanced Sectional Anatomy [RE] • 2.0 Credits

Designed for students having completed a cross-sectional anatomy course. Neuro and vascular anatomy and sectional images of joint and extremity body areas are presented with CT and MRI images.

Prerequisite: Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 265

Body Pathophysiology [RE] • 3.0 Credits

Presents pathologies of the abdomen, chest, and neck with physiological implications pertinent to CT, MR, Interventional, and Cardiac Cath imaging modalities. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 266

Neuropathophysiology [RE] • 3.0 Credits

Presents neurological based pathologies and the related diagnostic/interventional procedures applied in evaluation and treatment of them. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 270

CT Clinical Practicum I [RE] • 3.0 Credits

Provides hands-on experience in the clinical setting. Students perform designated tasks associated with CT scanning and procedures under direct and indirect supervision. Completion of this course prepares the student for entry-level work in a CT department. \$10.72 per quarter malpractice insurance fee. \$25.65 dosimetry badge fee. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 271

MRI Clinical Practicum [RE] • 3.0 Credits

Provides hands-on experience in the clinical setting. Students perform designated tasks associated with MRI scanning and procedures under direct and indirect supervision. \$10.72 per quarter malpractice insurance fee. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 280

CT Instrumentation [RE] • 3.0 Credits

Designed to provide didactic preparation for advanced-level certification exam in CT scanning. Includes information pertaining to the equipment used, clinical application, specific technique applications, patient care, and quality control. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

IMAGE 281

MRI Instrumentation and Procedures [RE] • 3.0 Credits

Presents the physics of magnetization, image production, image weighting, pulse responses, scanning procedures, magnet safety, and the role of the technologist. **Prerequisite:** Currently enrolled in an approved Radiologic Technology program, ARRT Certified Radiologic Technologist, ARRT Certified Radiation Therapist, or NMTCB Certified Nuclear Medicine Technologist.

Courses

Music

MUSC 100

Music Fundamentals • 3.0 Credits

Formerly MUS 100, MUSC 100

Non-major course covering basic concepts of rhythm, melody, keyboards, scales, and harmony.

MUSC& 105

Music Appreciation [H] • 5.0 Credits

Formerly MUS 115, MUSC& 105

The study of musical literature from early times to the present. Emphasis on listening and enjoyment through the use of recordings, attendance at concerts, and films.

MUSC 116

History of Jazz [H] • 5.0 Credits

Formerly MUS 116, MUSC 116

The evolution of jazz and the development of black music in white America. This is an intercultural humanities course. Emphasis on listening and enjoyment through the use of recordings, attendance at concerts, and films.

MUSC 118

Band • 1.0–2.0 Credits

Formerly MUS 118, MUSC 118

Instruction and performance of standard and contemporary wind literature. This course can be repeated for a maximum of six credits which can be applied to an AA degree. \$11.40 lab fee.

MUSC 122

Applied Music • 1.0 Credit

Formerly MUS 122, MUSC 122

Private lessons on wind, percussion, and keyboard instruments. Instruction may be by CBC faculty or by instructors approved by the CBC Music department. There may be additional fees charged by the instructor. These courses are intended for students who are pursuing a degree in music. Instructor permission is required to enroll.

MUSC 123

Applied Music • 1.0 Credit

Formerly MUS 123, MUSC 123

Private vocal lessons. Instruction may be by CBC faculty or by instructors approved by the CBC Music department. There may be additional fees charged by the instructor. These courses are intended for students who are pursuing a degree in music. Instructor permission is required to enroll.

MUSC 124

Applied Music • 1.0 Credit

Formerly MUS 124, MUSC 124

Private lessons on string instruments. Instruction may be by CBC faculty or by instructors approved by the CBC Music department. There may be additional fees charged by the instructor. These courses are intended for students who are pursuing a degree in music. Instructor permission is required to enroll.

MUSC 125

Orchestra • 1.0 Credit

Formerly MUS 125, MUSC 125

Introduction in and performance of standard orchestral literature. This course can be repeated for a maximum of six credits which can be applied to an AA degree. Instructor permission is required to enroll. \$11.40 lab

fee. **Prerequisite:** Orchestra instrument background and instructor permission required to enroll.

MUSC 134

Piano Class • 2.0 Credits

Formerly MUS 134, MUSC 134

Group piano instruction for all students interested in beginning piano. Students may take more than one quarter. \$11.40 lab fee.

MUSC 135

Piano Class • 2.0 Credits

Formerly MUS 135, MUSC 135

Group piano instruction for music majors and minors who cannot meet entrance requirements in piano and for all students interested in beginning piano. \$11.40 lab fee.

MUSC 136

Piano Class • 2.0 Credits

Formerly MUS 136, MUSC 136

Group piano instruction for music majors and minors who cannot meet entrance requirements in piano and for all students interested in beginning piano. \$11.40 lab fee.

MUSC 137

Jazz Band • 1.0–3.0 Credits

Formerly MUS 137, MUSC 137

Study, rehearse, and perform jazz, commercial, and big band literature. Performances required on and off campus. This course can be repeated for a maximum of six credits which can be applied to an AA degree.

Prerequisite: An audition is required to enroll.

MUSC 138

Voice Class • 2.0 Credits

Formerly MUS 141, MUSC 138

An introduction to the principles of voice production, vocal literature, and vocal techniques.

MUSC 139

Voice Ensemble • 1.0–3.0 Credits

Formerly MUS 142, MUSC 139

Emphasis on vocal ensemble literature. May include different types of ensembles/styles according to available voicing.

MUSC 140

Vocal Jazz • 1.0–3.0 Credits

Formerly MUS 140, MUSC 140

Emphasis on swing and vocal jazz concepts within a performance ensemble. Performances required on and off campus. Auditions for this ensemble are held in May and June for the following academic year. Contact instructor for materials. This course can be repeated for a maximum of six credits which can be applied to an AA degree.

Prerequisite: An audition is required to enroll.

MUSC& 141

Music Theory I • 5.0 Credits

Formerly MUS 101, MUSC& 141

Courses must be taken in sequence. The melodic, rhythmic and harmonic elements of music through ear-training, sight singing, writing, analysis, and keyboard work. This course should be taken concurrently with MUSC 171. Some music background is required. Students with no piano background should take MUSC 134 concurrently. Offered fall quarter only.

Courses

MUSC& 142

Music Theory II • 5.0 Credits

Formerly MUS 102, MUSC& 142

Courses must be taken in sequence. The melodic, rhythmic, and harmonic elements of music through ear-training, sight singing, writing, analysis, and keyboard work. Students with no piano background must take MUSC 135 concurrently. Offered winter quarter only. **Prerequisite: Completion of MUSC& 141 with a 0.7 or higher.**

MUSC& 143

Music Theory III • 5.0 Credits

Formerly MUS 103, MUSC& 143

Courses must be taken in sequence. The melodic, rhythmic, and harmonic elements of music through writing, analysis, ear-training, sight singing, and keyboard work. Music background is required. Students with no piano background must take MUSC 136 concurrently. Offered spring quarter only. **Prerequisite: Completion of MUSC& 142 with a 0.7 or higher.**

MUSC 147

Instrument Ensemble • 1.0 Credit

Formerly MUS 147, MUSC 147

The following ensembles will be organized if enrollment warrants: brass ensemble, woodwind ensemble, string ensemble, and mixed instrumental ensemble. A maximum of six elective credits from this course can be applied to an AA degree. Grade is pass/no credit.

MUSC 171

Ear Training Fundamentals • 1.0 Credit

Formerly MUS 171, MUSC 171

This class focuses on developing the skills to correctly identify major and minor scales, intervals, rhythmic patterns, and triads in root position. This class should be taken concurrently with MUSC& 141. Offered fall quarter only.

MUSC 172

Ear Training Fundamentals • 1.0 Credit

Formerly MUS 172, MUSC 172

This class focuses on developing the skills to correctly identify triads in first and second inversion, basic chord progressions, and cadences. This class should be taken concurrently with MUSC& 142. Offered winter quarter only.

MUSC 173

Ear Training Fundamentals • 1.0 Credit

Formerly MUS 173, MUSC 173

This class focuses on developing the skills to correctly identify seventh chords (both in root position and inversion), diatonic chord progression, and simple melodies containing basic non-harmonic tones. This class should be taken concurrently with MUSC& 143. Offered spring quarter only.

MUSC 181

Chorus • 1.0–3.0 Credits

Formerly MUS 181, MUSC 181

Instruction and performance of standard choral literature from a variety of historical periods and cultures. Performances required on and off campus. Open to all students. This course can be repeated for a maximum of six credits which can be applied to an AA degree.

MUSC 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

MUSC 216

Studio Problems - Conducting • 3.0 Credits

Formerly MUSC 216

Individual study for advanced students relating to conducting.

Prerequisite: Instructor permission and successful completion of classes in area of individual study and/or demonstrated proficiency in area of individual study required to enroll.

MUSC 217

Studio Problems - Composition • 3.0 Credits

Formerly MUSC 217

Individual study for advanced students relating to composition.

Prerequisite: Instructor permission and successful completion of classes in area of individual study and/or demonstrated proficiency in area of individual study required to enroll.

MUSC 218

Studio Problems - Performance • 3.0 Credits

Formerly MUSC 218

Individual study for advanced students relating to performance.

Prerequisite: Instructor permission and successful completion of classes in area of individual study and/or demonstrated proficiency in area of individual study required to enroll.

MUSC 225

Applied Music • 2.0 Credits

Formerly MUS 225, MUSC 225

Advanced private vocal lessons. Instruction may be by CBC faculty or by instructors approved by the CBC music department. There may be additional fees charged by the instructor. These courses are intended for students who are pursuing a degree in music. Instructor permission is required to enroll.

MUSC 227

Applied Music • 2.0 Credits

Formerly MUS 227, MUSC 227

Advanced private instrumental lessons. Instruction may be by CBC faculty or by instructors approved by the CBC Music department. There may be additional fees charged by the instructor. These courses are intended for students who are pursuing a degree in music.

MUSC 240

Jazz Theory and Improvisation • 1.0–2.0 Credits

Formerly MUS 240, MUSC 240

A combination of jazz theory and improvisation techniques for the small group setting. The emphasis is on individual solving skills. Performance required at various CBC concerts and jazz festivals.

MUSC& 241

Music Theory IV • 5.0 Credits

Formerly MUS 204, MUSC& 241

Melody harmonization, harmonic dictation, chromatic harmony, advanced modulation, 20th century techniques, and oral composition. Offered fall quarter only. **Prerequisite: Completion of MUSC& 143 with a 0.7 or higher. This course should be taken concurrently with MUSC 274.**

MUSC& 242

Music Theory V • 5.0 Credits

Formerly MUS 205, MUSC& 242

Melody harmonization, harmonic dictation, chromatic harmony, advanced modulation, 20th century techniques, and oral composition. Offered winter quarter only. **Prerequisite: Completion of MUSC& 241 with a 0.7 or higher.**

Courses

MUSC& 243

Music Theory VI • 5.0 Credits

Formerly MUS 206, MUSC& 243

Melody harmonization, harmonic dictation, chromatic harmony, advanced modulation, 20th century techniques, and oral composition. Offered spring quarter only. **Prerequisite:** Completion of MUSC& 242 with a 0.7 or higher.

MUSC 244

Advanced Vocal Jazz • 1.0–3.0 Credits

Formerly MUS 242, MUSC 244

Emphasis on traditional and contemporary vocal jazz concepts in an advanced ensemble situation. Extensive audition required each spring for the following academic year. Performances required on and off campus. Auditions for this ensemble are held in May and June for the following academic year. Contact instructor for materials. This course can be repeated for a maximum of six credits which can be applied to an AA degree. **Prerequisite:** An audition is required to enroll.

MUSC 274

Advanced Ear Training • 1.0 Credit

Formerly MUS 274, MUSC 274

This class focuses on developing the skills to correctly identify chord progressions and melodic dictation, and continued work with ear training concepts. This class should be taken concurrently with MUSC& 241. Offered fall quarter only.

MUSC 275

Advanced Ear Training • 1.0 Credit

Formerly MUS 275, MUSC 275

This class focuses on developing the skills to correctly notate chord progressions using inversions, two-part melodic dictation, and identification of chromatically altered chords. This class should be taken concurrently with MUSC& 242. Offered winter quarter only.

MUSC 276

Advanced Ear Training • 1.0 Credit

Formerly MUS 276, MUSC 276

This class focuses on developing the skills to correctly notate chord progressions using inversions and chromatically altered chords, four-part dictation, and identification of scales, chords, and progressions as used in 20th century techniques. This class should be taken concurrently with MUSC& 243. Offered spring quarter only.

MUSC 281

Advanced Chorus • 1.0–3.0 Credits

Formerly MUS 281, MUSC 281

Instruction and performance of advanced choral literature from a variety of historical periods and cultures. Performances required on and off campus. This course can be repeated for a maximum of six credits which can be applied to an AA degree. Instructor permission is required to enroll.

MUSC 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

Non-Licensed Operator

NOP 111

Hydraulic and Fluid Flows [RE] • 5.0 Credits

Introduction to the basic operations of hydraulic and fluid flows. Focuses on principles associated with lubrication, pumps, manual valves,

valve operators, and components associated with strainers and filters.

Prerequisite: Completion of NT 111 with a 0.7 or higher.

NOP 221

Advanced Operational Systems [RE] • 5.0 Credits

This course provides an introduction to electrical generation and distribution systems with a focus on transformers, motor and control circuits, generators, and the impact of environmental conditions.

Prerequisite: Completion of either ELT 111 or ELT 124 with a 0.7 or higher, and either NT 121 or NT 122 with a 0.7 or higher.

NOP 231

Advanced Facility Components [RE] • 5.0 Credits

This course provides an introduction to steam systems with a focus on steam traps, steam turbines, heat exchangers, and related facility components. **Prerequisite:** Completion of NT 111 with a 0.7 or higher, or instructor permission.

NOP 241

Chemical & Water Treatment Systems [RE] • 5.0 Credits

Introduction to chemical and water treatment systems with a focus on chemical safety and reactions, ion exchange, UV oxidation, and permitting. **Prerequisite:** Completion of CHEM& 140 with a 2.0 or better.

NOP 251

Advanced Thermodynamics and Heat Transfer [RE] • 4.0 Credits

This course provides an introduction to industrial processes and cycles including steam plants, diesel generators, air compressors, and refrigeration cycles. It also covers advanced heat transfer topics including thermal hydraulics. **Prerequisite:** Completion of NT 170 with a 0.7 or higher, or instructor permission.

Nuclear Technology

NT 101

Introduction to Clean Energy [RE] • 5.0 Credits

This course provides an overview of the clean energy sector, particularly highlighting nuclear energy. Students will explore career pathways in diverse fields that connect to the clean energy sector, research local and national initiatives, and explore the foundational principles of clean energy production. The course covers key concepts in power and energy systems, analyzing the benefits and challenges of various clean energy sources, including emerging trends and their environmental impacts. By the end of the course, students will have a good understanding of clean energy, nuclear advancements, and regional and national career opportunities. This course is open to all students, regardless of major.

NT 111

Basic Nuclear Math & Physics [RE] • 5.0 Credits

Introduction to basic nuclear concepts using mathematics and physics; includes concepts of dimensional analysis, algebra, geometry, trigonometry, mechanical principles, simple machines, including definitions, and basic concepts. Industrial and science applications of nuclear processes, and risk/benefit analysis are included. **Prerequisite:** A grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.

NT 114

Introduction to Radiation Safety [RE] • 5.0 Credits

Topics include types of radiation, radioactive decay, activity, radioactive sources, and interaction of radiation with matter, radiation units, and basic fundamentals of exposure, dose, and personnel dose. The course includes

Courses

an opportunity to practice basic radiation protection tasks. **Prerequisite: Students must be accepted into CBC's Nuclear Technology program prior to enrollment.**

NT 121

Reactor Plant Operations [RE] • 4.0 Credits

Introduction to the basics of reactor plant operations. Topics include basic computer operations and knowledge of basic systems associated with a nuclear power plant. **Prerequisite: Students must be accepted into CBC's Nuclear Technology program prior to enrollment.**

NT 122

Basic Nuclear Facilities [RE] • 4.0 Credits

Introduction to tank farms, vitrification, and decommissioning nuclear facilities. **Prerequisite: Students must be accepted into CBC's Nuclear Technology program prior to enrollment.**

NT 131

Nuclear Facility Components [RE] • 4.0 Credits

Introduction to basic mechanical and electrical components used by nuclear power plants such as different types of piping, valves, pumps, ejectors, filters, turbines, heat exchangers, compressors, lubrication systems, valve actuators, breakers, transformers, relays, and other equipment. **Prerequisite: Students must be accepted into CBC's Nuclear Technology program prior to enrollment.**

NT 141

Basic Reactor Safety, Theory, & Operations [RE] • 5.0 Credits

Introduction to the fission process, reactivity/criticality, basic reactor kinetics, heat removal, reactor types, nuclear power plant chemistry, and elementary thermodynamics. In addition, basic radiation worker training is provided in this course. **Prerequisite: A grade of 0.7 or higher in either NT 121 or NT 122.**

NT 142

Basic Nuclear Safety & Environmental Compliance [RE] • 5.0 Credits

An introduction to nuclear facility safety, accident analysis, and environmental regulations and compliance standards. **Prerequisite: A grade of 0.7 or higher in either NT 121 or NT 122.**

NT 150

Internship Seminar • 1.0 Credit

This class focuses on preparation for the internship. Topics include workplace expectations, safety, and communication skills. Evaluation methods for the internship are explained and discussed. Grade is pass/no credit. **Prerequisite: Students must be accepted into CBC's Nuclear Technology program prior to enrollment.**

NT 152

Internship [RE] • 1.0–5.0 Credits

Designed to provide students with major-related, supervised, evaluated practical training work experiences with a company that uses nuclear technicians in radiation protection, nuclear reactor operations, or nuclear reactor maintenance which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting.

NT 154

Industry Project [RE] • 5.0 Credits

This course is designed for students who have yet to obtain an internship in the nuclear industry. As part of the course, students will undertake an industry project in the nuclear field, applying their learned skills and training to become effective employees in the sector. The project

will build upon their nuclear technology studies and deepen their understanding of working in the nuclear industry, enhancing their knowledge and experience. **Prerequisite: Students must be accepted into CBC's Nuclear Technology program prior to enrollment.**

NT 160

Nuclear Chemistry [RE] • 3.0 Credits

Designed to give students a broad understanding of nuclear chemistry. Focuses on basic reactor water chemistry fundamentals, basic material properties, brittle fracture characteristics/mechanisms, and plant material problems. **Prerequisite: Students must be accepted into CBC's Nuclear Technology program prior to enrollment.**

NT 170

Mechanical & Fluid Power Transmission [RE] • 4.0 Credits

Formerly MEC 111, NT 170

Introduction to the concepts of mechanical and fluid power transmission including principles of heat, steam, heat transfer, and fluid flow.

