ACES100 AchieveCareer/EducationSuccess **Credit Hours:** 3

This course presents the skills needed for university success and initiates students to career planning and development. Students evaluate their abilities and interests in order to develop career goals and align these goals with an appropriate course of study. Through a career investigation project, students are introduced to research techniques. Students also improve on academic skills necessary to successfully complete university work, such as critical thinking, study techniques, and test taking strategies. In addition, students are introduced to important dynamics of interpersonal communication and conflict resolution. The course also orients students to the University, to the Davenport University Excellence System, and to other elements of the Davenport curriculum. (This course is required for all new business, health, and technology students, except those transferring with 30 or more semester credits.) Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate personal skills, abilities and interests to select and/or confirm a major and potential career path.
- Identify learning styles and strategize their applicability toward academic and professional success.
- Employ academic skills and techniques through the development of critical thinking to meet personal, educational and career goals.
- Design an education plan to succeed at the university and successfully navigate career path.
- Research, and critically evaluate potential professions.
- Establish expectations of effective interpersonal relationships, teamwork and communication in diverse workplaces and academic environments.
- Identify and understand key components of university culture as well as the location and value of campus resources.

ASLA111 American Sign Language I

Credit Hours: 3

American Sign Language (ASL) provides language training and cultural enrichment for people who wish to learn ASL and the uniqueness of deaf culture. This class will not prepare students to become interpreters but is designed to introduce students to the language and culture. This class is particularly useful for students pursuing careers such as allied health, nursing, medical management, or other healthcare related fields as well as paralegal studies where clients may be deaf. The class is designed to allow students to complement their degrees with an ASL experience. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply basic language skills to produce ASL in a variety of ways to communicate effectively with deaf adults and children who depend on visual representations of English for communication.
- Use classifiers through directionality, word signs, noun placements and non-manual signals.
- Produce intermediate receptive comprehension and expressive information.
- Recognize the diversity of the deaf culture through theory discussion, guest speakers and local events.

ASLA121 American Sign Language II **Credit Hours:** 3

This second semester American Sign Language course is a continuation of language skills and cultural enrichment introduced in ASLA111. The course will not prepare students to become interpreters but is designed to advance language skills and further promote understanding of deaf culture. This course is particularly useful for students pursuing careers such as allied health, nursing, medical management, or other healthcare related fields as well as paralegal studies where clients may be deaf. The class is designed to allow students to complement their degrees with an ASL experience. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): ASLA111 with a C or better grade

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply the next level of language skills to produce ASL in a larger variety of ways to communicate effectively with deaf adults and children who depend on visual representations of English for communication.
- Use a broader array of classifiers through directionality, word signs, noun placements and non-manual signals.
- Produce a broader range of receptive comprehension and expressive information.
- Examine the diversity of the deaf culture through theory, discussion, guest speakers and local events.

BIOL100 Introduction to Biology

Credit Hours: 3

This is a foundational course emphasizing the unifying themes of biology. It explores various aspects of living systems, including biological chemistry, cell biology, genetics, evolution, diversity, structure and function relationships, energy transformations, plant and animal systems, ecology, biodiversity, and conservation. The course introduces the scientific method and scientific reasoning. Co-requisite(s): BIOL100L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Predict inheritance patterns using knowledge of the relationship between DNA, RNA and proteins.
- Explain how evolutionary theory applies to the structure and function of living organisms
- Explain how human activity affects the natural world.
- Describe the properties and chemical basis of living organisms.
- Describe cell structure and function.
- Describe material cycling and energy flow in ecosystems.
- Describe levels of organization and related functions in plants and animals.

BIOL100L Introduction to Biology Lab

Credit Hours: 1

This course is designed to provide the laboratory fundamentals of biological science at the cellular level and organismal level. Students will focus on the scientific method, cellular structure and function, cellular energetics, photosynthesis, cellular respiration, genetics, heredity, evolution, biodiversity, plant and animal physiology, and ecology. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply the scientific method using scientific reasoning.
- Apply critical thinking skills in the analysis of experimental data.
- Conduct scientific experiments and clearly communicate results.
- Demonstrate proficiency in basic biological laboratory skills, in keeping with safety guidelines.
- Identify the properties of a properly designed scientific experiment.

BIOL110 Foundations of Cell Biology **Credit Hours:** 3

This course provides a foundation in fundamental biological and cellular concepts common to plants, animals, and microorganisms. Topics include the chemical and molecular basis of life, metabolism, cellular reproduction, principles of inheritance, and evolution. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): BIOL110L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Demonstrate an understanding of scientific classification and the science of taxonomy.
- Express understanding of foundational chemistry principles including basic atomic structure, chemical bonding, chemical reactions and the pH scale
- Describe the structure of the macromolecules and their relationship to the living organism
- Analyze cell membrane structure, function and the various forms of membrane transport
- Discuss the importance of thermodynamics and the role of ATP in biological systems
- Compare aerobic and anaerobic pathways in cellular respiration
- Explain the process of photosynthesis
- Analyze the various types of communication between cells
- Distinguish between mitosis and meiosis and state the importance of each to the life cycle of an organism
- Describe the process of transcription and translation.
- Examine the concepts of Mendelian genetics, including the principles of dominance, segregation and independent assortment
- Predict genetic changes that affect cell cycle control and may result in cancer
- Analyze practical applications of DNA technology.
- Write and present a position paper that analyzes an issue in current biological sciences.

BIOL110L Foundation of Cell Biology Lab **Credit Hours:** 1

(2 contact hours) This course is designed to provide the laboratory fundamentals of biological science at the cellular level. Students will focus on the scientific method, cellular structure and function, cellular energetics, photosynthesis, cellular respiration, genetics, and heredity. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): BIOL110

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Describe and apply the scientific method.
- Define and apply the metric system.
- Proficiently use a compound and dissecting microscope and prepare different mounts.
- Analyze, identify, and describe different macromolecules.
- Describe, list, identify cell structure and function.
- Describe the structure of lipid membranes and describe the effects of osmolarity.
- Explain how enzymes work and describe the effects of pH, temperature, and rates of chemical reactions on enzymatically controlled reactions.
- Compare aerobic and anaerobic pathways in cellular respiration.
- Identify and illustrate stages of mitosis and meiosis.
- Solve monohybrid and dihybrid crosses and apply the principles of genetics and heredity to scientific problems.
- Isolate and identify nucleic acids.
- Explain natural selection and describe the sequence of evolution

BIOL111 Organisms and Populations **Credit Hours:** 3

This second semester course provides a foundation in the study of biological systems at the organismal level. Students are introduced to structure and physiology of living organisms, evolution and general ecological principles. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): BIOL111L or BIOL111V Prerequisite(s): BIOL110 and BIOL110L or BIOL110V

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Compare and contrast the diversity of micro- and macroorganisms including the general form, function and structure of each.
- Identify how animal structure and function are related.
- Explain the origins and diversity of life in terms of natural selection and evolution.
- Explain the relationship between plant structure and function.
- Explain the interactions of organisms within their environment using ecological principles.

BIOL111L Organisms and Populations Lab **Credit Hours:** 1

(2 contact hours) This course is designed to provide the fundamentals of biological science at the organismal level in a virtual lab setting. Students will focus on the scientific method, evolution, biodiversity, plant and animal physiology, and ecology. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): BIOL111 Prerequisite(s): BIOL110 and BIOL110L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply the scientific method by designing and conducting a novel scientific experiment using standard biological equipment.
- Compare and contrast the diversity of micro- and macroorganisms including the general form, function, and structure of each.
- Identify how animal structure and function are related.
- Explain the origins and diversity of life in terms of natural selection and evolution.
- Explain the relationship between plant structure and function.
- Explain the interactions of organisms within their environment using ecological principles.