Prerequisite: Completion of NT 111 with a 0.7 or higher.

NT 200

Nuclear Industry Exam Preparation [RE] • 3.0 Credits

This course prepares nuclear technology students for taking multiple industry exams, which may include DOE Core Exam, POSS, or other exams as may be required by industry employers. \$25 NT exam course printing fee. **Prerequisite: Students must be accepted into CBC's Nuclear Technology program prior to enrollment.**

NT 261

Nuclear Facilities Management [RE] • 5.0 Credits

This course provides students with background in managing work functions in nuclear facilities, including compliance with federal and state regulations, quality assurances, and maintenance forms and records. This class should be taken during or after the second year of study in the Nuclear Technology program. Instructor permission is required for enrollment.

Nursing

NRS 101

Basic Pharmacology Math [RE] • 1.0 Credit

Drug dosage calculations. Emphasis is on mathematic computations for various forms of drug administration utilizing metric and household measures. This course must be completed with a 2.0 or better before advancing to NRS 102, 121, and 123. **Prerequisite: Students must be admitted into CBC's Nursing program prior to enrollment.**

NRS 102

Pharmacological Classifications I [RE] • 1.0 Credit

Provides new information as well as supplements, reviews, and reinforces information previously provided on the pharmacology of drugs introduced in Nursing I. Students review drug classifications and pharmacological principles associated with medication administration while relating this information to corresponding patient diagnoses as well as understanding related nursing implications. This course must be completed with a 2.0 or better before advancing to NRS 103, 131, and 133. **Prerequisite: Completion of NRS 101, 111, and 113, all with a 2.0 or better, and concurrent enrollment in NRS 121 and 123.**

Courses

NRS 103

Pharmacological Classifications II [RE] • 1.0 Credit

Provides new information as well as supplements, reviews, and reinforces information previously provided on the pharmacology of drugs introduced in Nursing I and II. Students review drug classifications and pharmacological principles associated with medication administration while relating this information to a corresponding patient diagnoses as well as understanding the related nursing implications. **Prerequisite:** Completion of NRS 102, 121, and 123, all with a 2.0 or better, and concurrent enrollment in NRS 131 and 133.

NRS 111

Nursing I [RE] • 7.0 Credits

This is the first theoretical course in the associate degree nursing curriculum. Theoretical concepts include the fundamentals of nursing care and the introduction of the nursing process. Concepts of health needs across the lifespan; diversity, equity and inclusion; nutrition; ethics and policy; basic pharmacological principles; and beginning professional communication techniques are presented. Emphasis is on quality, safety, health maintenance, professional responsibility, and the organizations that affect the practice of nursing. \$130 Nursing testing fee. **Prerequisite:** Students must be admitted into CBC's Nursing program prior to enrollment.

NRS 113

Nursing I Lab [RE] • 4.0 Credits

Formerly NRS 113

Clinical lab to be taken concurrently with NRS 111. This is the first clinical course in the associate degree curricular sequence. This course provides for the application of theoretical concepts to nursing care for adult patients in the long-term care setting. Students are introduced to basic nursing care practices. Emphasis is on therapeutic communication and application of the nursing process. \$10.72 per quarter malpractice insurance fee. \$21.75 nursing lab fee. **Prerequisite:** Students must be admitted into CBC's Nursing program prior to enrollment.

NRS 121

Nursing II [RE] • 5.0 Credits

This course builds on the theoretical concepts presented in NRS I. Learning experiences are directed toward increasing student knowledge of nursing care of individuals experiencing basic alterations in health. Emphasis is on the introduction of alterations in physical and emotional health throughout the life span. The nursing process is used as a framework for the development of knowledge. Students are introduced to nursing literature. \$130 Nursing testing fee. **Prerequisite:** Completion of NRS 101, 111, and 113, all with a 2.0 or better.

NRS 123

Nursing II Lab [RE] • 5.0 Credits

Formerly NRS 123

Clinical lab to be taken concurrently with NRS 121. This clinical course provides for the application of introductory theoretical concepts to the nursing care of adults and children in the acute care setting. Emphasis is on collaboration with members of the healthcare team and continued application of the nursing process in developing individualized plans of care. Nursing informatics is introduced as a method for documentation and communication. \$10.72 per quarter malpractice insurance fee. \$21.75 nursing lab fee. **Prerequisite:** Completion of NRS 101, 111, and 113, all with a 2.0 or better.

NRS 131

Nursing III [RE] • 5.0 Credits

This course builds on the theoretical concepts from NRS I and II. Learning experiences provide further exploration of physical illness throughout the life span. Emphasis is on alterations in gastrointestinal, cardiac, and fluid balance. Maternal child nursing concepts are introduced. There is a continued emphasis on the use of the nursing process and nursing research to plan, deliver, and evaluate nursing care. Concepts of patient education strategies are introduced through the formation of a patient teaching plan. \$10.72 per quarter malpractice insurance fee. \$130 Nursing testing fee. **Prerequisite:** Completion of NRS 102, 121, and 123, all with a 2.0 or better.

NRS 133

Nursing III Lab [RE] • 5.0 Credits

Formerly NRS 133

Clinical lab to be taken concurrently with NRS 131. This clinical course provides for the application of theoretical concepts to the nursing care of adults, children, and the family unit. Emphasis is on caring for multiple clients in the acute care setting and in health facilities outside the acute care model. There is expanded application of the nursing process to promote adaptation and wellness in developing individualized plans of care. \$10.72 per quarter malpractice insurance fee. \$21.75 nursing lab fee. **Prerequisite:** Completion of NRS 102, 121, and 123, all with a 2.0 or better.

NRS 135

Nursing Trends Lab [RE] • 1.0–2.0 Credits

Formerly NRS 135

A campus laboratory experience designed to allow nursing students to gain proficiency in nursing skills before actual practice in the acute care setting. Students enrolled in the Nursing program register for this pass/fail class quarters 1-3. \$10.72 per quarter malpractice insurance fee. \$21.75 nursing lab fee. Grade is pass/no credit. **Prerequisite:** Students must be admitted into CBC's Nursing program prior to enrollment.

NRS 145

First Year Clinical Elective [RE] • 6.0 Credits

This optional clinical lab course is offered to students desiring to obtain extra clinical experience before starting the second year of the Associate Degree Nursing Program. This course provides for application of theoretical concepts to the nursing care of adults and children in acute care setting. \$10.72 per quarter malpractice insurance fee. Grade is pass/no credit. **Prerequisite:** Completion of NRS 103, 131, and 133, all with a 2.0 or better.

NRS 201

Pharmacological Classifications III [RE] • 1.0 Credit

Provides new information as well as supplements, reviews, and reinforces information previously provided on the pharmacology of drugs introduced in Nursing I, II, and III. Students review selected drug classifications and pharmacological principles associated with medication administration while relating this information to a corresponding patient diagnoses as well as understanding related nursing implications. This course must be completed with a 2.0 or better before advancing to NRS 221/223. **Prerequisite:** Completion of NRS 103 with a 2.0 or better and concurrent enrollment in NRS 211 and 213.

NRS 211

Nursing IV [RE] • 5.0 Credits

This theory course is the first course in the second year of the associate degree curriculum. Learning experiences are directed toward expanding the student's knowledge of nursing care of individuals experiencing

Courses

alterations in health. Emphasis is on application of the nursing process in delivery of care to children and families, clients with mental health problems, and those with respiratory and immunological disorders. Concepts of evaluation of nursing research will be introduced. Continuation in the Nursing program requires a minimum cumulative 2.5 GPA in all nursing courses and a 2.0 or better in all supporting courses. \$130 Nursing testing fee. **Prerequisite: Completion of NRS 103, 131, and 133, all with a 2.0 or better.**

NRS 213

Nursing IV Lab [RE] • 5.0 Credits

Formerly NRS 213

Clinical lab to be taken concurrently with NRS 211. This clinical course provides for application of theoretical concepts to the nursing care of adults and children in acute care and psychiatric settings. Emphasis is on the use of the nursing process to develop individualized plans of care for patients across the lifespan. During the psychiatric nursing rotation, emphasis is on developing interpersonal and therapeutic communication skills and caring for the mentally ill client. \$10.72 per quarter malpractice insurance fee. \$21.75 nursing lab fee. **Prerequisite: Completion of NRS 103, 131, and 133, all with a 2.0 or better.**

NRS 221

Nursing V [RE] • 5.0 Credits

This course builds on the theoretical concepts presented in NRS I, II, III, and IV. Learning experiences are directed toward increasing the student's knowledge of nursing care of individuals experiencing alterations in health. Emphasis is on application of the nursing process in the delivery of care to individuals experiencing complex health issues associated with neurological, cardiac, oncological, and reproductive illnesses. Concepts of advanced leadership, delegation, and research are expanded. \$130 Nursing testing fee. **Prerequisite: Completion of NRS 201, 211, and 213, all with a 2.0 or better.**

NRS 222

Professional Issues I [RE] • 1.0 Credit

One-credit class providing an overview of nursing management and leadership, legal issues in nursing, job search, nursing delivery systems, and role transition issues related to moving from a nursing student to professional nursing practice. **Prerequisite: Concurrent enrollment in NRS 221 and 223 required.**

NRS 223

Nursing V Lab [RE] • 5.0 Credits

Formerly NRS 223

Clinical lab to be taken concurrently with NRS 221. This clinical course provides for application of theoretical concepts to the nursing care of adults and children in acute care and psychiatric settings. Emphasis is on implementing delegation/leadership skills and utilizing the nursing process to develop individualized plans of care for patients across the lifespan. During the psychiatric nursing rotation, emphasis is on developing interpersonal communication. \$10.72 per quarter malpractice insurance fee. \$21.75 nursing lab fee. **Prerequisite: Completion of NRS 201, 211, and 213, all with a 2.0 or better.**

NRS 231

Nursing VI [RE] • 5.0 Credits

This course builds on the theoretical concepts presented in NRS I, II, III, IV, and V. Learning experiences are directed toward increasing the student's knowledge of nursing care of individuals experiencing alterations in health. Emphasis is on application of the nursing process in the delivery of care to individuals experiencing complex health issues including reproductive, high risk maternal/newborn endocrine, and renal

disorders and those requiring emergent care. Concepts of leadership and delegation are reinforced. \$130 Nursing testing fee. **Prerequisite: Completion of NRS 222, 221, and 223, all with a 2.0 or better.**

NRS 232

Professional Issues II [RE] • 2.0 Credits

Two-credit class providing an overview of nursing management and leadership, legal, ethical and professional issues related to nursing practice, and the nurse's role in the changing healthcare environment. Students will explore multiple specialty roles within the nursing profession. **Prerequisite: Completion of NRS 222, 221, and 223, all with a 2.0 or better, and concurrent enrollment in NRS 231 and 233.**

NRS 233

Nursing VI Lab [RE] • 8.0 Credits

Formerly NRS 233

Clinical lab to be taken concurrently with NRS 231. This is the final clinical learning experience of the associate degree curriculum. This course provides for application of theoretical concepts to the care of adults and children in acute care and community settings. A preceptor experience is offered during this quarter. All students are expected to progress towards competence in thinking critically, using the nursing process, performing nursing skills, providing leadership, and delegating care at an associate degree nurse entry level. Students will also participate in various community service events. \$10.72 per quarter malpractice insurance fee. \$21.75 nursing lab fee. **Prerequisite: Completion of NRS 222, 221, and 223, all with a 2.0 or better.**

NRS 235

Nursing Trends Lab [RE] • 1.0 Credit

Formerly NRS 235

A campus laboratory experience designed to allow nursing students to gain proficiency in nursing skills before actual practice in acute care settings. Students enrolled in the Nursing program register for this pass/fail class quarters 4 and 5. \$10.72 per quarter malpractice insurance fee. \$21.75 nursing lab fee. Grade is pass/no credit. **Prerequisite: Students must be admitted into CBC's Nursing program prior to enrollment.**

NRS 299

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework.

NRS 301

Nursing Roles, Dimensions, and Perspectives [RE] • 3.0 Credits

Facilitates the transition of Registered Nurses with an Associate degree in Nursing to the role of a BSN graduate. Introduces students to the philosophy, theory, and roles of the professional nurse in the context of contemporary and future professional nursing practice. Analysis of social, economic, and policy issues affecting the practice of professional nursing with emphasis on strategies for advancing the profession. **Prerequisite: Students must be accepted into CBC's RN to BSN program prior to enrollment.**

NRS 305

Pharmacology [RE] • 4.0 Credits

Building on the pharmacological foundation presented at the LPN level, students review drug classifications and pharmacological principles associated with medication administration. Emphasis is placed on relating this information to corresponding patient diagnoses and understanding related nursing implications. Includes review of drug dosage calculations with emphasis on mathematic computations for various forms of drug administration utilizing metric and household measures. \$130 Nursing

Courses

testing fee. **Prerequisite: Students must be accepted into the LPN to BSN program at CBC prior to enrollment.**

NRS 310

The RN's Role in Holistic Health Assessment and Care [RE] • 3.0 Credits

Building on previous LPN education and practice, this course focuses on the expanded role and responsibilities of the Registered Nurse in the assessment of health and the delivery of care. Students will examine health from different perspectives including social justice, care of self, and the practice of professional nursing using a holistic, caring approach. \$130 Nursing testing fee. **Prerequisite: Students must be accepted into the LPN to BSN program at CBC prior to enrollment.**

NRS 311

Foundations Skill Lab [RE] • 2.0 Credits

This course is designed to introduce the student to science-based nursing, the nursing process, technical competencies, and the role of the registered nurse in direct patient care. Hands-on learning experiences are directed toward expanding the student's knowledge of nursing care of individuals experiencing alterations in health as well as focusing on application of the nursing process in delivery of care. \$21.75 nursing lab fee. **Prerequisite: Students must be accepted into the LPN to BSN program at CBC prior to enrollment.**

NRS 315

Healthcare Informatics/Information Technology [RE] • 5.0 Credits

Formerly AG 340, AG 402, AMGT 340, AMGT 402, HCAD 315, HCAD 402, NRS 315
Provides an introduction to health information technology and to the science of informatics as applied to healthcare. Emphasis is placed on how healthcare facilities use information technology to select and utilize electronic information management systems and to integrate data from patient health records. Topics of study include: use of computer networks, system protocols and policies, data and system architecture and congruency, communication and legal issues, basic computer security and safety, mobile applications, multi-system integration, stand-alone applications, data collection methods and integrity, legal document compliance, and consistent documentation to prevent errors. This course is cross-listed with AG 402, AMGT 402, and HCAD 402. Students completing NRS 315 may not receive graduation credit for AG 402, AMGT 402, or HCAD 402. Class must be passed with a 2.0 or better to count for BAS Applied Management degree. **Prerequisite: Students must be accepted into CBC's RN to BSN program, or CBC's Dental Hygiene program, prior to enrollment.**

NRS 320

Nursing Research and Evidence-Based Practice [RE] • 5.0 Credits

Examines the nature of inquiry, basic research concepts, language, and processes. Content in process focuses on how research contributes to the development of nursing knowledge, improves nursing practice, and enhances professional development and professional accountability. Qualitative and quantitative research methods are compared and are analyzed to enhance understanding of the research process. Legal and ethical issues are explored. Students utilize evidence based practice to guide decision-making in nursing practice. **Prerequisite: Students must be accepted into CBC's RN to BSN program prior to enrollment.**

NRS 330

Acute Care Nursing Theory I [RE] • 5.0 Credits

This is the first of three acute care courses that focuses on the development of nursing competence in planning and managing care of individuals with complex alterations in health status. Emphasis on integration of physiological, pathophysiological, psychological, and

pharmacological concepts as well as the role of the social determinants of health essential to professional nursing practice. \$130 Nursing testing fee. **Prerequisite: Completion of NRS 305, NRS 310, and NRS 311, all with a 2.0 or higher.**

NRS 331

Acute Care Nursing Clinical I [RE] • 4.0 Credits

This clinical course provides for application of theoretical concepts to the nursing care of adults in the acute care hospital setting. Emphasis is on the use of the nursing process to develop individualized plans of care for clients experiencing a variety of acute and chronic health alterations. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Completion of NRS 305, NRS 310, and NRS 311, all with a 2.0 or higher.**

NRS 332

Acute Care Nursing I Lab [RE] • 1.0 Credit

This campus laboratory course is designed to allow nursing students to gain proficiency in nursing skills. Hands-on learning experiences are directed toward expanding the student's knowledge of nursing care of individuals experiencing both acute and critical alterations in health. \$21.75 nursing lab fee. **Prerequisite: Completion of NRS 305, NRS 310, and NRS 311, all with a 2.0 or higher.**

NRS 340

Acute Care Nursing Theory II [RE] • 5.0 Credits

Building on Acute Care Nursing I, this is the second of three acute care courses that focuses on the development of nursing competence in planning and managing care of individuals with complex alterations in health status. Emphasis on integration of physiological, pathophysiological, psychological, and pharmacological concepts as well as the role of the social determinants of health essential to professional nursing practice. \$130 Nursing testing fee. **Prerequisite: Completion of NRS 330, NRS 331, and NRS 332, all with a 2.0 or higher.**

NRS 341

Acute Care Nursing Clinical II [RE] • 4.0 Credits

This clinical course provides for application of theoretical concepts to the nursing care of adults in the acute care hospital and psychiatric setting. Emphasis is on the use of the nursing process to develop individualized plans of care for clients experiencing a variety of acute and chronic mental and physical health alterations. During the psychiatric nursing rotation, emphasis is on development and utilization of therapeutic communication. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Completion of NRS 330, NRS 331, and NRS 332, all with a 2.0 or higher.**

NRS 342

Acute Care Nursing Lab II [RE] • 1.0 Credit

This campus laboratory course is designed to allow nursing students to gain proficiency in nursing skills utilized in the clinical setting. Learning experiences include advanced assessment, focused skills review, and application of both clinical and theoretical learning in the simulation environment. \$21.75 nursing lab fee. **Prerequisite: Completion of NRS 330, NRS 331, and NRS 332, all with a 2.0 or higher.**

NRS 350

Population Health, Pharmacology, and Assessment [RE] • 5.0 Credits

This course builds upon the RN's knowledge of the pathophysiology of disease, pharmacologic intervention, and health assessment of an individual by examining issues that affect families and communities on a local and global scale. Emphasis is on the role of the Bachelor's-prepared RN in assessing families, communities, and populations, identifying barriers to treatment, and developing interdisciplinary solutions.

Courses

Major topics include family, community, and population assessment, determinants of health, health disparities, vulnerable populations, genetics, genomics, and pharmacogenetics. **Prerequisite: Students must be accepted into CBC's RN to BSN program prior to enrollment.**

NRS 399

NCLEX Exam [RE] • 35.0 Credits

\$350 NCLEX exam fee. Grade is pass/no credit.

NRS 400

Acute Care Nursing Theory III [RE] • 5.0 Credits

Building on Acute Care Nursing I & II, this is the final of three acute care courses that focuses on the development of nursing competence in planning and managing care of individuals with complex alterations in health status. Emphasis on integration of physiological, pathophysiological, psychological, and pharmacological concepts as well as the role of the social determinants of health essential to professional nursing practice. \$130 Nursing testing fee. **Prerequisite: Completion of NRS 340, NRS 341, and NRS 342, all with a 2.0 or higher.**

NRS 401

Acute Care Clinical Preceptorship [RE] • 5.0 Credits

This is the final clinical learning experience of the LPN to BSN degree curriculum. This course provides for application of theoretical concepts to the care of adults and children in acute care and community settings utilizing a preceptorship model. All students are expected to progress towards competence in thinking critically, using the nursing process, performing nursing skills, providing leadership, and delegating care at a bachelor degree nurse entry level. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Completion of NRS 340, NRS 341, and NRS 342, all with a 2.0 or higher.**

NRS 410

Nursing Leadership and Management [RE] • 5.0 Credits

Enables students to practice within complex healthcare systems and to assume the roles of provider of care; designer/manager/coordinator of care; and member of a diverse and global health care environment. Major topic areas include: provision of complex systems, change theory, conflict management, conflict resolution strategies, negotiation, relationship building, group roles/group dynamics, and concepts of teamwork. Management and organizational theories and concepts are studied, evaluated, and applied. **Prerequisite: Students must be accepted into CBC's RN to BSN program prior to enrollment.**

NRS 420

Populations and Global Health Nursing [RE] • 3.0 Credits

This course examines nursing as part of the larger healthcare delivery system. Emphasis is on identification of cultural, social, political, and epidemiological factors related to health, illness, health promotion, and disease prevention that impact local, national, and global healthcare.

Prerequisite: Students must be accepted into CBC's RN to BSN program prior to enrollment.

NRS 421

Populations and Global Health Nursing Practicum [RE] • 2.0 Credits

This course presents clinical concepts of community health nursing and the multiple determinants of health in local healthcare settings. Students participate in selected clinical based activities in various community agencies as interdisciplinary provider, designer, and manager in the process to provide competent care, promote health protection, and provide assistance with health maintenance and restoration to a diverse population within the community. \$10.72 per quarter malpractice

insurance fee. **Prerequisite: Students must be accepted into CBC's RN to BSN program prior to enrollment.**

NRS 460

Leadership Capstone [RE] • 2.0 Credits

In collaboration with a nursing faculty and clinical preceptor, students plan and implement an evidence-based project consistent with the professional leadership role. Students use critical thinking skills and evidence-based practice to promote patient-centered nursing in a complex healthcare environment. This course culminates with an evidence-based project that is presented to peers and the community. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Students must be accepted into CBC's RN to BSN program prior to enrollment.**

NRS 499

Guided NCLEX Prep [RE] • 1.0 Credit

Focused review of the theoretical concepts presented throughout the pre-licensure nursing curriculum. Learning experiences are guided by focused Kaplan review tests and associated remediation in preparation for the national nursing licensure examination. \$130 Nursing testing fee. **Prerequisite: Completion of NRS 400 and NRS 401, both with a 2.0 or higher.**

Nursing Assistant

NA 100

Nursing Assistant [RE] • 4.0 Credits

This course leads to the ability of those completing the course to become eligible for testing as a Nursing Assistant Certified. The course covers communication and interpersonal skills, infection control, safety and emergency procedures, promoting resident independence, respecting resident rights, basic nursing skills, personal care skills, mental health and social services needs, care of the cognitively impaired resident, basic restorative care, resident rights, HIPAA, First Aid and CPR for the healthcare provider, seven hours of HIV/AIDS Bloodborne Pathogens training, dementia, and cultural awareness. Concurrent enrollment into NA 102 lab is required. Students are required to demonstrate competencies in skills associated with each of the course subjects within the laboratory or clinical setting. \$10.72 per quarter malpractice insurance fee. **Prerequisite: This is a selective admission program. Students must apply and be accepted into CBC's Nursing Assistant program prior to enrolling.**

NA 102

Nursing Assistant Lab [RE] • 4.0 Credits

Formerly NA 102

This course provides competencies in skills for laboratory and clinical requirements for the Nursing Assistant lecture course. Students are involved in on-campus learning laboratory experiences as well as clinical rotations within community health facilities. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. **Prerequisite: This is a selective admission program. Students must apply and be accepted into CBC's Nursing Assistant program prior to enrolling.**

Nutrition & Food Science

NUTR& 101

Nutrition [M/S] • 5.0 Credits

Formerly NFS 111, NUTR& 101

Principles of nutrition as they apply to macro-nutrients. Economic, cultural, and psychological influences are considered. The need for vitamins, minerals, and special nutritional requirements at different stages of the

Courses

lifecycle and special topics of current concern are included. \$25 science fee.

Occupational Safety & Health Technology

OSH 101

Fundamentals of Occupational Safety & Health [RE] • 5.0 Credits

Formerly IHST 101, OSH 101

This course covers the fundamental aspects of occupational safety and health practices and how they are related to applicable standards, risk management, performance metrics, hazard recognition/controls, industrial hygiene, environmental management, fire safety, systems safety, ergonomics, hazardous materials, fleet safety, emergency management, and accident investigation. \$5 per credit Industrial Health & Safety fee. **Prerequisite: A grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

OSH 124

Industrial and Construction Safety Regulations [RE] • 5.0 Credits

Formerly IHST 124, OSH 124

This course is a study of OSHA regulations for construction and general industry, and WISHA standards and regulations. Students will develop an understanding of safety management, project incorporation of safety, and subcontractor management. Topics covered include: excavation, fall protection, scaffolding, equipment operation, steel erection, cranes, and electrical. \$5 per credit Industrial Health & Safety fee.

OSH 147

Ethics, Documentation, and Records [RE] • 4.0 Credits

Formerly IHST 147, OSH 147

Safety and health professionals face potential legal and ethical issues on an almost daily basis. In a landscape of changing responsibilities and new laws, they often make difficult decisions that can result in the creation of legal issues and liabilities for themselves and their companies. This course will explore issues in criminal liability for individuals and corporations under the OSHA Act and state criminal codes. \$5 per credit Industrial Health & Safety fee.

OSH 151

Accident Prevention, Inspection & Investigations [RE] • 5.0 Credits

Formerly IHST 151, OSH 151

This course provides a review of accident investigation methodologies that include accident response, evidence collection, analysis techniques, and developing and communicating recommendations to prevent recurrence. It includes drug/alcohol testing, claims management, return to work/rehabilitation programs, and preparation for lawsuits and deposition. \$5 per credit Industrial Health & Safety fee.

OSH 152

Internship [RE] • 1.0–5.0 Credits

Formerly IHST 152, OSH 152

Designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. \$5 per credit Industrial Health & Safety fee. Grade is pass/no credit.

OSH 153

Risk Management [RE] • 5.0 Credits

Formerly IHST 153, OSH 153

This course is an examination of risk management principles in the context of safety and health management. Strategies and tactics for reducing workplace hazards are presented through a review of best practices and principles balanced by an organization's use of opportunistic and speculative risks. \$5 per credit Industrial Health & Safety fee.

OSH 177

Industrial Chemical Safety & Hazards [RE] • 5.0 Credits

Formerly IHST 177, OSH 177

A systematic analysis of how hazardous materials escalate an incident or emergency event. This course includes examination of the basic fundamental concepts common to hazardous chemicals with an emphasis on how some key elements, compounds, and mixtures are inherently dangerous. \$5 per credit Industrial Health & Safety fee.

OSH 230

Industrial Toxicology [RE] • 5.0 Credits

Formerly IHST 230, OSH 230

This course is an exploration of the basic principles associated with the toxic effects of chemicals on the living organism while examining the regulatory aspects and applications of toxicology in the workplace. Among the topics covered are the potential adverse effects of drugs, pesticides, food additives, and industrial chemicals. \$5 per credit Industrial Health & Safety fee.

OSH 231

Biological Hazards [RE] • 5.0 Credits

Formerly IHST 231, OSH 231

This course is intended to familiarize students with a range of biological hazards that may be encountered in community and work environments, including commercial, non-industrial, industrial and healthcare settings, with emphasis on the methods occupational hygienists use to recognize, evaluate, and control microbiological hazards. \$5 per credit Industrial Health & Safety fee.

OSH 233

Fire Protection Systems [RE] • 2.0 Credits

Formerly IHST 233, OSH 233

This course is an in-depth study of flammables, combustibles, and their relation to fire prevention. It includes hazard analysis and assessment of establishments relating to the prevention and control of fires, understanding the types of extinguishing systems and the hazards associated with each, and emergency response and evacuation plans. \$5 per credit Industrial Health & Safety fee.

OSH 235

Physical Hazards [RE] • 5.0 Credits

Formerly IHST 235, OSH 235

This course is a study of the physical hazards in industry and the methods of workplace design and redesign to control these hazards. Emphasis is on the regulation codes and standards associated with the control of physical hazards. \$5 per credit Industrial Health & Safety fee.

OSH 271

Fundamentals of Industrial Hygiene [RE] • 4.0 Credits

Formerly IHST 271, OSH 271

This course is an introduction to the basics of industrial hygiene that includes the anticipation, recognition, evaluation, and control of workplace environmental stressors (chemical, physical, and biological) that

Courses

can impact the health, comfort, or productivity of the worker. \$5 per credit Industrial Health & Safety fee.

OSH 272

Ergonomics [RE] • 4.0 Credits

Formerly IHST 272, OSH 272

This course covers the principles and practices of ergonomics as it applies to the industrial and construction environment. It demonstrates how to collect data on users and operators and how to convert the data to good workplace design. \$5 per credit Industrial Health & Safety fee.

OSH 274

Safety Program Management [RE] • 5.0 Credits

Formerly IHST 274, OSH 274

This course includes a study of accident cost analysis, recordkeeping standards, reporting, job safety analysis, fundamentals of safety training, and safety management system requirements, training, and implementation. \$5 per credit Industrial Health & Safety fee.

OSH 277

Environmental Management [RE] • 5.0 Credits

Formerly IHST 277, OSH 277

This course is an overview of the theories, processes, and applications of natural and technological hazards from a geographic perspective. Topics involve investigation beyond the basic physical processes to include mitigation strategies and emergency management considerations. Some of the subjects include earthquakes, volcanoes, wildfires, floods, tornadoes, hurricanes, winter storms, oil spills, chemical releases, and environmental terrorism. \$5 per credit Industrial Health & Safety fee.

OSH 280

Industrial Instrumentation and Equipment [RE] • 5.0 Credits

Formerly IHST 280, OSH 280

This course is an overview of the basic instrumentation used for industrial hygiene readings to include theory of operation, interferences, limitations, proper usage for Direct Reading Instruments (DRIs), Volatile Organic Compound (VOC) Meters, noise measuring, light measuring, heat stress instruments, and miscellaneous monitoring equipment as well as the use of sample pumps and media for source, area, and personal data gathering. \$5 per credit Industrial Health & Safety fee.

Paramedic

PMD 201

Paramedic I [RE] • 6.0 Credits

This course is intended to prepare the paramedic student in the areas of medical, legal, ethics, roles and responsibilities, principles of pathophysiology, pharmacology, intravenous access, and medication administration. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for Paramedics. It is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic exam. \$124 FISDAP course fee. \$11.40 lab fee.

Prerequisite: Acceptance into the Paramedic program at CBC. See program entrance requirements at columbiabasin.edu/paramedic.

PMD 202

Paramedic II [RE] • 6.0 Credits

This course is intended to train students in the areas of advanced airway management, physical assessment, field assessment, clinical decision-making, documentation, and the assessment and management of respiratory emergencies. This course follows the 2012 WA State EMS

Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic Exam. **Prerequisite:** Acceptance into the Paramedic program at CBC. See program entrance requirements at columbiabasin.edu/paramedic.

PMD 203

Paramedic III [RE] • 6.0 Credits

This course in the Paramedic sequence provides skills and knowledge necessary to assess and manage medical emergencies specifically: cardiac, neurological, and endocrine emergencies as well as allergies and anaphylaxis. At the completion of this course, students are certified in ACLS. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic Exam. **Prerequisite:** Acceptance into the Paramedic program at CBC. See program entrance requirements at columbiabasin.edu/paramedic.

PMD 204

Paramedic IV [RE] • 6.0 Credits

This course in the Paramedic sequence provides skills and knowledge necessary to assess and manage trauma emergencies, specifically: mechanism of injury, soft tissue and burn injuries, as well as head, neck, chest, abdominal, and other musculoskeletal trauma. At the successful completion of this course, students are certified in PHTLS. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic Exam. At the end of this course, the areas of neonate and pediatric care will begin, with completion in PMD 205. **Prerequisite:** Acceptance into the Paramedic program at CBC. See program entrance requirements at columbiabasin.edu/paramedic.

PMD 205

Paramedic V [RE] • 6.0 Credits

This course in the Paramedic sequence provides skills and knowledge necessary to assess and manage special emergencies with neonates, pediatrics, childbirth, geriatrics, behavioral emergencies, as well as abuse, and assault. At the completion of this course, students are certified in PALS. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic Exam. **Prerequisite:** Acceptance into the Paramedic program at CBC. See program entrance requirements at columbiabasin.edu/paramedic.

PMD 206

Paramedic VI [RE] • 6.0 Credits

This course provides skills and knowledge necessary to assess and manage emergencies of a gastrointestinal, urological, toxicological, or environmental nature. It additionally reviews special considerations of mass casualty, hazardous materials, rescue, and crime scene awareness. At the completion of this course, students complete a term paper and oral presentation. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for Paramedics, and is designed to give students the foundation to continue training to become eligible to take the National Registry EMT-Paramedic Exam. Students continue the field/

Courses

ambulance clinical competencies. **Prerequisite:** Acceptance into the Paramedic program at CBC. See program entrance requirements at columbiabasin.edu/paramedic.

PMD 210

Paramedic I Lab [RE] • 2.0 Credits

Lab to be taken concurrently with PMD 201. Introduces students to the policies and procedures of the field and hospital internship sites where students begin in same-day surgery performing IVs on patients preparing for surgical procedures. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee.

PMD 220

Paramedic II Lab [RE] • 3.0 Credits

Lab to be taken concurrently with PMD 202. The lab portion of the course introduces students to the policies and procedures of the field and hospital internship sites where they continue to work on their minimum competencies in same-day surgery, operating room, emergency department, as well as beginning their field/ambulance experience. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee.

PMD 230

Paramedic III Lab [RE] • 3.0 Credits

Lab to be taken concurrently with PMD 203. The lab portion of this course introduces students to the policies and procedures of the field and hospital internship sites where they continue to work on their minimum competencies in the operating room, emergency department, respiratory therapy, cardiac catheterization lab, and the intensive care units. Students continue the field/ambulance clinical competencies. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee.

PMD 240

Paramedic IV Lab [RE] • 3.0 Credits

Lab to be taken concurrently with PMD 204. The lab portion of this course introduces students to the policies and procedures of the field and hospital internship sites where they continue to work on their minimum competencies in the emergency department, respiratory therapy, cardiac catheterization lab, and the intensive care units. Students continue the field/ambulance clinical competencies. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee.

PMD 250

Paramedic V Lab [RE] • 3.0 Credits

Lab to be taken concurrently with PMD 205. The lab portion of this course introduces the students to the policies and procedures of the field and hospital internship sites where they continue to work on their minimum competencies in the emergency department, respiratory therapy, cardiac catheterization lab, intensive care units, pediatrics, neonate intensive care unit, obstetrics unit, and psychiatric rotations. Students continue the field/ambulance clinical competencies. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee.

PMD 260

Paramedic VI Lab [RE] • 3.0 Credits

Lab to be taken concurrently with PMD 206. The lab portion of the course focuses on the completion of hospital internship where students continue to work on their minimum competencies in the emergency department, respiratory therapy, cardiac catheterization lab, intensive care units, pediatrics, neonate intensive care unit, obstetrics unit, psychiatric rotations, and field internship. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee.

PMD 270

Extended Paramedic Internship [RE] • 1.0–3.0 Credits

This extension course is provided to current paramedic students who are working to complete field and/or hospital internship requirements as required by the program. This course follows the 2012 WA State EMS Education Standards for Paramedic as well as the National EMS Education Standard Instructional Guidelines for Paramedics, and allows students to complete all requirements and to become eligible to take the National EMT-P Certification Exam. \$11.40 lab fee. Grade is pass/no credit.

Prerequisite: Successful completion of PMD 201 through 206 with a minimum overall GPA of 2.5. Placement into this course is at the discretion of the Paramedic Director.

Philosophy

PHIL& 101

Intro to Philosophy [H] • 5.0 Credits

Formerly PHI 101, PHIL& 101

A study of the fundamental questions concerning humans and the universe that recur in the history of their thoughts, religion, knowledge, reality, and morality.

PHIL 106

Introduction to Logic [H] • 5.0 Credits

Formerly PHI 120, PHIL 106, PHIL& 106

A study of the principles of formal and informal thinking: induction, deduction, and language.

PHIL& 120

Symbolic Logic [Q/SR] • 5.0 Credits

A study of the principles of formal thinking, which includes an analysis of symbolic theory within a context that encourages the development of logical skills. **Prerequisite:** A grade of 2.0 or better in MATH 50, 70, or 72, or a grade of 0.7 or better in a higher math class, or appropriate placement.

PHIL 131

World Religions [H] • 5.0 Credits

Formerly PHI 131, PHIL 131

A survey of the major religious systems of the world, including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.

PHIL 150

Introduction to Ethics [H] • 5.0 Credits

Formerly PHI 150, PHIL 150

An introduction to moral concepts; their assumptions, arguments, implications, and practices. Special consideration is given to topics in the area of medicine, business, war, individual rights, and the future.

PHIL 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

PHIL 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

PHIL 305

Professional Ethics [H] • 5.0 Credits

This course examines the role of ethics and social responsibility in the management of public and private sector organizations and businesses. An emphasis is on contemporary trends in corporate responsibilities.