BIOL115 A & P w/Human Disease I

Credit Hours: 4

This course is the first of a two semester sequence that provides a foundation in human anatomy, physiology and the disease process for students in the Health Information Management and Allied Health programs. Students will learn anatomical and physiological terminology, homeostatic mechanisms, and other fundamental principles of anatomy and physiology. Students will study the structure, function, common disease processes, characteristics, and treatments related to the following body systems: integumentary, skeletal, muscular, nervous, senses, and endocrine. Each organ system will be studied with emphasis on the relation-ship between systems. Note: A grade of C or better is required to take the next course in the sequence. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Organize anatomical structures with respect to body planes, quadrants, cavities, and hierarchical levels.
- Differentiate major tissue types with respect to location, structure, and function within the body.
- Apply anatomical and medical terminology to body systems.
- Identify the major anatomical organs and structures of body systems.
- Describe the normal physiologic and homeostatic processes of body systems.
- Explain the risk factors, symptoms, etiology, progression, diagnosis, prognosis, and treatments for common conditions (including infections and injuries).
- Describe the changes that take place as a result of the aging process.
- Evaluate information from a wide variety of sources such as library databases and internet sources.

BIOL116 A & P w/Human Disease II

Credit Hours: 4

This course is the second of a two-semester sequence that provides a foundation in human anatomy, physiology and the disease process for students in the Health Information Management and Allied Health programs. This course expands on previously gained knowledge in the anatomy and physiology of the human body. Students will continue to learn anatomical and physiological terminology, homeostatic mechanisms, and other fundamental principles of anatomy and physi-ology. Students will study the structure, function, common disease processes, characteristics, and treatments related to the following body systems: blood and circulation, cardiovascular, lymphatic and immune, respiratory, digestive, urinary, and reproductive. Each organ system will be studied with emphasis on the relationship between systems. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Completion of BIOL115 with a C grade or above.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply anatomical and medical terminology to appropriate body systems.
- Identify the major anatomical organs and structures of systems.
- Describe the normal physiologic and homeostatic state of body systems.
- Explain the risk factors, symptoms, etiology, progression, diagnosis, prognosis, and
- treatments for common conditions including infections and injuries.
- Describe the changes that take place as a result of the aging process.
- Evaluate information from a wide variety of sources such as library databases and internet sources.

BIOL120 Essentials Anatomy/Physiology **Credit Hours:** 4

This course provides the student with the essential principles of anatomy and physiology including introductory chemistry concepts, cell and tissues studies and the structure and function of the following organ systems: integumentary, musculoskeletal, nervous, sensory, endocrine, respiratory, digestive, cardiovascular, lymphatic, immune, urinary and reproductive systems. Students will study the human body using a system-by-system approach. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Summarize the interrelationships among bodily systems
- Organize the anatomical components of each body system into a single functional entity
- Apply terminology of healthcare diagnostic techniques and interventions to the structures and functions of the human body
- Comprehend the concept of homeostasis and predict the outcome of deviations from the homeostatic state
- Identify and describe the structure and function of the cell and its components.
- Differentiate among the various types of tissues with respect to location, structure and function.
- Describe the structures of the integumentary system and its importance to health.
- Assess biomechanical systems and actions with respect to the bones, joints and muscles operating in those systems.
- Discuss how hormones function, their specific effects and predict the outcomes of deviation from homeostasis.
- Identify major structures of the special senses, their functions and appropriate regions of the brain where senses are identified.
- Describe the function and composition of blood.
- Outline blood flow through the cardiovascular system.
- Explain the structures and functions of the lymphatic system and how they relate to immunity.
- Describe the major processes that occur during digestive system activity throughout the digestive system structures.
- Explain the process of urine formation and how its composition relates to health.
- Identify the major organs of the male and female reproductive systems and the importance of each structure.

- Apply knowledge-based research techniques (such as library, MEDLINE, web-based) and common software applications (such as word processing, spreadsheet, database, graphics) to facilitate learning outcomes.
- Write and orally present a paper on a selected topic in anatomy and physiology.

BIOL131 Introduction to Human Disease **Credit Hours:** 3

This course introduces concepts of pathophysiology in a systemic manner by comparing the functioning of the human body in normal and diseased states. Students will integrate information relating to the etiology, presentation, evaluation, treatment, and prevention of common human diseases. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): BIOL116 if required in degree choice Prerequisite(s): BIOL115 or BIOL120

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate clinically apparent disease processes in terms of common cellular mechanism of adaptation, injury, and aging.
- Evaluate pertinent data given in clinical case scenarios to determine the likely underlying disease processes of, and appropriate interventions for, the case subjects.
- Evaluate the utility of specific diagnostic tests and healthcare interventions in the preventions and treatment of common human disorders.
- Assess the risk of common diseases occurring as a result of genetic inheritance, gender, lifestyle choices, developmental processes, and aging.
- Compare normal functioning of bodily systems to the physiologic changes that occur as a result of disease at multiple corporal levels.
- Describe the interrelationships among bodily systems in both progressive disease and healing states.
- Discuss current topics in disease research, medical science, health and/or physiology.

BIOL209 Techniques in Lab Science **Credit Hours:** 4

This course is designed to equip students with the skill set necessary for employment as life science laboratory professionals. Students will learn and practice various lab techniques in a life science laboratory setting. The course will focus on standard laboratory procedures and common laboratory mathematical calculations, procedure documentation and record keeping, solution and media preparation, quality control and quality assurance protocols, specimen handling and storage, as well as regulatory policies and laboratory safety. Course activities are designed to facilitate the application of course content toward development of critical thinking and laboratory problem solving skills. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): BIOL111/BIOL111L, CHEM161/CHEM161L and MATH150

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply statistical and instrumental analysis to judge the accuracy and precision of collected data.
- Implement standard safety protocols in the laboratory.
- Perform standard mathematical calulations utilized in a research laboratory setting
- Demonstrate common laboratory procedures and the ability to work with standard equipment and tools used in a biological research laboratory
- Demonstrate standard techniques for the isolation, analysis and manipulation of nucleic acids and he purification and analysis of proteins.
- Demonstrate ethical research practices including accurate record keeping and adherence to regulatory guidelines set forth by regulatory agencies that monitor research practices.
- Demonstrate strong interpersonal communication skills and work effectively in a team environment.
- Describe the documentation practices and regulatory processes prevalent in Biological Science Research laboratories, including research and development, quality assurance and manufacturing

BIOL211 Microbiology **Credit Hours:** 3

This course presents a comprehensive overview of the role of microbes in disease processes, and is designed for the student in health sciences. Students compare human microbial pathogens with respect to their structure, function, host selection, reservoirs, modes of transmission, host effects, and vulnerability to various treatment regimens. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): BIOL211L Prerequisite(s): BIOL110 and BIOL110L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Compare and contrast prokaryotic, eukaryotic organisms and acellular infectious agents (viruses).
- Summarize microbial metabolic pathways.
- Discuss microbial regulation of cellular activities.
- Describe inheritance, exchange and acquisition of genetic information in prokaryotes and acellular infectious agents (viruses).
- Analyze consequences of mutation and genetic recombination.
- Explain the dynamics of commensal, opportunistic, and pathological relationships particularly between microbes and humans.
- Evaluate and apply current techniques utilized for microbial identification , examination, and control through the analysis of sample scenarios and case studies.
- Compare and contrast the clinical characteristics for selected pathogenic microbes with regards to pathogenesis, epidemiology, treatment, and control.
- Discuss the importance of food and water safety.

BIOL211L Microbiology Lab **Credit Hours:** 1

(2 contact hours) This laboratory course presents a comprehensive overview of the role of microbes in disease processes, and is designed for the student in health sciences. Students learn skills applicable to the clinical laboratory, including aseptic techniques, microbial culture, and antimicrobial resistance testing. Students also compare human microbial pathogens with respect to their structure, function, reservoirs, modes of transmission, host effects, and vulnerability to various treatment regimens. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): BIOL211 Prerequisite(s): BIOL110 and BIOL110L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Demonstrate proficiency in the use of laboratory equipment, laboratory safety procedures, and basic microbiological techniques.
- Demonstrate the isolation and cultivation of selected microbes.
- Characterize an unknown microbe based on morphologic, biochemical and metabolic properties.
- Relate the process of selected staining methods in the differentiation of bacteria.
- Compare and contrast physical and chemical methods for controlling microbial growth.