Courses

with respect to ethical, legal, economic, and regulatory conditions in the global marketplace. The use of the case study approach is applied to a contemporary business ethical issue. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

PHIL 315

Professional Ethics In Healthcare [H] • 5.0 Credits

This course examines the role of ethics and social responsibility in the management of public and private healthcare organizations. Topics to be explored include the nature of morality, normative theories of ethics, justice and economic distribution as it relates to healthcare and healthcare-funded programs; the impact of technology on ethics in healthcare; and ethical situations in patient care. This course also examines practical applications of ethical theories in the context of real world scenarios, delving into the "hard work" of maintaining an ethical backbone through the steadfast commitment necessary to maintain accountability and integrity in the workplace. **Prerequisite: Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval.**

Phlebotomy

PHLEB 100

Phlebotomy I [RE] • 5.0 Credits

This course introduces the fundamental principles and techniques of phlebotomy. Through a combination of lectures and hands-on laboratory practice, students will learn essential skills in venipuncture, capillary puncture, and specimen handling. Topics include the anatomy of the circulatory system, infection control, safety procedures, patient interaction, and professional ethics in the healthcare environment. Students will also explore the importance of quality assurance and legal considerations in phlebotomy. This course prepares students for real-world clinical experiences by building a solid foundation of knowledge and skills necessary for success in the healthcare field. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Acceptance into the Phlebotomy program.**

PHLEB 101

Phlebotomy Clinical • 3.0 Credits

This course provides students with hands-on, supervised clinical experience in a variety of medical settings. Within the clinical setting, students will apply their classroom and laboratory knowledge in real-world environments, practicing venipuncture, specimen handling, patient interaction, and other essential phlebotomy skills. Clinical placements are arranged by the instructor, and students are expected to accommodate the operating hours of their assigned facility. \$10.72 per quarter malpractice fee. \$11.40 lab fee. **Prerequisite: Acceptance into the Phlebotomy program.**

Physical Education

PE 110

Aerobics Step Training I [PE] • 1.0 Credit

A low-impact exercise program that involves stepping up and down on a platform of adjustable height to the accompaniment of music, leading to improved cardiovascular conditioning, as well as lower body endurance and strength. \$11.40 lab fee.

PE 111

Aerobics Step Training II [PE] • 1.0 Credit

Continued study and involvement offering a greater level of conditioning through the use of more intense training techniques involved with step training. \$11.40 lab fee.

PE 112

Aerobic Dance I [PE] • 1.0 Credit

Dance steps and routines rigorously executed to increase cardiovascular rate, leading to figure trimming and toning. Records on improvements in pulse rates and pulmonary recovery are kept. \$11.40 lab fee.

PE 113

Aerobic Dance II [PE] • 1.0 Credit

Continued study and advanced techniques of this activity. Dance steps and routines executed to increase cardiovascular rate. Students test and record improvements in pulse rates and pulmonary recovery. \$11.40 lab fee. **Prerequisite: Completion of PE 112 with a 0.7 or higher.**

PE 114

Aerobic Dance III [PE] • 1.0 Credit

Advanced study in this activity. Dance steps and routines rigorously executed for improving cardiovascular rate and leading to figure trimming and toning. Improvements are tested and recorded. \$11.40 lab fee.

Prerequisite: Completion of PE 113 with a 0.7 or higher.

PE 115

Body Mechanics [PE] • 1.0 Credit

This course involves special exercise and calisthenics which enhance total fitness, figure improvement, body toning, weight control, and posture. \$11.40 lab fee.

PE 116

Pilates [PE] • 1.0 Credit

An introductory course to Pilates emphasizing physical exercises, breathing, core strength and stability, and muscle awareness. \$11.40 lab fee.

PE 117

Yoga I [PE] • 1.0 Credit

An introductory course to Hatha Yoga emphasizing physical exercises, breathing exercises, and meditation practice. \$11.40 lab fee.

PE 118

Step Aerobic Interval Training [PE] • 1.0 Credit

Using intervals of high intensity exercise followed by recovery periods, this class combines high and low intensity exercises performed on the floor as well as on the step. Aerobic exercise, power moves, step training, light weight training, and body resistance are used to introduce students to the benefits of an interval training program. Greater cardiovascular strengthening as well as muscular strengthening and endurance are introduced and practiced in this class. \$11.40 lab fee.

PE 119

Yoga II [PE] • 1.0 Credit

A continuation course to a Hatha Yoga practice including intermediate physical poses, yoga breathing exercises, and selected meditations. \$11.40 lab fee.

Courses

PE 120

Weight Training I [PE] • 1.0 Credit

Students are exposed to theories of weight training. Emphasis is placed on strength development, muscular endurance, and flexibility. Students design an individual program with the use of free weights and multi-station machines. \$11.40 lab fee.

PE 121

Weight Training II [PE] • 1.0 Credit

An intermediate program with students designing their individual workout program. \$11.40 lab fee.

PE 122

Weight Training III [PE] • 1.0 Credit

An advanced program with the student designing her/his individual workout program. \$11.40 lab fee.

PE 135

Golf Swing Analysis Strategies [PE] • 2.0 Credits

A comprehensive study of the individual parts of the modern golf swing with intensive training directed toward precise control and more power. \$50 Golf course fee.

PE 140

Softball I [PE] • 1.0 Credit

Softball I is designed for the beginning softball player. This course offers instruction of basic skills and rules of softball. Skills and knowledge of rules are tested. \$11.40 lab fee.

PE 141

Softball II [PE] • 1.0 Credit

Designed for the intermediate softball player. Additional work of strategy, individual, and team offensive/defensive techniques are taught. Skills and knowledge of rules are tested. \$11.40 lab fee. **Prerequisite: Completion of PE 140 with a 0.7 or higher.**

PE 142

Softball III [PE] • 1.0 Credit

Designed for the advanced softball player. Additional work of strategy, individual, and team offensive/defensive techniques are taught. Skills and knowledge of rules are tested. \$11.40 lab fee. **Prerequisite: Completion of PE 140 and PE 141 both with a 0.7 or higher.**

PE 145

Soccer I [PE] • 1.0 Credit

Basic individual skills are presented and developed. The international rules are emphasized and a physical conditioning program designed to prepare the student for play is implemented. \$11.40 lab fee.

PE 146

Soccer II [PE] • 1.0 Credit

Soccer II is designed for the intermediate player. Review of the basic skills taught in the beginning course. Additional work on strategy, defensive techniques. \$11.40 lab fee. **Prerequisite: Completion of PE 145 with a 0.7 or higher.**

PE 147

Soccer III [PE] • 1.0 Credit

Soccer III is designed for the advanced player. Advanced strategy, team defensive, and team offensive techniques are taught. Skills and rules are tested. \$11.40 lab fee. **Prerequisite: Completion of PE 146 with a 0.7 or higher.**

PE 148

Jogging I [PE] • 1.0 Credit

Provides cardiovascular improvement, burns body fat, and builds lifetime skills in aerobic fitness. Emphasis on stretching, safety, motivation, and enjoying jogging. Offered for the beginning jogger or walker through the competitive runner. \$11.40 lab fee.

PE 152

Badminton I [PE] • 1.0 Credit

Introduces the fundamental skills, rules, and strategies of badminton. Covers basic techniques and etiquette of both singles and doubles play. Allows students to enjoy badminton as a lifetime activity. \$11.40 lab fee.

PE 160

Basketball I [PE] • 1.0 Credit

Beginning skills and strategy, this class is suitable for anyone with a desire to learn the basics of the game, with emphasis on rules and court procedure. \$11.40 lab fee.

PE 161

Basketball II [PE] • 1.0 Credit

Students expand their knowledge of the skills of basketball, and additional skills are introduced. Team strategy at a more advanced level is emphasized. \$11.40 lab fee. **Prerequisite: Completion of PE 160 with a 0.7 or higher.**

PE 162

Basketball III [PE] • 1.0 Credit

Review of advanced basketball skills. Introduction of offensive patterns, defensive sets, and individual style of play. This class also involves usage of fast break and the transition game. \$11.40 lab fee. **Prerequisite: Completion of PE 161 with a 0.7 or higher.**

PE 163

Volleyball I [PE] • 1.0 Credit

Covers basic skills, court positions, and strategies for beginning sets along with 4-2 and 5-1 offenses. \$11.40 lab fee.

PE 164

Volleyball II [PE] • 1.0 Credit

A continuation of Volleyball I. Intermediate skills, defensive strategies, play sets, and how to play doubles and triples volleyball. \$11.40 lab fee. **Prerequisite: Completion of PE 163 with a 0.7 or higher.**

PE 165

Volleyball III [PE] • 1.0 Credit

Emphasis is on team plan and interaction using and applying all volleyball skills. \$11.40 lab fee. **Prerequisite: Completion of PE 164 with a 0.7 or higher.**

PE 172

Bowling I • 1.0 Credit

Course is structured to allow the individual to acquire and use proper bowling forms. Students learn to eliminate errors in techniques, follow rules, compute handicaps, and keep scores. \$11.40 lab fee.

PE 182

Adaptive Pe Lab [PE] • 1.0 Credit

Lab to be taken concurrently with PE 180. \$11.40 lab fee.

Courses

PE 183

Pickleball [PE] • 1.0 Credit

Introduces basic knowledge and skills to play pickleball such as forehand, backhand, groundstrokes, volleys, and serves as well as the rules and strategies for singles and doubles play. \$11.40 lab fee.

PE 184

Pickleball II [PE] • 1.0 Credit

A continuation from Pickleball I advancing the knowledge and skills to play pickleball such as forehand, backhand, groundstrokes, volleys, and serves as well as the rules and strategies for singles and doubles play. \$11.40 lab fee. **Prerequisite:** Completion of PE 183 with a grade of 1.0 or better.

PE 185

Pickleball III [PE] • 1.0 Credit

A continuation from Pickleball II advancing the knowledge and skills to play pickleball such as forehand, backhand, groundstrokes, volleys, and serves as well as the rules and strategies for singles and doubles play. \$11.40 lab fee. **Prerequisite:** Completion of PE 184 with a grade of 1.0 or better.

PE 187

Baseball I [PE] • 1.0 Credit

Introduces students to basic skills of baseball. Students are given instruction in all phases of the game, with main purpose being to gain an understanding of fundamentals. \$11.40 lab fee.

PE 188

Baseball II [PE] • 1.0 Credit

Students expand their knowledge of the skills of baseball taught at the beginning level. Team strategy is taught at a more advanced level. \$11.40 lab fee. **Prerequisite:** Completion of PE 187 with a 0.7 or higher.

PE 189

Baseball III [PE] • 1.0 Credit

Advanced level of skills are taught, and theory of baseball strategy is introduced in all phases of the game. Specific drills are used for development of specialized skills. \$11.40 lab fee. **Prerequisite:** Completion of PE 188 with a 0.7 or higher.

PE 190

Cardio Kickboxing I [PE] • 1.0 Credit

This course involves the study and implementation of martial art style kicks and punches, along with exercises to enhance flexibility, cardiovascular endurance, and increased stamina. \$11.40 lab fee.

PE 198

Special Studies • 1.0–15.0 Credits

An experimental class to be used to explore new approaches and applications to Physical Education. \$11.40 lab fee.

PE 199

Special Studies • 1.0–15.0 Credits

An experimental lab class to be used to explore new approaches and applications to Physical Education. \$11.40 lab fee.

PE 203

Badminton II [PE] • 1.0 Credit

A continuation from Badminton I advancing the skills, rules, and strategies of badminton. Covers basic techniques and etiquette of both singles and

doubles play. Allows students to enjoy badminton as a lifetime activity. \$11.40 lab fee. **Prerequisite:** Completion of PE 152 with a 1.0 or better.

PE 204

Badminton III [PE] • 1.0 Credit

A continuation from Badminton II advancing the skills, rules, and strategies of badminton. Covers basic techniques and etiquette of both singles and doubles play. Allows students to enjoy badminton as a lifetime activity. \$11.40 lab fee. **Prerequisite:** Completion of PE 203 with a 1.0 or better.

PE 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$11.40 lab fee.

Physical Education Professional

PEC 135

Swing Analysis and Strategies • 2.0 Credits

A comprehensive study of the individual parts of the modern golf swing with intensive training directed toward precise control and more power. Class meets at Golf Land, Argent & Rd. 42 in Pasco. \$11.40 lab fee.

PEC 235

Fundamentals of Basketball • 2.0 Credits

History, fundamentals, practice organization, method of instruction, game preparation, and player evaluation are the main topics for instruction.

PEC 236

Fundamentals of Volleyball • 2.0 Credits

An introductory course in the history and development of power volleyball. It is also a study of the basic skills and organization of offensive and defensive strategies.

PEC 242

Theory of Basketball • 2.0 Credits

Advanced concepts and theory in basketball coaching and continuation of fundamentals of basketball supply students with up-to-date information concerning fundamentals, practice organization, game preparation, and player evaluation. **Prerequisite:** Completion of PEC 235 with a 0.7 or higher.

PEC 243

Theory of Volleyball • 2.0 Credits

Theory of volleyball for prospective coaches and advanced players with the aspects of philosophy, psychology, methods, and organization.

Physics

PHYS 102

Physics of Everyday Experience [M/S] • 5.0 Credits

Designed for non-science majors, this course is a practical introduction to physics and science in everyday life. Lecture demonstrations are used to illustrate physics that we experience in everyday life such as motion, sports, energy and power, gravity and planetary motion, fluids, pressure, aerodynamics, waves, sounds and music, musical instruments, temperature and heat, engines, electricity, lightning, house hold electric circuits, magnets, electric generators, light and colors, images, laser, nuclear energy, radioactivity, and medical imaging technology. This is a lecture only class with no associated lab. \$25 science fee. **Prerequisite:** A grade of 2.0 or better in MATH 40, or a grade of 0.7 or better in a higher math class, or appropriate placement.

Courses

PHYS& 110

Physics for Non-Science Majors W/ Lab [M/S] • 5.0 Credits

Formerly PHY 100, PHYS& 100, PHYS& 101, PHYS& 110

Introduces the principles and concepts of physics using elementary algebraic procedures. Selected topics from classical and modern physics. Primarily for the non-science major. \$25 science fee. **Prerequisite: A grade of 2.0 or better in MATH 50, 60, or 62, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

PHYS& 114

General Physics I W/ Lab [M/S] • 5.0 Credits

Formerly PHY 105, PHYS& 114, PHYS& 121, PHYS& 124, PHYS& 131, PHYS& 134

This course is designed for those students that are not majoring in a four-year engineering or physical science degree. Topics include measurement and units, vectors, motion in one and two dimensions, Newton's laws, work and energy, momentum and collisions, circular motion, gravity, and rotational motion. \$25 science fee. **Prerequisite: Completion of one of the following math courses with a grade of 2.0 or better: MATH 113, MATH& 142, MATH& 152, or MATH& 153, or appropriate placement.**

PHYS& 115

General Physics II W/ Lab [M/S] • 5.0 Credits

Formerly PHY 106, PHYS& 115, PHYS& 122, PHYS& 125, PHYS& 132, PHYS& 135

Solids and fluids, thermal physics, laws of thermodynamics, electric forces and fields, electrical energy, DC circuits, magnetic forces and fields, electromagnetic induction, and AC circuits. \$25 science fee. **Prerequisite: Completion of PHYS& 114 with a 2.0 or better.**

PHYS& 116

General Physics III W/ Lab [M/S] • 5.0 Credits

Formerly PHY 107, PHYS& 116, PHYS& 123, PHYS& 126, PHYS& 133, PHYS& 136

Oscillations and waves, electromagnetic waves, geometric optics, physical optics, optical instrument, quantum physics, atomic physics, and nuclear physics. \$25 science fee. **Prerequisite: Completion of PHYS& 115 with a 2.0 or better.**

PHYS 199

Special Studies • 1.0–5.0 Credits

A class used to explore new coursework. \$25 science fee.

PHYS& 221

Engineering Physics I W/ Lab [M/S] • 5.0 Credits

Formerly PHY 201, PHYS& 221, PHYS& 231, PHYS& 241

The first quarter of a three-quarter sequence in calculus-based physics for science and engineering students. The course covers topics in mechanics, including kinematics of motion, force, work, energy, momentum, and kinematics and kinetics of rotation. \$25 science fee. **Prerequisite: A grade of 2.0 or better in MATH& 151, or a grade of 0.7 or better in a higher math class.**

PHYS& 222

Engineering Physics II W/ Lab [M/S] • 5.0 Credits

Formerly PHY 202, PHYS& 222, PHYS& 232, PHYS& 242

The second quarter of a three-quarter sequence in calculus-based physics for science and engineering students dealing with the topics of Gravity, Fluids, and Electromagnetism. \$25 science fee. **Prerequisite: Completion of MATH& 152 with a 2.0 or better, or a higher math class with a 0.7 or better, and PHYS& 221 with a 2.0 or better.**

PHYS& 223

Engineering Physics III W/ Lab [M/S] • 5.0 Credits

Formerly PHY 203, PHYS& 223, PHYS& 233, PHYS& 243

The third quarter of a three-quarter sequence in calculus-based physics for science and engineering students dealing with the topics of Oscillations and Waves, Thermodynamics, Electromagnetic Waves, Light, and Optics. \$25 science fee. **Prerequisite: Completion of PHYS& 222 with a 2.0 or better.**

PHYS 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.

Political Science

POLS 104

State and Local Government [S/B] • 5.0 Credits

Formerly POLS 104, PS 104

An examination of federal, state, and local government relationships; state executive, legislative, judicial, and political party systems; and forms of local governmental units.

POLS 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

POLS& 201

Intro Political Theory [S/B] • 5.0 Credits

Formerly POLS& 201, PS 150

An introduction to fundamental concepts and theories in political science, this course uses classic and contemporary works of political thought to deal with basic issues in the study of politics, such as who should rule, political rights, and the nature and limits of political authority.

POLS& 202

United States Government [S/B] • 5.0 Credits

Formerly POLS& 202, PS 100

A survey of the system and process of the United States national politics and government; including the structure and function of the executive, legislative, and judicial branches, and the U.S. political party system.

POLS& 203

International Relations [S/B] • 5.0 Credits

Formerly POLS& 203, PS 103

An examination of various theoretical approaches to international politics, causes of war, approaches to peace, and sources of conflict in the contemporary world.

POLS& 204

Comparative Government [S/B] • 5.0 Credits

Formerly POLS& 204, PS 101

A comparative study of the development and transformation of western democratic, communist, and third world political systems and processes.

POLS 205

American Political Thought [S/B] • 5.0 Credits

Formerly POLS 205, PS 151

Examines through classical and contemporary texts the crucial, ethical, and philosophical issues that shaped the founding and continues to be debated up to the modern day.

Courses

POLS 280

Race and Law in the U.S.[S/B] • 5.0 Credits

Race and ethnicity continue to play a significant role in American politics. This course explores the early historical formation of racial categories, the role of policy in defining racial inequalities and racial boundaries, and how past political decisions are reflected in modern racial realities in the United States. Course topics include the law and history of slavery; segregation and Jim Crow laws; housing, employment, and voting rights; and education and criminal justice policies. This class emphasizes participation and reflection, as students learn to better understand political racialization and the intersections of race and law in the US.

POLS 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

Project Management

PROJ 100

Introduction to Project Management [RE] • 5.0 Credits

An introduction to foundational knowledge and concepts for the project management profession. Introduces key project definitions, project phases, and the project management knowledge areas. Also introduces students to project management activities such as scope, cost, and schedule management, project leadership skills, and the project team development model. The role of ethics in project management is also discussed.

PROJ 110

Project Planning [RE] • 5.0 Credits

Examines the important planning phase of a project which includes preparing the project management plan, defining the project scope and work breakdown structure; defining the activities and schedule; and estimating the costs and defining the budget. Also addresses planning quality, human resources, communication, risk, and procurement elements of a project. **Prerequisite:** Completion of PROJ 100 and CS 101 with a 2.0 or better

PROJ 130

Introduction to Microsoft Project [RE] • 5.0 Credits

MS Project is used to develop the project schedule including such things as creating a work breakdown structure; identifying activities, estimates, durations, and relationships; and assignment of resources. Provides hands-on skills for a basic understanding of such things as capturing performance data; preparing outputs and reports; and using baselines. **Prerequisite:** Completion of PROJ 110 with a 2.0 or better.

PROJ 150

Agile Project Management [RE] • 5.0 Credits

This course introduces agile concepts, tools, techniques, and behaviors as they apply to project management. Also explored are agile frameworks (including Scrum), estimating, user stories, Kanban, information radiators and how agile project management deviates from the traditional project management paradigm. **Prerequisite:** Completion of PROJ 100 and CS 101 with a 2.0 or better

PROJ 170

Project Management Internship [RE] • 1.0–5.0 Credits

Designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired

through hands-on new experiences in an actual work setting. Instructor permission is required to enroll. Grade is pass/no credit.

PROJ 211

Project Procurement [RE] • 5.0 Credits

Provides basic understanding of the project procurement management including key processes, roles/responsibilities, and types of contracts. Addresses the various roles people play in the procurement process and how procurement management plays a key part in achieving successful projects. **Prerequisite:** Completion of PROJ 110 with a 2.0 or better.

PROJ 222

Project Quality Management [RE] • 5.0 Credits

Provides further understanding of how project quality planning and control contribute to sound project management and improved project results. This course addresses quality tools, skills, and techniques. **Prerequisite:** Completion of PROJ 110 with a 2.0 or better.

PROJ 230

Emotional Intelligence & Communication [RE] • 5.0 Credits

Formerly PROJ 230, PROJ 330

This course addresses emotional intelligence to include self-management, stakeholder engagement, and team development. Further, essential communication skills, which, according to research, can be directly tied to over 80% of project failures, such as conflict management, are analyzed. These emotional intelligence and communication skills are addressed through course assignments including group projects, individual projects, interactive discussions, and quizzes. **Prerequisite:** Completion of PROJ 110 with a 2.0 or better.

PROJ 231

Project Risk Management [RE] • 5.0 Credits

Provides additional knowledge and skills for identifying project risks, analyzing risks, and risk responses. Addresses both quantitative and qualitative analysis, risk monitoring and control techniques, risk probability, and risk impacts. **Prerequisite:** Completion of PROJ 110 with a 2.0 or better.

PROJ 240

Emerging Project Management Practices [RE] • 5.0 Credits

This class presents emerging practices related to project management that are not covered in the existing curriculum. Topics relate to cutting-edge technical discipline knowledge, tools, systems, processes, procedures, techniques, strategies/approaches, and/or emerging theories in project/program/portfolio management. Class must be passed with a 2.0 or better to count for AAS in Project Management degree. **Prerequisite:** Completion of PROJ 110 and PROJ 130 both with a 2.0 or better.

PROJ 241

Project Management Capstone [RE] • 5.0 Credits

Integrates all the various project management knowledge and skills learned in previous courses into a simulated project(s) including project initiation, planning, execution, and monitoring/control activities in a team environment. Includes evaluation of project decisions to identify improvement opportunities. **Prerequisite:** Completion of either PROJ 120 or PROJ 150, and PROJ 130, PROJ 211, PROJ 222, PROJ 230, and PROJ 231, all with a 2.0 or better.

PROJ 270

Project Management Internship [RE] • 1.0–5.0 Credits

Designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary.

Courses

Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. Instructor permission is required to enroll. Grade is pass/no credit.

PROJ 299

Special Studies [RE] • 1.0–5.0 Credits

A class used to explore new coursework.

PROJ 310

Project Contracts & Legal Issues [RE] • 5.0 Credits

Develops concepts beyond PROJ 211 dealing specifically with contracts including advanced contract administration topics such as monitoring/change control and claims. Also addresses project management legal issues. **Prerequisite:** Completion of PROJ 211 with a 2.0 or better.

PROJ 320

Project Monitoring, Control, & Earned Value [RE] • 5.0 Credits

Develops monitoring and control issues including earned value management concepts and skills. **Prerequisite:** Completion of PROJ 130 with a 2.0 or better.

PROJ 340

Advanced Emerging Project Management Practices [RE] • 5.0 Credits

This class presents advanced emerging practices related to project management that are not covered in the existing curriculum. Topics chosen relate to cutting-edge technical discipline knowledge, tools, systems, processes, procedures, techniques, strategies/approaches, and/or emerging theories in project/program/portfolio management. Class must be passed with a 2.0 or better to count for BAS in Project Management degree. **Prerequisite:** Completion of PROJ 110 and PROJ 130 both with a 2.0 or better.

PROJ 370

Project Management Internship [RE] • 1.0–5.0 Credits

Designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. Instructor permission is required to enroll. Grade is pass/no credit.

PROJ 411

Advanced Microsoft Project [RE] • 5.0 Credits

Develops advanced schedule concepts and practices using Microsoft Project software, beyond those learned in PROJ 130, including topics such as resource leveling, critical path management, baselining, and progress reporting. The class utilizes scenarios to be addressed using the software. **Prerequisite:** Completion of PROJ 130 with a 2.0 or better.

PROJ 430

Leadership and Human Resources [RE] • 5.0 Credits

This course integrates core concepts of project communication and emotional intelligence into two critical components of effective project management. The two components surround leadership and human resource dynamics. On the leadership side, the nuances of personal and stakeholder dynamics are highlighted. According to research, both of these critical components heavily influence successful project execution. The skills for this course are developed through personal assessments, discussion board assignments, quizzes, and in-class collaboration. **Prerequisite:** Completion of PROJ 230 and CMST 415, both with a 2.0 or better.

PROJ 470

Project Management Internship [RE] • 1.0–5.0 Credits

Designed to provide students with major-related, supervised, evaluated practical training work experiences which may be paid or voluntary. Students are graded on the basis of documented learning acquired through hands-on new experiences in an actual work setting. Instructor permission is required to enroll. Grade is pass/no credit.

PROJ 480

Advanced Project Management Capstone [RE] • 5.0 Credits

Integrates all the various project management knowledge and skills learned in previous courses into a simulated project(s) including project initiation, planning, execution, and monitoring/control activities in a team environment. This course includes evaluation of project decisions to identify improvement opportunities. **Prerequisite:** Completion of PROJ 241, PROJ 310, PROJ 320, PROJ 411, and PROJ 430, all with a 2.0 or better.

Psychology

PSYC& 100

General Psychology [S/B] • 5.0 Credits

Formerly PSY 101, PSYC& 100
Introduction to the scientific study of human behavior and mental processes. Topics include major psychological theory, learning, neuropsychology, consciousness, cognition, memory, and research methods.

PSYC 103

Applied Psychology • 3.0 Credits

Formerly PSY 100, PSYC 103
Designed to meet requirements for students graduating with vocational and technical degrees. The application of psychology in the workplace and the development of human relations skills is emphasized.

PSYC 106

Child Growth & Development • 3.0 Credits

Formerly PSY 106, PSYC 106
This course provides an overview of all aspects of child growth and the developmental stages of children from conception to adolescence, including the physical, cognitive, linguistic, emotional, mental, social, and personality development of the child. Provides an understanding of the things and situations that can affect how a child behaves.

PSYC& 180

Human Sexuality • 5.0 Credits

Formerly PSY 230, PSYC& 180
A survey of human sexuality from biological, psychological, sociocultural, and sociobiological perspectives. Topics include sexual orientation, sexual dysfunction, and sexually transmitted diseases.

PSYC 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

PSYC& 200

Lifespan Psychology [S/B] • 5.0 Credits

Formerly PSY 240, PSYC& 200
A comprehensive survey of psychological development of the human from conception to death using the biopsychosocial approach. **Prerequisite:** Completion of PSYC& 100 with a 0.7 or higher.

Courses

PSYC 201

Social Psychology [S/B] • 5.0 Credits

Formerly PSY 201, PSYC 201

This course will provide students with an introduction to the field of social psychology, a subfield of the science of psychology that focuses on the perceptions, thoughts, feelings, and behaviors of individuals and groups within a social context. As this is a survey course, this class will give you a broad overview of the major theories and findings within social psychology. It is recommended that students complete PSYC& 100 prior to enrollment.

PSYC 205

Psychology of Adjustment • 5.0 Credits

Formerly PSY 205, PSYC 205

A study of important findings of modern psychology as they relate to adjustment: social development, personality theory, motivation, mental health, and resources for personal growth.

PSYC 209

Fundamentals of Psychological Research [S/B] • 5.0 Credits

Covers psychological research methodology and techniques. Topics include the logic of hypothesis testing, experimental design, research strategies and techniques, fundamentals of scientific writing, evaluation of research literature in psychology, and ethical issues in psychological research. Students learn to apply computer software to data collected in psychological research, and participate in a class research project.

Prerequisite: Completion of PSYC& 100 with a 0.7 or higher.

PSYC 217

Forensic Psychology • 5.0 Credits

Introduces students to the interface of psychology and the law. The applications of psychological theory, research, methods, and expertise to issues that come before the legal system are the focus of this course. Topics include forensic assessment; competency and insanity; dangerousness and psychopathy; domestic violence; profiling; child abuse; and sex offenders. Legal standards regarding insanity, civil commitment, and eye-witness and expert testimony will be reviewed.

PSYC& 220

Psychological Disorders [S/B] • 5.0 Credits

Formerly PSY 202, PSYC& 220

Explores the conceptualization of abnormality and mental disorders from sociocultural, biological, psycho-dynamic, cognitive, and behavioral perspectives. Describes maladaptive mental disorders as well as their incidence and treatment. **Prerequisite:** Completion of PSYC& 100 with a 1.0 or higher.

PSYC 270

Health Psychology [PE] • 5.0 Credits

An overview of the psychological, behavioral, and social factors in health and disease. The biopsychosocial approach integrates the understanding and application of biological, psychological, and social factors as they relate to one's health and overall well-being. Some topics covered include stress and wellness, the adoption of healthy behaviors, and the avoidance of maladaptive behaviors. It is recommended that students complete PSYC& 100 prior to enrollment.

PSYC 280

Positive Psychology • 5.0 Credits

Historically, psychology has been somewhat negative in orientation, through an emphasis on human weaknesses and liabilities, abnormalities, developmental difficulties, pathology, and treatment modalities. Mental illness, rather than mental health, has been a primary focus for research

and practice. This course describes how the scope of psychology has recently been broadened to understand positive emotion, build strength and virtue, and provide a framework for creating what Aristotle called the good life. Topics include happiness (subjective well-being, positive emotions), optimal performance, personal fulfillment, optimal wellness/medical health, emotional intelligence, creativity, optimism, hope, self-efficacy, goals and life commitments, wisdom, spirituality, meaning and purpose in life, and the civic virtues. **Prerequisite:** Completion of PSYC& 100 with a 0.7 or higher.

PSYC 297

Field Experience • 1.0–3.0 Credits

Students work as volunteers in a community agency and complete a journal and report (usually 1 credit). **Prerequisite:** Completion of PSYC& 100 with a 0.7 or higher, and instructor permission.

PSYC 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

Radiation Protection Technician

RPT 111

Radiation Fundamentals [RE] • 5.0 Credits

This course provides future radiological protection technicians with an overview of radioactivity, sources of radiation, and radioactive decay. Emphasis is placed on plant safety, radiological hazards, and radioactivity containment. **Prerequisite:** Students must be accepted into CBC's Nuclear Technology program prior to enrollment.

RPT 121

Radiation Monitoring [RE] • 5.0 Credits

Principles of radiation detection and measurement principles. Application of radiological survey and analysis instruments, sample collection equipment, and calibration sources and equipment. **Prerequisite:** Completion of RPT 111 with a 0.7 or higher, or concurrent enrollment, or instructor permission.

RPT 131

Radiation Effects [RE] • 5.0 Credits

Radiation biology, radiation effects on simple chemical systems, biological molecules, cells, organisms, and humans. Stochastic vs. deterministic effects, units of exposure, dose and dose equivalent, external dosimetry, internal dosimetry, control of external and internal exposure, detector and instrumentation systems for measuring dose. **Prerequisite:** A grade of 0.7 or higher in either RPT 111 or RPT 121, or instructor permission.

RPT 141

Radioactive Materials Handling [RE] • 5.0 Credits

Radioactive material control and methods to minimize and control external exposure and airborne radioactivity. **Prerequisite:** Completion of RPT 111 with a 0.7 or higher.

RPT 211

Radiological Safety and Response [RE] • 5.0 Credits

This course focuses on contamination control and appropriate responses to radiological events. **Prerequisite:** Completion of RPT 111 with a 0.7 or higher.

Courses

RPT 222

Radiation Protection [RE] • 5.0 Credits

Practical applications and demonstrations of radiation protection and health physics. Radiological protection standards, contamination control, radiological incident evaluation and control, decontamination, and environmental monitoring. **Prerequisite:** Completion of RPT 111 with a 0.7 or higher.

Radiologic Technology

RATEC 102

Radiographic Physics [RE] • 5.0 Credits

This course offers an in-depth exploration of radiation principles, including matter and energy dynamics, electricity, and electromagnetism. Students will delve into x-ray technology, covering circuits, tubes, equipment, and production. Key topics also encompass x-ray prime factors, interactions, and radiation safety. Designed for concise yet comprehensive coverage, this course equips participants with essential knowledge and practical insights into radiologic technology. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. **Prerequisite:** Acceptance into CBC's Radiologic Technology program.

RATEC 103

Principles of Radiographic Exposure [RE] • 3.0 Credits

This course delves into digital imaging in radiography, covering spatial and contrast resolution, image signal characteristics, and the essentials of pixel and detector technology. Learn about the technicalities of sampling frequency, matrix size, bit depth, and the critical role of modulation transfer function. Compare plain film, computed, and digital radiographic imaging, including their pre/post-processing features. Understand how technical factors influence detector exposure and the significance of informatics in medical imaging. A concise yet thorough exploration tailored for a deep understanding of digital imaging's technical considerations. \$10.72 per quarter malpractice insurance fee. **Prerequisite:** Acceptance into CBC's Radiologic Technology program.

RATEC 104

Advanced Radiographic Procedures [RE] • 3.0 Credits

This course focuses on radiographic positioning and anatomy for the bony thorax, airway, skull, facial bones, sinuses, mandible, and covers fluoroscopic procedures for the urinary, digestive, and biliary systems. It includes lectures and labs on contrast exams and fluoroscopy in the operating room. Weekly, students receive two hours of lecture and two hours of lab, learning to apply radiation protection, prepare patients, adjust technique factors, and evaluate radiographs for diagnostic quality, all while upholding professional standards. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. **Prerequisite:** Acceptance into CBC's Radiologic Technology program.

RATEC 105

Introduction to Radiographic Technique [RE] • 2.0 Credits

Explore radiographic image evaluation and quality management in this course. Learn to assess image quality, understanding exposure indicators, resolution, and artifacts. Dive into x-ray quality concepts, image receptor exposure, and diagnostic image critique. Study mobile imaging, including portable x-rays and C-arms, plus fluoroscopy unit functions and radiation safety. Perfect for enhancing skills in radiography and quality assurance. \$10.72 per quarter malpractice insurance fee. **Prerequisite:** Acceptance into CBC's Radiologic Technology program.

RATEC 106

Computed Imaging [RE] • 2.0 Credits

Presents computed imaging in comparison to screen-film technology. Topics include identifying components, understanding how they affect the image, and quality control. **Prerequisite:** Acceptance into CBC's Radiologic Technology program.

RATEC 107

Positioning and Related Anatomy I [RE] • 3.0 Credits

This course offers a foundational exploration into the realms of body planes, anatomical landmarks, medical terminology, and the essentials of radiographic techniques. With a blend of theoretical knowledge and practical skills, students will gain hands-on experience in positioning and imaging for the pelvis, thoracic, and abdominal cavities. The curriculum is structured around weekly sessions comprising two one-hour lectures and a two-hour lab, designed to foster a deep understanding of radiographic equipment, body positions, planes, projections, and the anatomical intricacies of key body cavities. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. **Prerequisite:** Acceptance into CBC's Radiologic Technology program.

RATEC 108

Positioning and Related Anatomy II [RE] • 3.0 Credits

This course offers an in-depth exploration of the anatomy and radiographic positioning techniques for the upper and lower extremities, blending theoretical knowledge with practical application. Through a structured format of weekly two one-hour lectures and two-hour lab sessions, students will learn to describe and identify the intricate anatomical structures and execute precise radiographic positioning for these areas. Emphasis is placed on delivering proper patient care, especially for trauma patients, and performing specialized radiographic techniques tailored to the extremities. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. **Prerequisite:** Acceptance into CBC's Radiologic Technology program.

RATEC 109

Positioning and Related Anatomy III [RE] • 3.0 Credits

This course offers hands-on training in radiographic positioning and anatomy for the shoulder girdle, lumbar spine, sacrum, coccyx, and cervical and thoracic spine. Through weekly two one-hour lectures and two-hour lab sessions, students will learn to identify anatomical structures, apply shielding, prepare and position patients (including trauma cases), and adjust radiographic techniques for optimal imaging. The course emphasizes professional ethics, patient care, and evaluating and adjusting radiographs for diagnostic quality, preparing students for excellence in radiologic technology. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. **Prerequisite:** Acceptance into CBC's Radiologic Technology program.

RATEC 111

Clinical Education I [RE] • 5.0 Credits

Second in a series of supervised clinical education experiences. Students are assigned to clinical sites, 16 hours per week. Students observe and perform diagnostic radiologic procedures. \$10.72 per quarter malpractice insurance fee. \$25.65 dosimetry badge fee. **Prerequisite:** Acceptance into CBC's Radiologic Technology program.