BIOL221 Anatomy & Physiology I **Credit Hours:** 3

This course provides an in-depth introduction to the structure and function of the human body, and is designed for the future health care professional. Students will learn anatomical and physiological terminology as it relates to body systems, directional terminology, homeostatic mechanisms, and other fundamental principles of anatomy and physiology. The human body will be studied at the cellular, tissue, organ, organ system, and organism levels. Students will understand interrelationships between the integumentary, skeletal, muscular, nervous, and endocrine systems. Students will review the natural developmental and aging processes that occur in each system. Note: A grade of C or better is required to take the next course in the sequence. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): BIOL221L Prerequisite(s): BIOL110 and BIOL110L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Compare the structure and function of anatomical structures (i.e. cells, tissues, organs) as they vary across the lifespan.
- Organize anatomical structures with respect to hierarchical levels and bodily compartments.
- Differentiate major tissue types with respect to structure, function and location within the body.
- Describe the multiple contributions of the integumentary system to homeostasis and health of the body.
- Identify and explain biomechanical systems and actions with respect to the bones, joints and muscles operating in those systems.
- Compare the functioning of the nervous and endocrine systems in regards to communication and regulation of the body.
- Correlate organism behavior to structure and function of the nervous system.
- Predict systemic responses in multiple organ systems to changes in homeostasis.

BIOL221L Anatomy & Physiology I Lab **Credit Hours:** 1

(2 contact hours) This laboratory course provides an in-depth introduction to the structure and function of the human body, and is designed for the future health care professional. Students will learn anatomical and directional terminology, homeostatic mechanisms, and other fundamental principles of anatomy and physiology. The human body will be studied at the cellular, tissue, organ, organ system, and organism levels. Students will understand interrelationships between the integumentary, skeletal, muscular, nervous, and endocrine systems through laboratory exercises. Note: A grade of C or better is required to take the next course in the sequence. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): BIOL221 Prerequisite(s): BIOL110 and BIOL110L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Work effectively with groups of students to achieve common goals.
- Compare the structure and function of anatomical structures as they vary across the lifespan
- Demonstrate an understanding of the interconnections that exist between cells, tissues, organs, and organ systems of the human organism.
- Differentiate major tissue types with respect to structure, function and location within the body.
- Identify the various layers and components of the integumentary system.
- Identify the major bones and bone markings of the human organism.
- Identify the major superficial muscles, origin and insertion of each, and how they are interrelated to produce bodily movement.
- Identify the major regions and structures of the brain and spinal cord.
- Compare the functioning of the nervous and endocrine systems in regards to regulation and communication.
- Write laboratory reports comparing anatomical structure with anatomical function in various body systems.
- Actively dissect and participate in all structure and system identification laboratory activities.

BIOL222 Anatomy & Physiology II **Credit Hours:** 3

This course expands on previously gained knowledge in the anatomy and physiology of the human body. Students will continue to learn anatomical and physiological terminology as it relates to body systems. Students will integrate the structure and functioning of the cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive systems with material from earlier courses. Students will also review the natural developmental and aging processes that occur in each system. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): BIOL222L Prerequisite(s): Completion of BIOL221/BIOL221L with a C grade or above

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Describe the composition and function of plasma and blood cells, including their origins.
- Evaluate the anatomical components of the cardiovascular system and their relationship to blood flow through the heart and vessels.
- Compare structure and functions of the lymphatic and cardiovascular systems in their roles of fluid circulation.
- Relate the lymphatic structures' locations and functions to immunity.
- Compare the various immune cells' functions in cell mediated immunity and humoral mediated immunity.
- Differentiate hypersensitivity reactions.
- Correlate respiratory system structures with their functions.
- Explain the mechanisms of gas transport including the exchange of gases between blood, lungs and tissues.
- Describe the mechanics of breathing and the physical factors that influence pulmonary ventilation.
- Distinguish among the processes of digestion and absorption throughout the alimentary canal and accessory digestive structures.
- Differentiate carbohydrate, lipid and protein metabolism.
- Describe the location and roles of functions of the urinary system, including the role of the kidney in maintaining bodily homeostasis.
- Compare the role of major ions and the major hormones that influence their concentration.
- Describe respiratory and renal compensations to maintain acid-base balance.
- Identify the major organs of the male and female reproductive system and their functions.

- Distinguish between spermatogenesis and oogenesis.
- Correlate the major physiological events controlling menstruation, ovulation and reproduction with the endocrine system.
- Compare the structure and function of anatomical structures as they change throughout the lifespan.

BIOL222L Anatomy & Physiology II Lab **Credit Hours:** 1

(2 contact hours) This laboratory course expands on previously gained knowledge in the anatomy and physiology of the human body. Students will integrate the structure and functioning of the cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive systems with material from earlier courses through laboratory exercises. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): BIOL222 Prerequisite(s): Completion of BIOL221/BIOL221L with a C grade or above

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Work safely in a laboratory setting within groups to achieve common goals.
- Identify the major hematologic cells through microscopy.
- Blood type to understand the principles of transfusion compatibility.
- Relate blood flow through the heart by identifying the major vessels and structures through dissection.
- Identify electrocardiographic waves and intervals on a normal electrocardiogram.
- Locate major lymphatic structures and lymph nodes.
- Identify organs of the respiratory tract and their associated structures.
- Define, identify and determine respiratory volumes and respiratory capacities.
- Identify the digestive system structures and describe how they are connected to allow for the processes of digestion and absorption.
- Identify the structures of the urinary system through dissection, including major structures of the kidney.
- List the major areas of the nephron involved in the process of filtrate formation.
- Determine the physical and chemical properities of a urine sample and relate these properties to normal urine composition.
- Identify the male and female reproductive structures that initiate oogenesis and spermatogenesis and the role of the accessory organs.
- Identify the location of fertilization and early embryonic implantation.
- List the basic human development stages including the following terms: zygote, blastocyst, embryo, and fetus.
- Identify the female reproductive structures associated with pregnancy including the following: amnion, yolk sac, chorion, chorionic villi, placenta, umbilical cord, fetal blood vessels, maternal blood vessels."

2022 – 2023 Academic Year

CHEM150 Foundations of Chemistry **Credit Hours:** 3

This course emphasizes general chemistry principles, including introductory topics in organic chemistry and biochemistry for the health professions student. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): CHEM150L Prerequisite(s): MATH120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Identify common units of measure and perform conversions between metric units
- Explain the organization of the periodic chart
- Describe the three states of matter and classification
- Explain general structure and nomenclature of atoms
- Predict types of bond formations between atoms
- Apply the mole concept in the stoichiometry of reactions and solutions.
- Balance chemical equations and use stoichiometric relationships to calculate product and reactant amounts.
- Compare and contrast types of reactions and predict the outcome of these reactions.
- List properties of acids and bases, the pH scale and buffers
- Explain the behavior of solutions, suspensions, and colloids
- Describe the properties of gases
- Explain nuclear decay, the concept of half-life and the diagnostic and therapeutic uses of ionizing radiation
- Compare types of molecules occurring in inorganic systems with those found in organic systems
- Identify and compare the structure and function of proteins, enzymes, carbohydrates and lipids
- Describe the role of nucleic acids in biochemical protein synthesis
- Write a paper on the application of chemistry in solving problems in the student's field of professional study