RATEC 112

Clinical Education II [RE] • 5.0 Credits

Third in a series of supervised clinical education experiences. Students are assigned to clinical sites, 16 hours per week. Specific performance objectives are established for each student. \$10.72 per quarter malpractice

Courses

insurance fee. \$25.65 dosimetry badge fee. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 113

Clinical Education IV [RE] • 13.0 Credits

Clinical Education IV advances the series of clinical education with a focus on enhancing the breadth of radiologic skills and responsibilities. As the fourth course, it aims to consolidate students' proficiency in more complex radiographic procedures, patient care, and interprofessional collaboration within a healthcare setting, preparing them for the transition into professional practice. \$10.72 per quarter malpractice insurance fee. \$25.65 dosimetry badge fee. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 114

Supplemental Clinical Practicum I [RE] • 1.0 Credit

An optional course that offers supervised clinical education experiences between the fall and winter quarter of the first program year. Students are assigned to clinical sites, 16 hours per week. Students observe and perform diagnostic radiologic procedures. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 120

Nursing Procedures [RE] • 2.0 Credits

Presents basic nursing procedures emphasizing the role of the radiologic technologist in various patient-care situations. Incorporates seven hours of AIDS and bloodborne pathogen education. Healthcare provider BLS is included. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 121

Patient Care [RE] • 2.0 Credits

Examines patient care and assessment in the imaging department, as well as in other special care units. Topics include medications and their administration, acute patient care, bedside radiography, and patient lines and tubes. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 127

Introduction to Sectional Anatomy [RE] • 2.0 Credits

Expands knowledge of anatomy through the introduction of multiple plane orientations. Students review normal anatomy of the brain, chest, abdomen, pelvis, neck, and spine. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 199

Special Studies [RE] • 1.0–10.0 Credits

A class used to explore new coursework. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 207

Concept Integration [RE] • 2.0 Credits

Prepares students for the American Registry of Radiologic Technologists exam through a comprehensive review. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 210

Clinical Education III [RE] • 13.0 Credits

Clinical Experience III is the third in our series of supervised clinical education, offering an immersive rotation where students engage in an expanded set of skills and responsibilities. Tailored performance objectives

guide each student's development, enhancing their practical expertise in radiologic technology and preparing them for complex roles in healthcare environments. \$10.72 per quarter malpractice insurance fee. \$25.65 dosimetry badge fee. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 212

Clinical Education V [RE] • 8.0 Credits

Clinical Education V is the penultimate clinical experience in the series, advancing students' proficiency in radiologic practices. Students engage in focused clinical rotations, applying their skills to meet individual performance objectives. This stage is designed to refine their competency in specialized imaging procedures, patient care, and interdisciplinary collaboration, preparing them for their final transition into professional practice. \$10.72 per quarter malpractice insurance fee. \$25.65 dosimetry badge fee. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 213

Clinical Education VI [RE] • 8.0 Credits

Clinical Education VI, as the final clinical course, provides a capstone experience for radiologic technology students. This course solidifies students' competencies in all radiographic procedures and patient care protocols. It emphasizes autonomy in clinical decision-making, mastery in advanced imaging techniques, and readiness for entry into the professional environment. Students demonstrate integrative knowledge and skills, reflecting their full transition from learners to healthcare professionals ready to contribute to a dynamic workplace. \$10.72 per quarter malpractice insurance fee. \$25.65 dosimetry badge fee. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 214

Supplemental Clinical Practicum II [RE] • 1.0 Credit

An optional course that offers supervised clinical education experiences between the fall and winter quarter of the second program year. Students are assigned to clinical sites, 16 hours per week. Students observe and perform diagnostic radiologic procedures. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 220

Pathology I [RE] • 3.0 Credits

Introduces changes that occur in disease and injury, with application to radiologic technology. Topics include respiratory, skeletal, gastrointestinal, and urinary systems. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 221

Pathology II [RE] • 2.0 Credits

Continues RATEC 220. Students become familiar with the etiology, symptoms, prognosis, and imaging of disease processes of the cardiovascular, nervous, hemopoietic, endocrine, and reproductive systems. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

RATEC 240

Radiation Biology and Protection [RE] • 3.0 Credits

Explores types of radiation, interaction of radiation with matter, and the effects of those interactions in human tissue. Students learn methods and principles of radiation protection for both patient and technologist. \$10.72 per quarter malpractice insurance fee. **Prerequisite: Acceptance into CBC's Radiologic Technology program.**

Courses

RATEC 296

Special Topics In Radiology [RE] • 2.0 Credits

Allows study of special topics that may be necessary to update students in the field of radiologic technology. \$10.72 per quarter malpractice insurance fee. **Prerequisite:** Acceptance into CBC's Radiologic Technology program.

RATEC 299

Special Studies [RE] • 1.0–10.0 Credits

A class used to explore new coursework. \$10.72 per quarter malpractice insurance fee. **Prerequisite:** Acceptance into CBC's Radiologic Technology program.

Reading

RDG 91

Reading Skills [RE] • 5.0 Credits

Reinforces essential reading comprehension skills: recognizing vocabulary in context, locating main ideas, understanding supporting details, identifying transitions, making inferences, outlining and summarizing, and recognizing patterns of organization. This class gives students an opportunity to practice and improve these strategies in a supportive environment. Grade is pass/no credit. **Prerequisite:** Appropriate placement or teacher recommendation.

RDG 99

College Reading Skills [RE] • 5.0 Credits

Breaks reading down into the skills necessary for academic success: learning vocabulary in context, locating main ideas and supporting details, and recognizing inferences, transitions, patterns of organization, purpose and tone, support for argument, and fact and opinion. Grade is pass/no credit. **Prerequisite:** Appropriate placement, or completion of RDG 91 with a 0.7 or better, or teacher recommendation.

RDG 115

Vocabulary Improvement [RE] • 1.0–3.0 Credits

This class teaches students to advance their vocabulary for college-level writing using a words-in-context approach.

RDG 199

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework.

RDG 299

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework.

Respiratory Therapy

RT 301

Fundamentals of Respiratory Care I [RE] • 8.0 Credits

This introductory course immerses students in the essentials of respiratory therapy practice, providing a comprehensive overview of the respiratory care field. Students will learn core skills, including proper use of personal protective equipment (PPE), maintaining personal hygiene, and handling basic respiratory therapy equipment. Emphasis is placed on patient safety, introductory patient assessment techniques, and fundamental oxygen delivery methods. This course establishes the foundational knowledge and practical skills necessary for success in more advanced respiratory care training and clinical settings. **Prerequisite:** Acceptance into CBC's Respiratory Therapy program.

RT 302

Cardiopulmonary Anatomy & Physiology [RE] • 6.0 Credits

This course offers an in-depth study of the structure and function of the cardiopulmonary system. Topics include the respiratory and circulatory systems, gas exchange mechanisms, blood gas analysis, and the regulatory aspects of breathing and circulation. **Prerequisite:** Acceptance into CBC's Respiratory Therapy program.

RT 303

Fundamentals of Respiratory Care II [RE] • 8.0 Credits

Continuing from RT 301, this course delves into intermediate respiratory care techniques, including non-invasive ventilation, patient assessment, and management of acute respiratory conditions. Emphasis on integrating clinical decision-making with theoretical knowledge. **Prerequisite:** Completion of RT 301, RT 311, and RT 302 with a grade of 2.0 or better.

RT 304

Respiratory Therapy Pharmacology [RE] • 6.0 Credits

This course explores pharmacological agents in respiratory care, including bronchodilators, corticosteroids, and anti-infectives. Emphasis on pharmacodynamics, dosing, side effects, and clinical application in respiratory disorders. **Prerequisite:** Completion of RT 301, RT 311, and RT 302 with a grade of 2.0 or better.

RT 305

Fundamentals of Respiratory Care III [RE] • 6.0 Credits

Building on previous courses, this class addresses complex respiratory care practices, focusing on critical care, advanced patient management strategies, and ethical considerations in respiratory therapy. **Prerequisite:** Completion of RT 303, RT 313, and RT 304 with a grade of 2.0 or better.

RT 306

Advanced Respiratory Pathophysiology [RE] • 3.0 Credits

An in-depth exploration of respiratory pathophysiology, this course examines the underlying mechanisms and clinical manifestations of various pulmonary diseases, emphasizing their impact on respiratory function and patient care. **Prerequisite:** Completion of RT 303, RT 313, and RT 304 with a grade of 2.0 or better.

RT 311

Fundamentals of Respiratory Care I Lab [RE] • 3.0 Credits

A practical laboratory complementing RT 301, this course provides hands-on experience with basic respiratory care equipment and procedures. Students will engage in simulations that reinforce theoretical concepts, focusing on proper equipment use and patient care techniques. \$95 respiratory therapy lab supply fee. **Prerequisite:** Acceptance into CBC's Respiratory Therapy program.

RT 313

Fundamentals of Respiratory Care II Lab [RE] • 3.0 Credits

A hands-on lab experience complementing RT 303. Focuses on intermediate respiratory care procedures, non-invasive ventilation setups, and patient management simulations, enhancing technical and decision-making skills. \$95 respiratory therapy lab supply fee. **Prerequisite:** Completion of RT 301, RT 311, and RT 302 with a grade of 2.0 or better.

RT 315

Fundamentals of Respiratory Care III Lab [RE] • 3.0 Credits

An advanced laboratory course that reinforces and expands on the concepts from RT 305. Students engage in simulated critical care

Courses

scenarios, mastering advanced respiratory care techniques and patient management strategies. \$95 respiratory therapy lab supply fee.

Prerequisite: Completion of RT 303, RT 313, and RT 304 with a grade of 2.0 or better.

RT 327

Respiratory Therapy Clinical I [RE] • 4.0 Credits

The first clinical practicum, offering immersive experience in real-world respiratory care settings. Emphasis on applying theoretical knowledge to patient care, diagnostic procedures, and therapeutic interventions. \$10.72 malpractice insurance fee. **Prerequisite:** Completion of RT 303, RT 313, and RT 304 with a grade of 2.0 or better.

RT 401

Fundamentals of Respiratory Care IV [RE] • 5.0 Credits

This course focuses on specialized areas of respiratory care, including pediatric and neonatal care, advanced diagnostic techniques, and the latest trends in respiratory therapy. **Prerequisite:** Completion of RT 305, RT 315, RT 306, and RT 327 with a grade of 2.0 or better.

RT 402

Electrocardiography [RE] • 2.0 Credits

An introduction to electrocardiography, this course covers the basics of ECG technique and interpretation. Students will learn to recognize normal and abnormal heart rhythms and understand their clinical significance. **Prerequisite:** Completion of RT 305, RT 315, RT 306, and RT 327 with a grade of 2.0 or better.

RT 403

Fundamentals of Respiratory Care V [RE] • 6.0 Credits

This advanced course covers comprehensive respiratory care in various clinical settings, including critical care, long-term care, and rehabilitation. Focus on patient assessment, advanced therapeutic techniques, and interprofessional collaboration. **Prerequisite:** Completion of RT 401, RT 411, RT 402, RT 412, and RT 423 with a grade of 2.0 or better.

RT 405

Respiratory Therapy Capstone Project [RE] • 4.0 Credits

This course requires senior respiratory therapy students to develop and complete a research project or clinical case study. The project demonstrates their mastery of respiratory care principles and their ability to apply knowledge to real-world situations. **Prerequisite:** Completion of RT 424 with a grade of 2.0 or better.

RT 407

Professional Credentialing Preparation [RE] • 4.0 Credits

This course prepares students for professional credentialing exams in respiratory care. It includes comprehensive review sessions, practice exams, and strategies for successful test-taking, covering all major aspects of respiratory therapy. **Prerequisite:** Completion of RT 405 and RT 426 with a grade of 2.0 or better.

RT 411

Fundamentals of Respiratory Care IV Lab [RE] • 3.0 Credits

This lab course accompanies RT 401 and provides practical experience in specialties including pediatric and neonatal respiratory care techniques, along with advanced diagnostic procedures in respiratory therapy. \$95 respiratory therapy lab supply fee. **Prerequisite:** Completion of RT 305, RT 315, RT 306, and RT 327 with a grade of 2.0 or better.

RT 412

Electrocardiography Lab [RE] • 1.0 Credit

Complementing RT 402, this lab focuses on hands-on ECG acquisition and analysis. Students will practice correct lead placement, ECG interpretation, and troubleshooting common ECG acquisition problems. \$95 respiratory therapy lab supply fee. **Prerequisite:** Completion of RT 305, RT 315, RT 306, and RT 327 with a grade of 2.0 or better.

RT 413

Fundamentals of Respiratory Care V Lab [RE] • 3.0 Credits

This lab complements RT 403, offering hands-on experience with advanced respiratory care equipment and techniques in diverse clinical scenarios. \$95 respiratory therapy lab supply fee. **Prerequisite:** Completion of RT 401, RT 411, RT 402, RT 412, and RT 423 with a grade of 2.0 or better.

RT 423

Respiratory Therapy Clinical II [RE] • 3.0 Credits

This clinical practicum provides students with hands-on experience in respiratory care. Under supervision, students will develop foundational skills in patient assessment, respiratory diagnostics, and therapeutic techniques, including pulmonary function. Emphasis is placed on translating theoretical knowledge into practical application, fostering competence in entry-level respiratory care procedures, documentation, and professional communication. \$10.72 malpractice insurance fee.

Prerequisite: Completion of RT 305, RT 315, RT 306, and RT 327 with a grade of 2.0 or better.

RT 424

Respiratory Therapy Clinical III [RE] • 8.0 Credits

In this clinical practicum, students are immersed in real-world respiratory care settings. Emphasis on applying theoretical knowledge to patient care, diagnostic procedures, and therapeutic interventions. \$10.72 malpractice insurance fee. **Prerequisite:** Completion of RT 403 and RT 413 with a grade of 2.0 or better.

RT 426

Respiratory Therapy Clinical IV [RE] • 8.0 Credits

A continuation of the clinical series, this course provides advanced clinical experiences in respiratory care. Students will engage in patient management in diverse settings, focusing on critical care scenarios and advanced respiratory support techniques. \$10.72 malpractice insurance fee. **Prerequisite:** Completion of RT 424 with a grade of 2.0 or better.

RT 428

Respiratory Therapy Clinical V [RE] • 8.0 Credits

The final clinical practicum in the series, this course offers students in-depth, hands-on experiences in specialized areas of respiratory care. Emphasis is on integrating all learned skills and knowledge in the management of complex respiratory cases in various clinical settings. \$10.72 malpractice insurance fee. **Prerequisite:** Completion of RT 405 and RT 426 with a grade of 2.0 or better.

Social Science

SSCI 199

Special Studies [RE] • 1.0–15.0 Credits

A class used to explore new coursework.

Courses

SSCI 290

Social Research Methods [S/B] • 4.0 Credits

Introduces the theory, methodology, and some of the specific techniques of social science research. Students learn how to compose research questions, review the literature, make measurements and obtain data, perform basic analyses of qualitative and quantitative data, and write up research findings. This course also explores the philosophical underpinnings and ethical considerations involved in social research. Intended for students majoring in the social or behavioral sciences.

SSCI 291

Social Research Methods Lab [S/B] • 1.0 Credit

Lab to be taken concurrently with SSCI 290. \$11.40 lab fee.

Social Work

SOWK 101

Introduction to Social Work • 5.0 Credits

Formerly HS 101, SOWK 101

An overview of social work experience including history, purpose and tasks, practice settings, and future trends of social work profession.

SOWK 103

Social Work Ethics [RE] • 5.0 Credits

Formerly HS 103, SOWK 103

The course is designed to review, discuss, and evaluate ethics as it pertains to the field of Social Work. The course will cover current ethical codes, ethical decision making, and how students' personal beliefs, attitudes, biases, and values impact their role as helping professionals.

SOWK 201

Counseling Theory and Practice [RE] • 5.0 Credits

Formerly HS 201, SOWK 201

This course is an overview of major theories of counseling and psychotherapy. Students will be exposed to a wide variety of theories and have the opportunity to apply those approaches in classroom exercises and role-playing situations. Students will have the opportunity to develop a unique style of counseling, utilizing effective techniques with an emphasis on multicultural awareness. **Prerequisite: Completion of SOWK 101 with a 0.7 or higher, or concurrent enrollment.**

Sociology

SOC& 101

Intro to Sociology [S/B] • 5.0 Credits

Formerly SOC 101, SOC& 101

An introduction to the scientific study of society. Emphasis on relationship of the individual to society, inequality, social institutions, and deviant behavior.

SOC 110

Gender, Media, & Popular Culture [S/B] • 5.0 Credits

This course explores how men and women, as well as the qualities of "masculinity" and "femininity," are portrayed in print, visual, and news media, as well as the relationship between gender and cultural experiences, such as technology, sports, and violence. **Prerequisite: This course is cross-listed with WS 110. Students completing SOC 110 may not receive graduation credit for WS 110.**

SOC 115

Intro to Middle East History & Society [S/B] • 5.0 Credits

Formerly HIS 115, HIST 115, SOC 115

This course will introduce students to the sociology and history of the Middle East as one of the most diverse regions in the world. Specifically, it examines the historical development as well as the current transformation of social, cultural, economic, and political systems of Middle Eastern societies. Topics will be examined using a macro-sociological approach which analyzes both their internal dynamics and their role and place in the world. **Prerequisite: This course is cross-listed with HIST 115. Students completing SOC 115 may not receive graduation credit for HIST 115.**

SOC 150

Marriage, Family, and Relationships [S/B] • 5.0 Credits

The family is discussed in broad sociobiological, historical, and comparative perspectives. Modern family life is analyzed after conceptual frameworks have been developed.

SOC 160

Gender Studies [S/B] • 5.0 Credits

Societies create many roles for their members, depending upon technology, organization, and the distribution of power. Some of those roles are assigned on the basis of sex. This course examines the social creation of those gender roles assigned to sex and sexual behavior, and explores the inner life of acting out those roles.

SOC 197

Field Experience • 1.0–3.0 Credits

Arrangements are made for students to receive actual field experience. The number of hours per week determines the credit enrollment.

Prerequisite: Completion of SOC& 101 with a 0.7 or higher, and instructor permission.

SOC 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

SOC& 201

Social Problems [S/B] • 5.0 Credits

Formerly SOC 201, SOC& 201

Examines conditions that adversely affect the quality of life in the United States. Deviant behavior (crime, alcoholism, drug abuse, sexual deviance, mental illness) and problems of inequality (including poverty, racism, and sexism) are to be covered.

SOC 220

Globalization [S/B] • 5.0 Credits

Formerly ICS 220, SOC 220

Sociological analysis of the global interconnectedness of things, people, and ideas. Topics include economic development and trade, immigration and citizenship, human rights, transmission of culture and knowledge, and new technologies including the internet. Emphasis on understanding the significance of social forces and inequalities in shaping globalization processes. **Prerequisite: This course is cross-listed with ICS 220. Students completing SOC 220 may not receive graduation credit for ICS 220.**

SOC 221

Sociology of Deviance and Crime [S/B] • 5.0 Credits

This course introduces students to the sociological study of social behavior that violates society's accepted norms, namely, deviance and crime (hereafter: deviance). Specifically, the course will help students understand types of crime, non-criminal deviant behavior (such as mental

Courses

illness and addiction) and how society responds at various levels to these behaviors. Students will learn about the theoretical approaches (labeling theory, differential association theory, control theory, for example) that explain the causes, extent and consequences of deviance in society. Student will also learn how deviance relates to aspects of class, ethnicity and race and to various social institutions, such as family, media, and power.

SOC 230

Human Sexuality • 3.0 Credits

A survey of human sexuality from biological, psychological, sociocultural, and sociobiological perspectives. Topics include sexual orientation, sexual dysfunction, and sexually transmitted diseases.

SOC 269

Sociology of World Cinema [S/B] • 5.0 Credits

Introduces one of the most vital and significant aspects of cultural life in the world. The world cinema is central to an artistic self-awareness that reflects a range of dominant social and cultural issues. Through a number of feature films from the Arab, Iranian, Israeli, Turkish, Chinese, Indian, French, Italian, German, Mexican, and American cinema, this course takes these cultural products as the aesthetic expressions of some enduring social, cultural, political, and economic concerns in contemporary world societies. A total of about ten feature films are shown and discussed in the course of the quarter.

SOC 297

Field Experience • 1.0–3.0 Credits

Arrangements are made for students to receive actual field experience. The number of hours per week determines the credit enrollment.

Prerequisite: Completion of SOC& 101 with a 0.7 or higher, and instructor permission.

SOC 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

SOC 305

Cybercrime: A Sociological Perspective [S/B] • 5.0 Credits

Cybercrime is a deviant behavior involving the illegal use of computer technology and the internet against individuals, social groups, and institutions. This course examines cybercrime and its various types (such as identity theft, bullying, and cyber-terrorism) as a social problem in the United States and the world. The goal of this course is to introduce students to the theories and methods used by sociologists to understand the different dimensions of cybercrime including their causes, costs, and challenges to society, and possible solutions. Topics include: cyber-sociology, crime and deviance, types of cybercrime, challenges to social order, society's responses to cybercrime, and socio-economic and ethical consequences of cybercrime. **Prerequisite:** Acceptance into a BAS/BSN program, completion of a two-year degree or equivalent, or instructor approval. It is also recommended that students complete either SOC& 101 or SOC& 201 prior to enrollment.

SOC 334

Sociology of Health and Illness • 5.0 Credits

This course introduces students to the sociology of medicine and healthcare. Specifically, this course systematically examines factors that affect health and illness, social epidemiology of disease, the organization of health care systems, strain on healthcare systems, as well as other societal factors affecting the health status of groups and individuals, with a special focus on minority groups. **Prerequisite:** Acceptance into a BAS/

BSN program, completion of a two-year degree or equivalent, or instructor approval.

Spanish

SPAN 110

Beginning Spanish for Professionals [H] • 5.0 Credits

Formerly SPA 110, SPAN 110

A beginning-level Spanish course designed for those who interact with Spanish-speaking people professionally, as customers, clients, patients, or co-workers. This course is also intended for students who intend to follow business, service, legal, or medical professions. This class begins with basic Spanish language study, followed by activities specifically designed to meet the individual needs and professions of the participants. No previous Spanish is required.

SPAN 111

Intermediate Spanish for Professionals [H] • 5.0 Credits

Formerly SPA 111, SPAN 111

The second level of Spanish for Professionals, is a course designed for those who interact with Spanish-speaking people professionally, as customers, clients, patients, or co-workers. This course is also intended for students who intend to follow business, service, legal, or medical professions. Continuing basic Spanish instruction is followed by activities specifically designed to meet the individual needs and professions of the participants. **Prerequisite:** A grade of 0.7 or higher in either SPAN 110 or SPAN& 121, or instructor permission.

SPAN 112

Advanced Spanish for Professionals [H] • 5.0 Credits

Formerly SPA 112, SPAN 112

The third level of Spanish for Professionals, a course designed for those who interact with Spanish-speaking people professionally, as customers, clients, patients, or co-workers. This course is also intended for students who intend to follow business, service, legal, or medical professions. Continuing Spanish language instruction is followed by activities specifically designed to meet the individual needs and professions of the participants. **Prerequisite:** A grade of 0.7 or higher in either SPAN 111 or SPAN& 122, or instructor permission.

SPAN& 121

Spanish I [H] • 5.0 Credits

Formerly SPA 101, SPAN& 121

Introduction to the Spanish language including conversational skills, reading, writing and grammar, and Hispanic culture including geography, customs, daily life, and heritage. Designed for the novice learner of Spanish, with little or no proficiency in the Spanish language. It is recommended that students complete at least ENGL 99 prior to enrollment.

SPAN& 122

Spanish II [H] • 5.0 Credits

Formerly SPA 102, SPAN& 122

Introduction to the Spanish language including conversational skills, reading, writing and grammar, and Hispanic culture including geography, customs, daily life, and heritage. **Prerequisite:** Completion of SPAN& 121 with a 0.7 or higher, or instructor permission.

SPAN& 123

Spanish III [H] • 5.0 Credits

Formerly SPA 103, SPAN& 123

Courses

Introduction to the Spanish language including conversational skills, reading, writing, grammar, Hispanic culture including geography, customs, daily life, and heritage. **Prerequisite: Completion of SPAN& 122 with a 0.7 or higher, or instructor permission.**

SPAN 199

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

SPAN 205

Spanish for Spanish Speakers [H] • 5.0 Credits

Formerly SPA 205, SPAN 205

Native or near-native speakers of Spanish develop and improve reading, writing, and grammar skills in their native language, while learning to appreciate the depth and diversity of Latino culture both in the United States and abroad. Special attention is given to spelling, accents, grammar, and vocabulary of standard Spanish. Students are also introduced to a comprehensive and analytical survey of Spanish and Latin American literature.

SPAN 206

Spanish for Spanish Speakers [H] • 5.0 Credits

Formerly SPA 206, SPAN 206

Designed for native or near-native speakers of Spanish who learn Spanish at home and wish to reactivate their use of the Spanish language, while expanding their academic Spanish language skills and cultural knowledge. Emphasis on speaking, reading, writing, and listening comprehension, in response to students' specific needs. Special attention is given to advanced grammar and vocabulary of standard Spanish.

Prerequisite: Completion of SPAN 205 with a 0.7 or higher, or instructor permission.

SPAN 207

Spanish for Spanish Speakers [H] • 5.0 Credits

Formerly SPA 207, SPAN 207

Designed for native or near-native speakers of Spanish who learn Spanish at home and wish to reactivate their use of the Spanish language, while expanding their academic Spanish language skills and cultural knowledge. Emphasis on speaking, reading, writing, and listening comprehension, in response to students' specific needs. Special attention is given to advanced grammar and vocabulary of standard Spanish. Students are introduced to a comprehensive and analytical survey of Spanish and Latin American literature. **Prerequisite: Completion of SPAN 206 with a 0.7 or higher, or instructor permission.**

SPAN& 221

Spanish IV [H] • 5.0 Credits

Formerly SPA 201, SPAN& 221

Extensive practice in all four language skills (reading, writing, speaking, and listening). The course includes cultural readings and short stories and an in-depth review of basic Spanish grammar, expansion of basic vocabulary, and a broadening of the student's understanding of Hispanic culture. **Prerequisite: Completion of SPAN& 123 with a 0.7 or higher, or instructor permission.**

SPAN& 222

Spanish V [H] • 5.0 Credits

Formerly SPA 202, SPAN& 222

Extensive practice in all four language skills (reading, writing, speaking, and listening). The course includes cultural readings and short stories and an in-depth review of basic Spanish grammar, expansion of basic vocabulary, and a broadening of the student's understanding of Hispanic

culture. **Prerequisite: Completion of SPAN& 221 with a 0.7 or higher, or instructor permission.**

SPAN& 223

Spanish VI [H] • 5.0 Credits

Formerly SPA 203, SPAN& 223

Extensive practice in all four language skills (reading, writing, speaking, and listening). The course includes cultural readings and short stories and an in-depth review of basic Spanish grammar, expansion of basic vocabulary, and a broadening of the student's understanding of Hispanic culture.

SPAN 299

Special Studies • 1.0–15.0 Credits

A class used to explore new coursework.

Spanish Community Interpreting

INTP 101

Introduction to the Interpreting Profession [RE] • 5.0 Credits

This course allows students to explore the interpreting profession, including a variety of professional pathways and specializations. Students will be introduced to the laws and regulations that govern interpreters and the provision of language access. They will learn what interpreters need to know and do to keep themselves safe. They will also begin to understand and apply the codes of ethics and standards of practice that guide interpreter decision making. Learning will be supported by students' observation of professional interpreters at clinical learning sites. This course is open to any student interested in learning more about the interpreting profession; admission to the Spanish Medical Interpreting program is only required for students pursuing the program certificate.

INTP 102

Medical Terminology for Interpreters I [RE] • 5.0 Credits

This course covers the basics of medical terminology in English and Spanish to support effective interpreting. Students will learn about the differences in word choices and idiomatic expressions among regional variants of Spanish. They will learn about body systems and their anatomy and physiology, as well as common diseases, symptoms, medical treatments, and diagnostic testing. Students will also learn about common abbreviations, understand medical terms based on word roots and affixes, and learn about how U.S. health systems operate. This course is open to any bilingual student. Admission to the Spanish Medical Interpreting program is only required for students pursuing the program certificate. This course can be taken concurrently with INTP 101.

INTP 103

Consecutive Interpreting I [RE] • 5.0 Credits

Students will learn about consecutive interpreting and note-taking for interpreters. Students will learn about the role of the community interpreter and how to manage the flow of information in an interpreted encounter. They will explore their own personal culture and beliefs and understand how to support the communication goals of everyone involved in the encounter. Learning will be supported by interpreting under supervision at clinical learning sites.

INTP 104

Modes of Interpreting I [RE] • 5.0 Credits

This course focuses on three important modes for community interpreters - simultaneous interpreting, sight translation, and written translation. Students will explore each mode, learning how and why each is used in community interpreting, and begin to develop their skills. Learning

Courses

will be supported by interpreting at clinical learning sites. **Prerequisite:** Acceptance into CBC's Spanish Medical Interpreting program and completion of INTP 101 and INTP 102 with a 1.5 or better.

INTP 201

Medical Terminology for Interpreters II [RE] • 5.0 Credits

This advanced course in Spanish and English medical terminology for interpreters builds on the terms and concepts learned in Medical Terminology for Interpreters I. Students will learn about specialty medical treatments, procedures and diagnostics, while also learning how to research unknown terms and manage the register of medical terminology. Students will examine the impact of culture on communication, and explore methods of supporting cross-cultural communication in the interpreting encounter. **Prerequisite:** Acceptance into CBC's Spanish Medical Interpreting program and completion of INTP 101 and INTP 102 with a 1.5 or better.

INTP 202

Consecutive Interpreting II [RE] • 5.0 Credits

In this course, students continue to hone their skills in the consecutive interpreting mode and in note-taking for interpreters. Students will work with increasingly complex material and develop their ability to self-monitor for errors and to replicate the register and style of the speaker. They will apply the code of ethics and standards of practice to interpreting scenarios. Students will also learn about how to begin operating as a freelance interpreter in Washington state and maintain their interpreting credentials. Learning will be supported by independent interpreting at clinical learning sites. **Prerequisite:** Acceptance into CBC's Spanish Medical Interpreting program and completion of INTP 103 with a 1.5 or better.

Sterile Processing Technician

SPT 100

Foundations of Sterile Processing [RE] • 6.0 Credits

Formerly HCST 100, SPT 100

This course is designed to prepare students for entry-level opportunities within the central service and material management setting. Fundamentals of sterile processing are discussed in the context of today's diverse perioperative environment. Students learn basic technical concepts within the scope of the central service department. Topics include supply chain management, purchasing and inventory management concepts, recommended standards of practice for instrument and equipment processing, safety regulations, and the impact of effective customer service on quality patient care. \$11.40 lab fee.

Prerequisite: Students must be accepted into the Sterile Processing Technician Program prior to enrolling.

SPT 150

Sterile Processing Clinical [RE] • 12.0 Credits

Formerly HCST 150, SPT 150

This course provides students the opportunity to apply central service and material management concepts within the context of a clinical internship. Students perform technical skills within the scope of the central service department. Skills include cleaning and disinfecting medical devices, preparing items for sterilization, inspecting and assembling surgical instrumentation, operating sterilization equipment, and storing surgical equipment and supplies. \$10.72 per quarter malpractice insurance fee.

Prerequisite: Completion of SPT 100 and HSCI 147 with a 2.0 or better in both.

Surgical Technology

SURG 101

Introduction to Surgical Technology [RE] • 4.0 Credits

Formerly SRGT 101, SURG 101

This course explores fundamental concepts related to perioperative practice and provides a comprehensive introduction into the field of surgical technology. Areas of emphasis include: historical foundations of surgical sciences, role definition and scope of practice, teamwork, operating equipment and instrumentation, aseptic principles, and perioperative case management. **Prerequisite:** Completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.

SURG 102

Perioperative Science [RE] • 5.0 Credits

Formerly SRGT 110, SURG 102

This course surveys perioperative sciences specific to the practice of surgical technology. Topics include information technology, electricity, lasers, minimally invasive surgical applications, interventional radiology applications, physical and environmental hazards, sterile processing and infection control fundamentals, the disease process, and postoperative wound healing. **Prerequisite:** Completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.

SURG 103

Perioperative Patient Care [RE] • 2.0 Credits

Formerly SRGT 160, SURG 103

This course explores the duties and responsibilities of the surgical technologist in the assistant circulator role. Additionally, students are introduced to legal and ethical concepts governing perioperative practices related to surgical technology. Topics include: legal concepts and risk management, professional and medical ethics, communication, HIPAA, patient records, medication handling, open gloving, urinary catheterization, patient positioning, preoperative skin preparation, and emergency patient management. **Prerequisite:** Completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.

SURG 106

Surgical Pharmacology and Anesthesia [RE] • 4.0 Credits

Formerly SRGT 104, SURG 106

This class provides a basic knowledge of the language of pharmacology including: reading, interpreting, and documenting medication orders; systems of measurement and conversions; measuring medications for administration; calculating dosages and solutions; routes of administration for the surgical patient; anesthesia agents and principles of anesthesia administration; and medications used in emergency situations in the operating room. \$11.40 lab fee. **Prerequisite:** Acceptance into the Surgical Technology program and completion of the following with a minimum grade of 2.0: SURG 101/111, 102/112, and 103/113.

SURG 107

Surgical Procedures I [RE] • 8.0 Credits

Formerly SRGT 150, SURG 107

This course introduces students to surgery and primary surgical procedures within basic specialties including general surgery, obstetrics and gynecology, otorhinolaryngology, genitourinary surgery, and orthopedics. \$247 AST exam - Surgical Technology. **Prerequisite:** Acceptance into the Surgical Technology program and completion

Courses

of the following with a minimum grade of 2.0: SURG 101/111, 102/112, and 103/113.

SURG 111

Introduction to Surgical Technology Lab [RE] • 3.0 Credits

Skills laboratory designed to accompany SURG 101. This course provides students with an opportunity to demonstrate practical skills designed to facilitate operative procedures in the scrub role and ensure high-quality patient care. Practical skills include: identifying surgical equipment and instrumentation, assembling and preparing surgical supplies, establishing and maintaining the sterile field, surgical hand hygiene, gowning and gloving, intraoperative case management, operative counts, and dressing application. \$11.40 lab fee. **Prerequisite: Completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.**

SURG 112

Perioperative Science Lab [RE] • 2.0 Credits

Skills laboratory designed to accompany SURG 102. This course provides students with an opportunity to demonstrate practical skills designed to facilitate operative procedures in the scrub role and ensure high-quality patient care. Practical skills include: donning operation room attire and PPE, patient transport, minimally invasive applications, electrosurgical unit safety, sterile processing, assisting with wound closure techniques, and surgical specimen handling. \$11.40 lab fee. **Prerequisite: Completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.**

SURG 113

Perioperative Patient Care Lab [RE] • 1.0 Credit

Skills laboratory designed to accompany SURG 103. This course provides students with an opportunity to demonstrate practical skills designed to facilitate operative procedures in the assistant circulator role and ensure high-quality patient care. Practical skills include: reviewing documentation, medication handling, open gloving, urinary catheterization, patient positioning, preoperative skin preparation, and emergency management. \$11.40 lab fee. **Prerequisite: Completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.**

SURG 117

Surgical Procedures Lab [RE] • 3.0 Credits

This course provides students with an opportunity to perform comprehensive practical skills designed to facilitate operative procedures and ensure high-quality patient care in the clinical setting. \$11.40 lab fee. **Prerequisite: Acceptance into the Surgical Technology program and completion of the following with a minimum grade of 2.0: SURG 101/111, 102/112, and 103/113.**

SURG 118

Advanced Surgical Skills Lab [RE] • 2.0 Credits

This lab course provides students an opportunity to learn and practice advanced techniques in perioperative case management, including complex draping skills, specialty surgical field setup, correcting breaks in sterility, use of minimally invasive surgical applications, and gowning and gloving for orthopedic procedures. **Prerequisite: Acceptance into the Surgical Technology program and completion of the following with a minimum grade of 2.0: SURG 101/111, 102/112, and 103/113.**

SURG 206

Professional Development [RE] • 2.0 Credits

This course reviews workplace issues, communication strategies, conflict management, leadership, and employability skills. In preparation for

graduation and entrance into the workforce, students will develop a professional resume and practice job interview skills. **Prerequisite: Acceptance into the Surgical Technology program and completion of the following with a minimum grade of 2.0: SURG 223 and SURG 207.**

SURG 207

Surgical Procedures II [RE] • 8.0 Credits

Formerly SRGT 250, SURG 207

A progression from SURG 107. This course introduces students to surgery and primary surgical procedures within basic specialties including ophthalmology, oral and maxillofacial surgery, plastic and reconstructive surgery, cardiothoracic surgery, peripheral vascular surgery, and neurosurgery. \$105 NBSTSA board review fee. **Prerequisite: Acceptance into the Surgical Technology program and successful completion of SURG 106, 107, and 117 with a minimum grade of 2.0.**

SURG 208

Certification Preparation [RE] • 4.0 Credits

Formerly SRGT 240, SURG 208

Certification Preparation provides an in-depth review of the Core Curriculum for Surgical Technology. Students will also engage in discussions based on their experiential learning opportunities within the clinical practicum to assist in preparation for the Certified Surgical Technologist (CST) national certifying examination. **Prerequisite: Acceptance into the Surgical Technology program and successful completion of SURG 223 and SURG 207 with a minimum grade of 2.0.**

SURG 223

Operating Room Practicum I [RE] • 8.0 Credits

This course provides progressive exposure to and experience with diverse surgical procedures performed in multiple specialties within the clinical setting. Students prepare for and perform assigned surgical procedures under the supervision of facility personnel, clinical preceptors, and clinical college faculty in accordance with patient safety standards and industry best practices. **Prerequisite: Acceptance into the Surgical Technology program and successful completion of SURG 106, 107, and 117 with a minimum grade of 2.0.**

SURG 224

Operating Room Practicum II [RE] • 8.0 Credits

A progression from SURG 223. This course provides progressive exposure to and experience with diverse surgical procedures performed in multiple specialties within the clinical setting. Students prepare for and perform assigned surgical procedures under the supervision of facility personnel, clinical preceptors, and clinical college faculty in accordance with patient safety standards and industry best practices. Clinical experience focuses on advanced skills intended to assist in the transition from classroom to employment. \$11.40 lab fee. **Prerequisite: Acceptance into the Surgical Technology program and successful completion of SURG 223 and SURG 207 with a minimum grade of 2.0.**

SURG 293

Independent Study [RE] • 1.0–5.0 Credits

Formerly SRGT 293, SURG 293

A class used to explore new coursework or for a specific topic of special interest. \$10.72 per quarter malpractice insurance fee. \$11.40 lab fee. **Prerequisite: Completion of major support courses for Surgical Technology and acceptance into the Surgical Technology program.**

Courses

Theatre

DRMA 100

Theatre Study Tour • 1.0–3.0 Credits

Formerly DRMA 100, THA 100

Students participate in a field trip experience to attend professional, commercial theatre. Destinations are selected among Ashland, Los Angeles, Seattle, San Francisco, Portland, and New York City. Students meet for analysis and discussions before and after attending the planned events. Fees apply. May be repeated for credit.