CHEM150L Foundations of Chemistry Lab **Credit Hours:** 1

(2 contact hours) This course is an introduction to general chemistry laboratory principles and techniques that accompanies CHEM150. Emphasis is placed on fundamental chemistry principles, organic chemistry, and biochemistry for the health professions student. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): CHEM150 Prerequisite(s): MATH120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Identify common units of measure and perform conversions between metric units
- Explain the organization of the periodic chart
- Describe the three states of matter and classification
- Explain general structure and nomenclature of atoms
- Predict types of bond formations between atoms
- Apply the mole concept in the stoichiometry of reactions and solutions.
- Balance chemical equations and use stoichiometric relationships to calculate product and reactant amounts.
- Compare and contrast types of reactions and predict the outcome of these reactions.
- List properties of acids and bases, the pH scale and buffers
- Explain the behavior of solutions, suspensions, and colloids
- Describe the properties of gases
- Explain nuclear decay, the concept of half-life and the diagnostic and therapeutic uses of ionizing radiation
- Compare types of molecules occurring in inorganic systems with those found in organic systems
- Identify and compare the structure and function of proteins, enzymes, carbohydrates and lipids
- Describe the role of nucleic acids in biochemical protein synthesis
- Write a paper on the application of chemistry in solving problems in the student's field of professional study

CHEM160 General Chemistry I

Credit Hours: 3

First semester of a two semester course. This course introduces the student to the basic theories and concepts in chemistry. Topics that will be covered include: atomic structure, chemical bonding, stoichiometry, gas laws, thermochemistry, quantum theory, states of matter and solutions. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): CHEM160L Prerequisite(s): MATH 120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Compare and contrast the chemical behavior and physical properties of common substances.
- Solve quantitative problems (stoichiometric) involving chemical formulas, equations, acid- base chemistry, and solution dilution and concentration .
- Distinguish the qualitative and quantitative relationships between matter and energy involved in chemical or physical processes
- Utilize chemical and physical properties to separate matter in to its components
- Relate the process of chemical bonding to the size, shape and nature of ions and molecules
- Apply the scientific method to solve a problem
- Classify the structure and behavior of atoms based on modern atomic theory

CHEM160L General Chemistry I Lab **Credit Hours:** 1

(2 contact hours) This laboratory course supplements the learning in CHEM160. It is an introduction to fundamental principles and techniques of chemistry. Emphasis is placed on basic chemical theories, stoichiometry, properties of solutions, gas laws, and thermochemistry applications. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): CHEM160 Prerequisite(s): MATH 120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Construct a formal lab report, including materials methods. discussion, procedures, data, results and conclusions.
- Formulate and test hypotheses.
- Record, graph, chart and interpret data obtained from experimentation
- Demonstrate safe and proper use of standard chemistry glassware and equipment while performing laboratory experiment
- Perform fundamental aspects of statistical analysis including the calculation of averages, standard deviations and assess statistical validity of data points.
- Use the basic instrumentation employed in a general chemistry lab including a pH meter, spectrophotometer, and analytical balance
- Apply the fundamental aspects of stoichiometry in the execution of experiments.
- Identify an unknown compound applying experimental techniques acquired in the course

CHEM161 General Chemistry II

Credit Hours: 3

This is the second semester of a two semester sequence. This course expands on previously gained knowledge and introduces the student to additional basic theories and concepts in chemistry. Topics that will be covered include: reaction rates, chemical equilibrium, acid-base equilibria, thermodynamics, electrochemistry, nuclear chemistry, chemistry of metals/nonmetals and organic chemistry. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): CHEM161L or CHEM160V Prerequisite(s): CHEM160 and CHEM160L or CHEM160V

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Interpret potential-energy curves for endothermic and exothermic reactions.
- Distinguish integrated rate laws for first-order, second-order, and zero-order reactions
- Explain the Transition-State theories and activation energy (Ea).
- Explain the rate-determining step of a mechanism
- Explain the differences between homogeneous catalysis and heterogeneous catalysis and how they influence the rate of a reaction
- Explain Bronsted–Lowry concept of Acids and Bases
- Discuss key concepts in Electrochemistry, Nuclear chemistry and thermodynamics
- List examples of a rate law, rate constant, and reaction order.

CHEM161L General Chemistry II Lab **Credit Hours:** 1

(2 contact hours) This course expands on the topics explored in CHEM160L. Emphasis is placed on basic chemical theories, acid-base properties, equilibrium, kinetics, electrochemistry and qualitative analysis. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): CHEM161 Prerequisite(s): CHEM160 and CHEM160L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Interpret potential-energy curves for endothermic and exothermic reactions
- Determine the molecularity of an elementary reaction
- Qualitatively interpret equilibrium constants and write Kc for reactions
- Distinguish how temperature, activation energy, and molecular orientation influence reaction rates
- Determine pH using a pH meter and acid–base indicators.
- Calculate the common-ion effect on acid ionization
- Calculate ΔS° for a reaction using the standard entropies of products and reactants.
- Apply Le Châtelier's principle to the alteration of temperature and pressure in chemical reactions.
- Explain the behavior of solutions, suspensions, and colloids
- Explain enzyme catalysis and how a catalyst influences the rate of a reaction

CHEM250 Organic Chemistry I

Credit Hours: 3

This is the first semester of a two semester sequence. This course introduces students to the fundamental concepts necessary for understanding organic molecules and their significance in biological systems. Topics include classes of organic compounds, nomenclature, covalent bonding, stereochemistry, spectroscopy and reaction mechanisms. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Co-requisite(s): CHEM250L Prerequisite(s): CHEM161 and CHEM161L or CHEM161V

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Draw and interpret organic structures.
- Understand pKa and the role of acid-base reactions in organic chemistry.
- Explore three-dimensional arrangements of molecules.
- Explore the differences of conformational and configurational isomers.
- Gain familiarity with functional groups.
- Learn nomenclature for organic molecules.
- Draw reaction mechanisms.
- Predict the products of organic reactions.
- Propose steps to synthesize complex organic molecules.

CHEM250L Organic Chemistry I Lab **Credit Hours:** 1

(2 contact hours) This laboratory course highlights the concepts learned in lecture. Students will learn and employ techniques for the preparation, isolation, purification and characterization of organic molecules. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Co-requisite(s): CHEM250 Prerequisite(s): CHEM161 and CHEM161L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Use common separation and purification methods.
- Set up synthesis experiments.
- Isolate synthetic products.
- Evaluate the purity of samples.
- Calculate percent yield of products.
- Properly maintain a laboratory notebook.
- Write laboratory reports.

CHEM255 Organic Chemistry II

Credit Hours: 3

This is the second semester of a two semester sequence. Topics include structure and reactions of aromatic compounds, carbonyl compounds, carbohydrates, amino acids, and lipids; nomenclature of organic compounds; synthesis; and reaction techniques. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Co-requisite(s): CHEM255L Prerequisite(s): CHEM250 and CHEM250L or CHEM250V

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Draw and interpret organic structures.
- Understand pKa and the role of acid-base reactions in organic chemistry.
- Explore three-dimensional arrangements of molecules.
- Explore the differences of conformational and configurational isomers.
- Gain familiarity with functional groups.
- Learn nomenclature for organic molecules.
- Draw reaction mechanisms.
- Predict the products of organic reactions.
- Propose steps to synthesize complex organic molecules.

CHEM255L Organic Chemistry II Lab **Credit Hours:** 1

(4 contact hours) This second semester laboratory course builds on the foundation set in the first semester. Students will use the separation and purification techniques and synthetic skills learned from the first semester to complete more challenging synthetic tasks. An emphasis will be put on product yield and purity. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Co-requisite(s): CHEM255 Prerequisite(s): CHEM250 and CHEM250L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Set up complex synthesis reactions.
- Complete multi-step syntheses of molecules.
- Complete reactions of aromatic and carbonyl compounds.
- Improve isolation techniques.
- Use evaluation techniques to determine purity of isolated products.
- Properly maintain a laboratory notebook and write laboratory reports.