DRMA& 101

Intro to Theatre [H] • 5.0 Credits

Formerly DRMA& 101, THA 115

An exploration of the many facets of theatre and the many creative artists who comprise the theatre arts. Students study the history of theatre, styles of production, plays, playwrights, directors, actors, critics, and designers.

DRMA 105

Performance Practicum • 1.0–3.0 Credits

Formerly DRMA 105, THA 105

This variable credit lab course provides students with the opportunity to participate in college theater productions as performers in leading or supporting roles. Students will engage in a hands-on learning environment through rehearsals and performances, with a focus on practical experience in acting and stage performance. Participation in rehearsals and all scheduled performances is mandatory, ensuring students gain valuable experience in live theatrical productions. \$11.40 lab fee.

DRMA 106

Design, Tech, & Management Practicum • 1.0–3.0 Credits

Formerly DRMA 106, THA 106

This variable credit lab course offers students hands-on experience in the technical and managerial aspects of theater production. Students will engage in a range of tasks, including theatrical design, backstage technical work, and stage management. Through active participation in college theater productions, students will develop practical skills in set design, lighting, sound, props, costumes, and stage management. Participation in rehearsals and performances is mandatory, allowing students to gain comprehensive experience in theater production. \$11.40 lab fee.

DRMA 107

Rehearsal and Performance • 1.0–3.0 Credits

Formerly DRMA 107, THA 107

Participation in college theatre productions on stage and backstage. After play auditions for each quarter, the class, composed of students selected for cast and production staff positions, is involved in rehearsals and performances. \$11.40 lab fee.

DRMA 110

Voice and Movement • 3.0 Credits

Formerly DRMA 110, THA 110

Creative and effective communication of ideas through the use of the body and voice. Includes physical and vocal technique, improvisation, and group problem solving.

DRMA 115

Stage Combat • 3.0 Credits

Where there is theatre, there are shows with simulated violence and struggle. Stage Combat is the artform used to safely and effectively communicate these scenes to audiences. It is the art form that bridges the

gap between consent/partnering and volatile conflict. Over the course of the quarter, students will learn safe and believable Unarmed and Knife Stage Combat techniques for stage and screen, develop the physicality and skills necessary to perform fight choreography, and gain the ability to learn, rehearse, and perform fight scenes in a theatrical context.

DRMA 120

Acting-Beginning • 5.0 Credits

Formerly DRMA 120, THA 120

An introduction to acting course. This course focuses on creating a character with internal truth that is presented with an awareness of external craft, including interpretive skills, through a variety of exploratory exercises. Class culminates in performance final.

DRMA 121

Acting-Intermediate • 5.0 Credits

Formerly DRMA 121, THA 121

An intermediate studio acting course which is a continuation of DRMA 120. This course continues its focus on creating a character with internal truth that is presented with an awareness of external craft, including interpretive skills, through a variety of exploratory exercises. Class culminates in performance final. \$11.40 lab fee. **Prerequisite: Completion of DRMA 120 with a 0.7 or higher, or instructor permission.**

DRMA 126

Stagecraft • 1.0–3.0 Credits

Formerly DRMA 126, THA 126

A study of the technical aspects of stage craft, and some design, with an emphasis on construction techniques. During lab times, students gain a working knowledge of shop tools, their application, shop safety, and crew protocol. \$11.40 lab fee.

DRMA 127

Stagecraft • 1.0–3.0 Credits

Formerly DRMA 127, THA 127

A study of the technical aspects of stage craft, and some design, with an emphasis on construction techniques. During lab times, students gain a working knowledge of shop tools, their application, shop safety, and crew protocol. \$11.40 lab fee.

DRMA 128

Stagecraft • 1.0–3.0 Credits

Formerly DRMA 128, THA 128

A study of the technical aspects of stage craft, and some design, with an emphasis on construction techniques. During lab times, students gain a working knowledge of shop tools, their application, shop safety, and crew protocol. \$11.40 lab fee.

DRMA 198

Special Studies • 1.0–3.0 Credits

Formerly DRMA 198, DRMA 199

A class used to explore new coursework.

DRMA 199

Special Studies • 1.0–3.0 Credits

Formerly DRMA 198, DRMA 199

A class used to explore new coursework.

DRMA 200

Theatre Study Tour • 1.0–3.0 Credits

Formerly DRMA 200, THA 200

Students participate in a field trip experience to attend professional, commercial theatre. Destinations are selected among Ashland, Los

Courses

Angeles, Seattle, San Francisco, Portland, and New York City. Students meet for analysis and discussions before and after attending the planned events. Fees apply. May be repeated for credit.

DRMA 215

Survey of Theatre History [H] • 5.0 Credits

Formerly DRMA 215, THA 215

This is a survey course that covers significant trends and innovations throughout theatre history from its inception in ancient Greece through the present. The emphasis, however, is on early theatre and its development and evolution.

DRMA 216

Acting for The Camera • 3.0 Credits

Formerly DRMA 216, THA 216

Instruction and practice in the basics of acting for both TV and film style productions: playing to the camera, shooting out of sequence, blocking, and other production considerations. **Prerequisite: Completion of DRMA 120 with a 0.7 or higher, or instructor permission.**

DRMA 220

Acting Studio • 1.0–3.0 Credits

A professional acting studio which utilizes class performances of scenes and monologues, as well as class discussions of theory. This course focuses on creating a character with internal truth (Stanislavskian-based) that is presented with an awareness of external craft including interpretive skills. Emphasis is placed on actor coaching and discovery. \$11.40 lab fee. **Prerequisite: Completion of DRMA 120 with a 0.7 or higher, or instructor permission.**

DRMA 221

Acting Studio • 1.0–3.0 Credits

A professional acting studio which utilizes class performances of scenes and monologues, as well as class discussions of theory. This course focuses on creating a character with internal truth (Stanislavskian-based) that is presented with an awareness of external craft including interpretive skills. Emphasis is placed on actor coaching and discovery. **Prerequisite: Completion of DRMA 120 with a 0.7 or higher, or instructor permission.**

DRMA 222

Acting Studio • 1.0–3.0 Credits

A professional acting studio which utilizes class performances of scenes and monologues, as well as class discussions of theory. This course focuses on creating a character with internal truth (Stanislavskian-based) that is presented with an awareness of external craft including interpretive skills. Emphasis is placed on actor coaching and discovery. **Prerequisite: Completion of DRMA 120 with a 0.7 or higher, or instructor permission.**

DRMA 225

Touring Children's Theatre • 1.0–3.0 Credits

This course involves adapting and developing material from children's stories and original literature into theatrical presentations. Emphasis is on ensemble acting and improvisation skills. The second half of the quarter focuses on performance as group tours area grade schools. \$11.40 lab fee.

DRMA 242

Design Essential • 3.0 Credits

Formerly DRMA 242, THA 242

This is an introductory course in developing basic skills in visualization, period research, graphic techniques, and script interpretation for theatre design; the focus being on scenic and costume design approaches.

DRMA 243

Stage Costuming • 1.0–3.0 Credits

Formerly DRMA 243, THA 243

An introductory course in the theory and practice of stage costume design and construction. \$11.40 lab fee.

DRMA 244

Stage Makeup • 1.0–2.0 Credits

Formerly DRMA 244, THA 244

A course covering the basics of stage makeup design as an extension of characterization. Students learn the techniques of makeup application, including youth, middle-age, old-age, and specialty makeup.

DRMA 245

Sound Design • 1.0–3.0 Credits

Formerly DRMA 245, THA 245

An introduction to sound design for theatre. This class focuses on the equipment, typical set-ups for theatre, and the design concepts for the use of sound in today's theatre environments. **Prerequisite: Completion of DRMA 242 with a 0.7 or higher, or instructor permission.**

DRMA 246

Stage Lighting • 1.0–3.0 Credits

Formerly DRMA 246, THA 246

A beginning course in the theory and practice of stage lighting. This course is a "hands-on" approach to design and technical drawing. Lab time involves, "hang and focus" crew techniques and protocol, and special projects. \$11.40 lab fee.

DRMA 248

Stage Management • 2.0 Credits

Formerly DRMA 248, THA 248

Examines the work of a stage manager. This course covers management of the stage and explores the "business" aspects of commercial theatre. Emphasis is on preparing students for stage managing in the commercial theatre and to prepare students for a theatre career with an enlightened view of theatre as a business.

DRMA 249

Special Studies • 1.0–3.0 Credits

Formerly DRMA 249, THA 249

Topics vary from among dramatic literature, acting styles, directing, theory criticism, aesthetics, history, and design. May be repeated for credit.

Prerequisite: Requirements to enroll in this class varies by quarter; please check with the instructor.

DRMA 250

Directing for The Stage • 3.0 Credits

Formerly DRMA 250, THA 250

An introductory course in the theory and practice of directing for the stage. Students explore analysis, interpretation, and concept formulation of dramatic literature. Communication and collaboration is emphasized.

Prerequisite: Completion of DRMA 120 with a 0.7 or higher, or instructor permission.

DRMA 298

Special Studies • 1.0–3.0 Credits

Formerly DRMA 298, DRMA 299

A class used to explore new coursework.

DRMA 299

Special Studies - Scene Painting • 1.0–3.0 Credits

Formerly DRMA 298, DRMA 299

Courses

A class used to explore new coursework.

Welding Technology

WT 100

Basic Welding [RE] • 3.0 Credits

This course provides a beginning level of theory and welding processes and applications being used today. This course includes safety, set-up and tear-down, present concepts, applications and methods, and operation of oxy-acetylene, electric arc, and MIG welding. This course is for the general student population and is not intended for welding majors. \$37.50 per credit Welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee.

WT 101

Oxy-Acetylene Process [RE] • 1.0 Credit

A theoretical approach to give students an understanding in the areas of oxy-acetylene cutting, welding, and brazing of various metals. This class is for beginning, entry-level students. Subject matter focuses on background of the process and safety of this process and equipment, and its uses.

Prerequisite: Acceptance into the Welding Technology program.

WT 103

Fundamentals Major Processes & Their Consumables [RE] • 5.0 Credits

This is the systems' approach to welded design, the design of welded joints and allowable for welds. Arc welding consumables are covered and students become familiar with various welding processes. **Prerequisite:**

Acceptance into the Welding Technology program.

WT 107

Fabrication Principles Review [RE] • 4.0 Credits

Introduces welding students to many mathematical procedures they will face in the fabrication shop. Topics include the manipulation of fractions and decimals along with an instructor handout intended to familiarize students with the reading of tape measures and rulers. Students work problems involving calculating various dimensions from complex shapes, both fractional and decimal. In conjunction with these exercises, students are exposed to various geometry principles that are extremely beneficial in the fabrication shop for calculating sheet metal parameters, areas, volumes, and the weight of the finished product. The geometry portion also teaches how to calculate angles necessary to be cut and fitted in place in order to complete the finished product. **Prerequisite:** **Acceptance into the Welding Technology program, and a grade of 0.7 or better in MATH 100 or a higher math class or placement into MATH 100.**

WT 108

Fabrication Technique I [RE] • 1.0 Credit

This course is designed to aid students in understanding the variables that greatly affect welding fabrication. **Prerequisite:** **Completion of WT 107 and WT 112, both with a 2.0 or higher, or instructor permission.**

WT 111

Oxy-Acetylene Process Lab [RE] • 3.0 Credits

Gives students hands-on experience in a laboratory situation with the use of oxygen-acetylene equipment. Safety equipment set up/shut down, and manual and automatic cutting are covered, as well as identification of metals. \$37.50 per credit Welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee. **Prerequisite:** **Acceptance into the Welding Technology program.**

WT 112

Introduction to Shield Metal Arc Welding [RE] • 1.0–10.0 Credits

An introduction to mild steel arc welding consisting of manipulative skills using the shield metal arc process with E6010 type mild steel electrode. \$37.50 per credit Welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee. **Prerequisite:** **Acceptance into the Welding Technology program.**

WT 113

Advanced Shield Metal Arc Welding [RE] • 1.0–10.0 Credits

This course develops welding skills to meet AWS and ASME standards using the shielded metal arc process. \$37.50 per credit Welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee. **Prerequisite:** **Completion of WT 112 with a 2.0 or higher, or instructor permission.**

WT 131

Metallic Arc Refresher [RE] • 1.0–10.0 Credits

Designed primarily for tradesmen who need upgrading in shielded metallic arc welding. Includes instruction and practice for upgrading skills, test qualifications, and special application. \$37.50 per credit Welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee.

Prerequisite: **Trade experience is required; a test may be given to verify experience.**

WT 141

Shield Metal Arc Welding Certification [RE] • 1.0–10.0 Credits

Last course in the three-course series of the SMAW process. This course will finish working through the final open root outside corner joint lesson and transition to either an open root butt joint weld in the 2g, 3g, and 4g positions or a butt joint with a backing bar in the 2g, 3g, and 4g positions. Students will practice each position as individual lessons working towards demonstrating proficiency in all three positions to have the opportunity to take a welder qualification test to gain a structural welding certification to ASME sect. IX code standard. Successful completion of the open root 3 position plate test is required as a prerequisite to WT 211 Intro to pipe welding. \$37.50 per credit Welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee. **Prerequisite:** **Completion of WT 113 with a 2.0 or better, or instructor permission.**

WT 181

Fabrication Techniques I Lab [RE] • 3.0 Credits

This course is designed to aid students in understanding the variables that greatly affect welding fabrication. Students get hands-on and field work experience utilizing a welding truck for structural fabrication, including hoisting and rigging. \$37.50 per credit Welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee. **Prerequisite:** **Completion of WT 112 with a 2.0 or higher, or instructor permission.**

WT 195

Supervised Employment [RE] • 1.0–3.0 Credits

This is a supervised work experience involving the application and practice of skills and principles learned in the classroom and lab. The student will be placed with an employer where the environment will build on the student's area of career interest and prepare them to be productive employees. Grade is pass/no credit. **Prerequisite:** **Completion of WT 181 with a 0.7 or higher, or instructor permission.**

WT 201

Weldability of Metals [RE] • 5.0 Credits

This course introduces the concepts that explain the metallurgical behavior and determine the weldability of ferrous and non-ferrous metals. **Prerequisite:** **Completion of WT 108, 141, and 181, all with a 2.0 or higher, or instructor permission.**

Courses

WT 202

Welding Inspection [RE] • 5.0 Credits

This course is designed to acquaint students with fundamental information and to help in the preparation for the AWS Welding Inspector Certification examination. **Prerequisite: Acceptance into the Welding Technology program.**

WT 208

Fabrication Technique II [RE] • 1.0 Credit

This course is designed to aid students in understanding the variables that greatly affect welding fabrication. **Prerequisite: Completion of WT 222 with a 2.0 or better and MATH 100 or a higher math class with a 1.0 or better, or instructor permission.**

WT 211

Introduction to Pipe Welding [RE] • 1.0–10.0 Credits

An introduction to pipe welding using mild steel pipe and the shield metal arc process with E6010/E7081 covered electrode. Develop the necessary welding skills and techniques to prepare for certification in accordance with ASME code. \$37.50 per credit Welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee. **Prerequisite: Completion of either WT 141 with a 2.5 or higher, or instructor permission.**

WT 222

Gas Tungsten Arc Welding (Tig) [RE] • 1.0–10.0 Credits

This course is designed for the welding of plate and pipe using the gas tungsten arc welding (GTAW) process. Instruction stresses developing proper manipulative techniques and skills necessary to certify using the GTAW process. \$37.50 per credit Welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee. **Prerequisite: Completion of WT 211 or WT 251 with a 2.0 or higher, or instructor permission.**

WT 231

Pipe Welding Certification [RE] • 1.0–10.0 Credits

This course emphasizes qualification tests for piping and tubing. \$37.50 per credit welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee. **Prerequisite: Completion of WT 211 with a 2.0 or higher, or instructor permission.**

WT 233

Pipe Welding Refresher [RE] • 1.0–10.0 Credits

This course is designed for tradesmen who need upgrading on pipe welding procedures and skills for employment in the piping field. Includes instruction and practice for upgrading welding test qualifications and special applications. \$37.50 per credit welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee. **Prerequisite: Trade experience is required; a test may be given to verify experience.**

WT 251

Gas Metal Arc Welding (Mig) Certificate [RE] • 1.0–10.0 Credits

Formerly WT 151, WT 251

An introduction to gas metal arc welding consisting of manipulative skills using the gas metal arc process. \$37.50 per credit welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee. **Prerequisite: Completion of WT 141 with a 2.0 or better, or instructor permission.**

WT 255

Structural Certification [RE] • 1.0–10.0 Credits

This course provides advanced development of arc welding skills to meet American Welding Society (AWS), and American Society of Mechanical Engineers (ASME) welder qualification standards. This is the certification class for the structural welding pathway of the AAS welding technology

degree. \$37.50 per credit welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee.

WT 281

Fabrication Technique II Lab [RE] • 3.0 Credits

This course is designed to aid students in understanding the variables that greatly affect the welding of pipe fabrication. Students get hands-on and field work experience utilizing a welding truck for pipe fabrication including hoisting and rigging. \$37.50 per credit welding course fee. \$11.40 lab fee. \$12.50 per credit welding equipment fee. **Prerequisite: Completion of WT 222 with a 2.0 or better and MATH 100 or a higher math class with a 1.0 or better, or instructor permission.**

Women's Studies

WS 110

Gender, Media, and Popular Culture [S/B] • 5.0 Credits

This course explores how men and women, as well as the qualities of "masculinity" and "femininity," are portrayed in print, visual, and news media, as well as the relationship between gender and cultural experiences, such as technology, sports, and violence. **Prerequisite: This course is cross-listed with SOC 110. Students completing WS 110 may not receive graduation credit for SOC 110.**

WS 155

Women's Cultural Heritage [H] • 5.0 Credits

An introductory course which presents an overview of the contributions women have made socially, politically, and culturally.

WS 215

Women in U.S. History [H] • 5.0 Credits

An introductory survey of women in U.S. history from pre-colonial times to the present. This course explores women's experiences, including historical attitudes about women's place in society and the realities of life and work for women. This course also explores how female roles in family, work, politics, and culture have changed over time. Emphasizes the diversity among women in terms of race, ethnicity, class, and sexuality. **Prerequisite: This course is cross-listed with HIST& 215. Students completing WS 215 may not receive graduation credit for HIST& 215.**