CHEM275 Chemistry Laboratory Safety **Credit Hours:** 3

This course introduces the requirements for the proper use, storage, and disposal of hazardous chemicals, discusses safe laboratory practice and the use of personal protection equipment. This course will provide guidance on how to comply with OSHA regulations, and other local, state, and federal regulations. Prerequisite(s): CHEM160 and CHEM160L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

COMM120 Presentation Techniques **Credit Hours:** 3

This course introduces and applies the theories and principles of effective communication. Students learn to organize and present clear, logical messages to specific audiences. They develop confidence in public speaking and increase their ability to inform and persuade listeners. They also implement critical thinking and listening skills. Finally, students exhibit the skills and tools necessary to construct, organize, and deliver effective speeches. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create a plan to convey research-based messages and presentations.
- Employ communication elements necessary to deliver oral messages and presentations including persuasive and informative speaking.
- Utilize presentation aids and technology to enhance messages.
- Adapt presentation techniques appropriate to the purpose, situation, and audience.
- Avoid plagiarism by using the American Psychological Association Style to document sources and copyrighted materials.
- Identify the fundamentals of communication theory and public speaking.

ECON200 Microeconomics **Credit Hours:** 3

This course introduces students to economics. Students learn the basics of supply and demand; the market economy; elasticity; the foundation of consumer demand; the theory of the business firm and costs of production; the market structures of perfect competition, monopoly, oligopoly, and monopolistic competition; theories of labor unions and wages; antitrust policy; and the microeconomic view of international business. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): ENGL109 and MATH120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Assess how comparative advantage and specialization impact production, consumption, and trade.
- Analyze market changes resulting from changes in economic forces of supply and demand.
- Analyze a typical firm's pricing and output decisions within each of the four major market structures.
- Analyze the impact of labor and financial markets on household income and wealth as well as other sectors of the economy.
- Explain major factors that affect consumer decisions.
- Explain the costs associated with production in the short run and in the long run.
- Explain the main sources of market failure, their possible remedies, and reasons for government intervention in the economy.
- Describe the field of economics and basic economic concepts including scarcity, free markets, and exchange.

GEOL120 Astronomy **Credit Hours:** 3

The general concepts of modern astronomy and cosmology are introduced in this class. Students will learn about the general structure of the Solar System including the distribution and physical characteristics of the Sun, satellites, planets, dwarf planets, and small solar system objects. The similarities and differences between the Earth and other astronomical bodies will be discussed. Theories will be debated concerning the origin and fate of the Universe, the Solar System and its place within the Universe, and the probability of life beyond Earth. Telescopes will be utilized to view objects within our Solar System. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Write and orally present results of independent and group projects.
- Describe the basic physical attributes of the Sun, planets, dwarf planets, satellites, and small solar system objects within our Solar System.
- Name and recognize all of the planets and dwarf planets within the Solar System as well as a select group of satellites and small solar system objects.
- Locate and identify a variety of objects in the night sky through the naked eye, binoculars and/or telescopes.
- Describe and summarize the different regions of the Solar System.
- Apply basic scientific concepts and principles to relevant situations.
- Apply basic observational methods and logical reasoning to propose hypotheses and devise methods to test those hypotheses.
- Calculate distances to celestial objects within the Solar System, the Milky Way Galaxy, and the Universe.
- Examine the orbital path of objects and utilize these paths to anticipate the location of planetary bodies relative to each other within the Solar System.
- Consider the potential for life beyond the boundaries of Earth and hypothesize as to potential locations for life within our Solar System.

GEOL140 Physical Geology **Credit Hours:** 3

Students are introduced to the scientific field of geology. Students also apply the scientific study of geology in a lab setting. The basic principles of biology, chemistry, mathematics and physics are integrated into a concise and straight forward application to the study of the Earth and earth processes. Topics will include an overview of rock and mineral identification and formation, weathering and erosion, earthquakes, volcanism, erosion and depositional environments, surface water and groundwater studies, and plate tectonics. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Write and orally present results of independent and group projects.
- Describe how geologic processes shape the surface of Earth, including river, desert, coastal, mountainous, and glacial features.
- Describe how geologic processes shape the subsurface of the Earth distinguishing between subcontinental, submarine, and sublithospheric regions.
- Predict the likelihood of natural disasters occurring in various regions based on plate tectonics and the geologic history of the area.
- Explain depositional and erosion landforms and their impact on surrounding ecosystems based on knowledge of groundwater and surface water properties.
- Apply basic scientific concepts and principles.
- Apply basic observational methods and logical reasoning to propose hypotheses and devise methods to test those hypotheses.
- Prepare geologic maps, cross sections, and/or sketches to depict and help interpret the current geologic setting and/or geologic history of an area.
- Classify common minerals and rocks based on their individual physical properties, including the three rock types and the geologic processes associated with their formation.
- Recommend solutions to current problems faced by individuals, corporations, and/or governments based on geologic knowledge learned.

HIST111 Early World History **Credit Hours:** 3

This course examines the history of world civilizations, from the beginnings of history in the Ancient Near East through the Renaissance, with a special emphasis on the ways that the events of the past shape the present and future. Students will learn about the historical causes and effects that accompany the rise and fall of world civilizations. Students will also learn about individuals who changed history. In addition, students will analyze the achievements of world civilizations, both Western and non-Western. The impact of ideologies and environmental crises will be put into perspective. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Interpret major events and movements throughout the world from the beginnings of history in the Ancient Near East through the Renaissance.
- Analyze the chronology of significant events in human history.
- Compare the major components of multiple societies and understand the roots of his or her own society within that historical context.
- Discuss the historical construction of social, political, religious, economic, intellectual, technological, and artistic differences and similarities between groups and regions over time.
- Demonstrate an ability to identify and interpret a wide variety of primary sources including but not limited to personal and public documents, visual and oral representations, popular and material culture.
- Demonstrate an ability to analyze the historical method and construct a historical argument.

HIST112 Modern World History

Credit Hours: 3

This course examines the history of the modern world, from the Renaissance through the present, with a special emphasis on the ways that the events of the past shape the present and future. Students will analyze the achievement of modern and post-modern world civilizations within the context of exploration, colonialism, independence movements, the new world order, and the increasing destructiveness of warfare. Population increase, ethnic solidarity, religious divisiveness, technological advances, and the rise and fall of ideologies are examined. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Interpret major events and movements in the modern world from the Renaissance through the present.
- Analyze the chronology of significant events in human history.
- Compare the major components of multiple societies and understand his or her own society within that historical context.
- Discuss the historical construction of social, political, religious, economic, intellectual, technological, and artistic differences and similarities between groups and regions over time.
- Demonstrate an ability to identify and interpret a wide variety of primary sources including but not limited to personal and public documents, visual and oral representations, popular and material culture.
- Demonstrate an ability to analyze the historical method and construct a historical argument.

HIST211 Early United States History

Credit Hours: 3

This course teaches a survey of the history of the United States from pre-history through the Reconstruction period. Students will learn the foundations of democracy, including the development of the Constitution, and how the principles of the Declaration of Independence were tested by the Civil War. Students will learn how the Reconstruction period set the stage for civil rights abuses that persisted long after it. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Interpret major events and movements on the North American Continent from before European contact through Reconstruction.
- Discuss the historical construction of social, political, religious, economic, intellectual, technological, and artistic differences and similarities between groups and regions over time.
- Analyze the chronology of significant events in U.S. history from the thirteenth century through 1865 with special consideration of a global context.
- Demonstrate an ability to identify and interpret a wide variety of primary sources including but not limited to personal and public documents, visual and oral representations, popular and material culture.
- Demonstrate an ability to analyze the historical method and construct a historical argument.

HIST212 Modern United States History **Credit Hours:** 3

This course teaches essential concepts of U.S. history from the end of Reconstruction through the growth of modern America. Students learn how the United States came to prominence as a world power through the events of the two world wars. Students will also learn the genesis of world events leading to September 11, 2001, and will evaluate future directions in the light of the past. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Interpret the major events and movements in the United States from 1865 through the present.
- Discuss the historical construction of social, political, religious, economic, intellectual, technological, and artistic differences and similarities between groups and regions over time.
- Analyze the chronology of significant events in U.S. history from 1865 through the present with special consideration of a global context.
- Demonstrate an ability to identify and interpret a wide variety of primary sources including but not limited to personal and public documents, visual and oral representations, popular and material culture.
- Demonstrate an ability to analyze the historical method and construct a historical argument.

HIST265 Survey of World History **Credit Hours:** 4

This course examines world civilizations from the beginnings of human history in the Ancient Near East to the present. Students will critically analyze world events through exploration of historical concepts, terms, sources, and perspectives as well as the historical construction of differences, similarities, and consequences of cultural phenomena between groups and regions of the world. This course also teaches concepts and principles of world geography with particular emphasis on regions and places, including physical features, systems, characteristics, and natural processes of the earth's surface. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- 1: Analyze world events, developments and movements critically from geographical, regional and historical perspectives from the beginnings of human society in the Near East to the present.
- 2: Apply the principles of world regional geography to explain the roles and responsibilities of major world powers in key global issues.
- 3: Describe the historical constructions of differences and similarities between groups and regions of the world, including those of one's own society.
- 4: Identify physical features, ecosystems, characteristics, land use, and natural processes of the earth's surface to explain how these features lead to the cultural development of the Eastern and Western Hemispheres.
- 5: Explain historical and geographical concepts, terms, sources, and perspectives.

HIST270 Survey of American History **Credit Hours:** 4

This course examines U.S. history from the Colonial Period to the present. Students will examine major events and movements which shape the present and future by analyzing diverse historical and geographical perspectives. This course also includes focused looks at Michigan history and geography as well as the ways that U.S. and Michigan history have been constructed through social, political, religious, economic, intellectual, technological, and artistic differences. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Analyze U.S. and Michigan regional events, developments, problems, movements and individuals critically from historical and geographical perspectives from the Pre-Colonial Period to the present.
- Analyze the importance of geography, global ecosystems, natural resources and patterns of land use in cultural development.
- Apply the historical method to construct an historical argument by evaluating primary sources such as personal and public documents, visual and oral representations, and popular and material cultural artifacts.
- Describe geographical concepts, terms, sources, and perspectives to explain physical features, systems, characteristics, and natural processes of Michigan geography.
- 5 Describe the historical constructions of differences and similarities between groups and regions of the United States, including those of one's own society, over time.

HUMN101 Arts and Culture **Credit Hours:** 3

This course will use an interdisciplinary approach to explore the fine arts, philosophy, and historical perspectives within and among various Western and non-Western cultural traditions. Students will develop an understanding of the ways in which our thoughts, perceptions, and expressions are constructed. Students will also experience the humanities by investigating art, philosophy and cultural traditions beyond the classroom setting. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate major artistic, cultural, and historic themes, trends and movements
- Construct patterns of meaning across disciplines through reading, writing, talking, listening, and thinking
- Synthesize single events and items of information as they fit into our total history and shape our traditions
- Apply course knowledge of humanities to non-classroom contexts
- Examine historical periods for the social and political influences on the fine arts and philosophy
- Define and use appropriate terminology when describing themes, trends, and movements

MATH120 College Mathematics **Credit Hours:** 3

Students in this course will explore and apply college-level mathematical concepts so as to enhance their critical and creative thinking skills. Topics will include i) problem solving, ii) set theory and real numbers, iii) linear, quadratic, exponential, and logarithmic functions, and iv) counting techniques and probability. Other topics of interest will be selected from graph theory, prime numbers, logic, number representation, and voting theory. Additional course fee(s) apply for MATH120L, a 0 credit hour lab utilized in the Accelerated Learning Program (ALP). Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Appropriate test scores or successful completion of MATH030. Students must also successfully complete an assessment exam on the first day of class

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Investigate sets and their relationships using set operations and Venn diagrams.
- Compute simple, compound, and conditional probabilities.
- Graph linear, quadratic, exponential and logarithmic functions and use them to model and analyze real world phenomena.
- Solve linear, quadratic, and exponential equations.
- Solve systems of linear equations and inequalities.
- Solve direct and inverse variation problems from written descriptions.
- Solve counting problems.

MATH125 Intermediate Algebra **Credit Hours:** 3

This course is designed to prepare students for the traditional calculus sequence. Course coverage includes the definitions, properties, and arithmetic of algebraic expressions, solving equations and inequalities, an introduction to functions, graphing equations and functions (e.g., linear, quadratic, rational, radical, exponential, and logarithmic). The course also includes a brief introduction to right triangle trigonometry. Techniques of problem solving and applications are integrated throughout the course. Note: A final grade of C or better is required to take MATH135 or MATH150. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Appropriate test scores or successful completion of MATH030. Students must also successfully complete an assessment exam on the first day of class.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Formulate and solve linear, linear systems, and quadratic models derived from written descriptions of problems.
- Solve quadratic, absolute value, rational, radical, exponential, and logarithmic equations.
- Solve and graph linear and absolute value inequalities; solve systems of linear inequalities graphically.
- Evaluate and graph linear, absolute value, quadratic, rational, radical, exponential and logarithmic functions, and identify domain and range.
- Solve problems involving direct and inverse variation and dimensional analysis.
- Simplify and/or rewrite expressions and equations in equivalent forms using the appropriate properties and definitions.
- Identify the type of function or equation based on its graph.
- Utilize right triangle trigonometry in technical applications.
- Utilize technology as appropriate to enhance the student's understanding of algebra.

MATH130 Contemporary Applied Mathemati **Credit Hours:** 3

This course introduces students to systematic mathematical thinking in everyday life scenarios. Through a non-traditional exploratory approach, students apply mathematical concepts to social and professional situations. Students learn to apply mathematical problem solving to planning, scheduling, efficient producing, and voting. Students learn the basic concepts of cryptography, logic, and number systems and their applications to computer science and the internet. Students will also utilize, discuss, and compare various consumer finance models. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): MATH120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Perform conversions among binary, hexadecimal, and decimal number systems (computer math).
- Apply the techniques of Graph Theory to model real-world scenarios and find optimal solutions.
- Encrypt and decrypt messages using Caesar and Vigenère cyphers. Demonstrate an understanding of the vocabulary, complexity, and basic requirements of cryptographic systems.
- Construct truth tables and circuit diagrams for simple and compound statements.
- Compare, contrast, and apply commonly used voting methods: plurality, plurality with runoff, Hare, Borda, sequential pairs, and approval voting.
- Analyze collective choice using election theory, weighted voting, and apportionment.
- Compare retirement plans, investment options, and various sources of financing, by calculating simple and compound interest.
- Use scheduling techniques to optimize efficiency and effectiveness.
- Understand the elements and applications of identification numbers.

MATH135 College Algebra **Credit Hours:** 3

This course is intended to further develop students' algebraic skills as well as prepare them for success in MATH210 (Business Calculus). The course focuses heavily on the necessary knowledge of mathematical concepts needed to solve a diverse and complex array of scenarios. These include polynomial, rational, exponential, and logarithmic functions and their properties. In addition, students will solve logarithmic and exponential equations, learn the symmetry of graphs, and sequences and series of numbers. Applications to the business, health, and/or technology professions will be emphasized throughout the course. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Completion of MATH120 or MATH125 with a C or above

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Perform function operations.
- Solve logarithmic and exponential equations with particular focus on applications to the business, health, and/or technology professions.
- Graph polynomial, rational, exponential, and logarithmic functions.
- Solve exercises involving sequences and series.
- Determine the domains of polynomial, rational, logarithmic, and exponential functions.
- Apply properties of logarithms and exponents to simplify logarithmic and exponential expressions.
- Simplify, add, subtract, multiply, and divide rational expressions.
- Factor quadratic trinomials and 'difference of squares' binomials.
- Apply computerized spreadsheet techniques and technology as appropriate to the course content.

MATH140 Finite Mathematics **Credit Hours:** 3

This course introduces students to the fundamentals of non-calculus-based mathematics. Applications to Managerial Science and Computer Science serve as motivation for course material. Topics include the mathematics of finance (compound interest and annuities), optimization, and decision-making. The use of spreadsheets (Microsoft Excel) to handle more complex calculations will be introduced where appropriate. This course is strongly recommended for students in the Computer Science BS program. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): MATH120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Solve a linear programming problem for the optimal solution.
- Model and solve problems involving compound interest, present value, future value, and the amortization of a loan
- Determine optimal strategies using game theory techniques.
- Analyze trends and predict future successes using Markov chains.
- Perform simulations using probability models.
- Apply computerized spreadsheet techniques and technology as appropriate to the course content.
- Solve systems of equations using matrices.

MATH150 Pre-Calculus **Credit Hours:** 4

This course is designed to prepare students for the traditional calculus sequence. Topics include: brief review of algebra, solving equations and inequalities, systems of linear and nonlinear equations, the properties and graphs of relations and functions (including polynomial, radical, rational, logarithmic, exponential, and trigonometric), zeros of polynomial functions, trigonometry, conic sections, polar coordinates. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Completion of MATH120 or MATH125 with a C or above

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Manipulate numbers and variables algebraically including the solving of equations.
- Given a function (linear, quadratic, polynomial, rational, logarithmic, exponential, or trigonometric), generate its graph including domain, range, intercepts, symmetries, asymptotes, and increasing/decreasing.
- Combine, translate, and manipulate (add, multiply, divide, compose, transformations, and find inverses) functions and generate the resulting graph.
- Demonstrate knowledge of logarithmic and exponential properties by simplifying expressions and solving equations.
- Use functions to build mathematical models in order to understand and predict physical phenomena.
- Demonstrate full understanding of trigonometric functions including definitions, trig values of standard angles, radian and degree measure, identities, graphs, inverses, and applications.
- Given a graph of a conic section (line, circle, ellipse, parabola, hyperbola), be able to determine its equation, and vice versa.
- Solve systems of two equations with two unknowns.
- Convert between polar and Cartesian coordinates and graph simple equations in polar coordinates.
- Demonstrate an elementary understanding of complex numbers including graphing, adding, and multiplying.
- Be acquainted with the central ideas of calculus (finding slopes of non-linear graphs and areas of regions under graphs via the process of taking limits).

MATH205 Applied Linear Algebra **Credit Hours:** 4

This course introduces the fundamentals of linear algebra (i.e., the notation and algebra of vector spaces and matrices). Because these items have the ability to handle masses of data as a single unit with relative ease, they are of particular interest to those in computer science. Those applications to programming (e.g., 3-D game design, simulation, and biometric security) will serve as context throughout the course. Topics include matrix operations, linear transformations, vector spaces, and 3D geometry. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): MATH135 or MATH150

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Perform the following matrix operations: addition, subtraction, scalar multiplication and multiplication.
- Find the inverse, transpose, and determinant of a matrix and perform LU-Factorization.
- Solve a system of equations using augmented matrices, row operations, and Gaussian Elimination. Use linear systems to model and analyze applied situations.
- Perform Linear Transformations (translations, reflections, projections, rotations, dilations, and contractions) using matrices.
- Solve problems using applications of matrices such as coding, graph theory, and computer graphics.
- Perform the following vector operations: sum, difference, dot product, scalar multiplication, cross products, and normalizing.
- Solve problems dealing with 3-D geometry such as finding bounding boxes or bounding spheres, and finding intersections of geometric shapes in 3-D.
- Compute eigenvalues and eigenvectors of a matrix.
- Utilize technology as appropriate to perform matrix operations.

MATH210 Business Calculus **Credit Hours:** 3

This course introduces students to calculus within the context of business applications. Particular focus will be given to questions involving optimization, marginal analysis, point of diminishing returns, and elasticity of demand. Calculus is a common prerequisite of many MBA programs. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): MATH135 or MATH150

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply the techniques of basic differential and integral calculus to business-related problems in the areas of optimization, marginal analysis, point of diminishing returns, and elasticity of demand.
- Sketch graphs of functions using derivatives and asymptotes as aids.
- Use the first and second order derivatives to solve optimization problems and to analyze the concavity of a function.
- Perform implicit differentiation.
- Evaluate definite integrals.
- Apply the rules of differentiation to polynomial, rational, exponential and logarithmic functions.
- Apply the rules of integration to polynomial, rational, exponential and logarithmic functions.
- Find the derivative of a function using the limit of difference quotient.
- Evaluate limits and identify any discontinuities of a function numerically, graphically and algebraically.
- Apply computerized spreadsheet techniques and technology as appropriate to course content.

MATH215 Calculus I

Credit Hours: 4

This course covers differential calculus and an introduction to integral calculus. Topics include: limits and continuity, the definition of the derivative, rules and techniques of differentiation, applications of the derivative (including motion, L'Hôpital's Rule, curve sketching, optimization, and related rates), antiderivatives, Riemann sums, the definition of the definite integral, the Fundamental Theorem of Calculus, and elementary methods and applications of integration. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Note: A grade of C or above is required to take MATH216, MATH317 and MATH350. Prerequisite(s): MATH150

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate limits using a variety of methods.
- Determine continuity and differentiability of a function.
- Evaluate derivatives using limits, rules of differentiation, tables of derivatives, and implicit differentiation.
- Employ derivatives to solve related rates, optimization, and other application problems.
- Construct graphs of functions utilizing their first and second derivatives.
- Interpret the behavior of functions based on their first and second derivatives.
- Describe the behavior of the graph with respect to extrema, direction, and concavity.
- Evaluate antiderivatives and indefinite integrals of elementary functions.
- Employ antiderivatives to solve initial value problems and applications.
- Employ finite sums to approximate total change and the area under a curve.
- Determine the existence of the definite integral of a function for a given interval.

MATH216 Calculus II

Credit Hours: 4

This course covers methods and applications of integral calculus, improper integrals, sequences and series including theory and applications of Taylor series, and an introduction to differential equations. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Completion of MATH215 with a C or above

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate integrals using a variety of integration techniques.
- Determine the appropriate method of integration for a given integral.
- Employ integration to solve various application problems.
- Demonstrate an understanding of the calculus of conic sections, parametric curves, and polar equations.
- Solve first-order differential equations and first-order initial value problems.
- Employ first-order differential equations to solve various application problems.
- Determine the convergence or divergence of an infinite sequence, and the convergence or divergence of an infinite series.
- Use understanding of sequences and series to represent, evaluate, integrate, and differentiate functions.

MATH250 Discrete Structures **Credit Hours:** 3

This course applies fundamental ideas in discrete structures and mathematical reasoning. Topics include elementary logic and set theory, functions and relations, induction and recursion, elementary algorithm analysis, counting techniques, and introduction to computability. Fundamental techniques include graph theory, Boolean algebra, and trees. Techniques and topics will form the foundation for subsequent programming language courses. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): CISP111 and MATH130, MATH135 or MATH150

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Translate and interpret symbolic logic and apply to language and mathematical proof.
- Describe sets and set operations, identify properties of functions, categorize sequences, and compute values of summantions.
- Identify various growth rates of functions and categorize algorithms using Big-O notation.
- Apply concepts of congruence to such things as modular arithmatic, number theory, and cryptography.
- Apply methods of counting to problems involving permutations and combinations.
- Apply concepts of graph theory including optimization of paths and circuits and applications with trees.
- Apply concepts of Boolean algebra to construct logic gates and minimize circuits. (*Optional if time permits)

MATH260 College Geometry **Credit Hours:** 3

This course covers the essential topics of Euclidean geometry including i) axiomatic definitions of points, lines, angles, planes, and geometric shapes, ii) derivations and applications of formulas involving perimeter, area, surface area, and volume for two- and three-dimensional shapes, iii) proving theorems using concepts of parallel and perpendicular lines, congruence, and similarity, and iv) conic sections. The course will also include an exploration of non-Euclidean geometries including hyperbolic and spherical geometry. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): MATH120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Derive formulas involving perimeter, area, surface area and volume for two- and three-dimensional shapes.
- Prove properties of two- and three-dimensional shapes in Euclidean geometry using geometric principles of points, lines, angles, planes, congruence, and similarity.
- Analyze conic sections via their definitions involving a locus of points satisfying distance relationships.
- Compare and contrast axiomatic constructions of various geometries including Euclidean and non-Euclidean geometries.
- Solve problems related to measurement and measuring units including measurements of angle (degree and radian), length, area, and volume.

PHYS100 Applied Physics **Credit Hours:** 2

This course introduces the basic physical principles relating to particle motion, transfer of energy, energy fields and waves, rotational motion, thermodynamics, electromagnetism, material properties, and relativity. Students will apply these principles to physical systems in the virtual or physical laboratory setting. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): PHYS100L Prerequisite(s): MATH 120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate real world problems and identify potential solution methodologies to these problems using the scientific method.
- Apply physics concepts and equations to quantitatively solve real world problems.
- Analyze the contributions of physics to developments in the student's chosen degree program or profession.
- Formulate basic technical documentation by applying laboratory writing skills
- Explain the mechanics of Newton's laws, momentum, energy, and rotational motion.
- Explain the basic physical properties of matter, heat, wave motion, electromagnetism, and light.

PHYS100L Applied Physics Lab **Credit Hours:** 1

(2 contact hours) This course introduces the basic physical principles relating to particle motion, transfer of energy, energy fields and waves, rotational motion, thermodynamics, electromagnetism, material properties, and relativity. Students will apply these principles to physical systems in the virtual or physical laboratory setting. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): PHYS100 Prerequisite(s): MATH 120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply the scientific method to evaluate real world problems and identify potential solution methodologies to these problems.
- Apply physics concepts and equations to quantitatively solve real world problems.
- Analyze the contributions of physics to developments in the student's chosen degree program or profession.
- Apply laboratory writing skills to formulate basic technical documentation.
- Apply the mechanics of Newton's laws, momentum, energy, and rotational motion.
- Apply the basic physical properties of matter, heat, wave motion, electromagnetism, and light.

PHYS210 Fundamentals of Physics I **Credit Hours:** 3

This course introduces the fundamental mechanics of physics. The physical properties of motion, matter, phases, thermodynamics, heat, vibrations and sound will be discussed. Methods for quantitative and qualitative analyses of physical properties will be introduced. This course is the first in a two-course sequence introducing students to the fundamentals of physics. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.. Co-requisite(s): PHYS210L Prerequisite(s): MATH150

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Utilize mathematics to solve models that describe physical phenomenon and obtain meaningful answers.
- Apply laboratory writing skills to formulate technical documentation.
- Analyze real world challenges using critical thinking and the scientific method.
- Evaluate potential solution methodologies to efficiently address these challenges.
- Develop conceptual models to describe physical phenomena quantitatively.
- Analyze the reasonableness of these solutions.
- Relate the mechanics of Newton's laws, momentum, energy, and rotational motion as related to living systems.
- Conduct basic experimentation to confirm or disprove hypotheses.

PHYS210L Fundamentals of Physics I Lab **Credit Hours:** 1

(2 contact hours) This laboratory course introduces the fundamental mechanics of physics through hands-on and/or virtual laboratory experiments. Experiments involving physical properties of motion, matter, phases, thermodynamics, heat, vibrations and sound will be done. Methods, including the scientific method, for quantitative and qualitative analyses of physical properties will be introduced. This laboratory course is the first in a two-course laboratory sequence introducing students to the fundamentals of physics. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): PHYS210 Prerequisite(s): MATH150

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Utilize mathematics to solve models that describe physical phenomenon and obtain meaningful answers.
- Apply laboratory writing skills to formulate technical documentation
- Apply critical thinking and the scientific method to analyze real world challenges.
- Identify and evaluate potential solution methodologies to efficiently address these challenges.
- Develop conceptual models to describe physical phenomena quantitatively.
- Analyze the reasonableness of these solutions.
- Apply the mechanics of Newton’s laws, momentum, energy, and rotational motion as related to living systems.
- Conduct basic experimentation to confirm or disprove hypotheses.

PHYS220 Fundamentals of Physics II **Credit Hours:** 3

This course is the second in a two-course sequence introducing students to the fundamentals of physics. This course builds on the knowledge learned in Fundamentals of Physics I. The physical properties of electricity, magne-tism, optics, relativity, and nuclear physics will be discussed. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): PHYS220L Prerequisite(s): PHYS210 and PHYS210L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Analyze real world challenges using critical thinking and the scientific method.
- Evaluate potential solution methodologies to efficiently address real world challenges.
- Develop conceptual models to describe physical phenomena quantitatively.
- Utilize mathematics to solve these models and obtain meaningful answers.
- Analyze the reasonableness of these solutions.
- Apply the basic physical properties of matter, heat, wave motion, electromagnetism, and light.
- Conduct basic experimentation to confirm or disprove hypotheses.
- Apply laboratory writing skills to formulate technical documentation.

PHYS220L Fundamentals of Physics II Lab

Credit Hours: 1

(2 contact hours) This laboratory course is the second in a two-course laboratory sequence introducing students to the fundamentals of physics. This course builds on the knowledge learned in Fundamentals of Physics Laboratory I through hands-on and/or virtual laboratory experiments. Experiments involving physical properties of electricity, magnetism, optics, relativity, and nuclear physics will be done. Methods, including the scientific method, for quantitative and qualitative analyses of physical properties will be used. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): PHYS220 Prerequisite(s): PHYS210 and PHYS210L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Use critical thinking and the scientific method to analyze real world challenges.
- Identify and evaluate potential solution methodologies to efficiently address these challenges.
- Develop conceptual models to describe physical phenomena quantitatively.
- Utilize mathematics to solve these models and obtain meaningful answers.
- Analyze the reasonableness of these solutions.
- Apply the basic physical properties of matter, heat, wave motion, electromagnetism, and light.
- Conduct basic experimentation to confirm or disprove hypotheses.
- Apply laboratory writing skills to formulate technical documentation.

POLS111 American Government **Credit Hours:** 3

This course introduces students to American politics, the political process, and the evolution of American government at the national, state, and local levels. Students will explore national and state constitutions, civil rights, citizenship, suffrage, public opinion, political parties, and the electoral system. Students also evaluate the relationship between the individual and the government in the United States. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): ENGL109

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Analyze the U.S. Constitution and its amendments
- Evaluate the various concepts of American federalism
- Evaluate the influence of interest groups on U.S. public policy
- Analyze American democracy and its political culture
- Analyze the concepts of civil liberty and civil rights
- Analyze U.S. domestic and foreign policy
- Understand current political issues facing the U.S. government
- Understand the U.S. electoral process, including the role of political parties

POLS230 Comparative Politics **Credit Hours:** 3

This course introduces students to comparative study of the domestic politics of nations throughout the world. Students explore the development of the modern state, the structures of political institutions in diverse nations, and the nature of political power. Students also examine the concepts of nationalism, nation-building, political change, and the political culture of various nations. Other topics for study include the nature of democracy, planned economies and market economies, the politics of the developing world, and international relations. Specific countries and their governments will be compared to provide students the means to evaluate different types of political systems. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): ENGL109

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Understand the major topics and themes of comparative politics.
- Analyze the concept of the state and its institutions and explain the origins of the modern nation state.
- Evaluate the electoral systems of democratic states, and analyze
- the role of political parties.
- Analyze the various types of states including liberal democracies, new democracies, communist and post-communist states, and less-developed states
- Understand the public policymaking processes of various states.
- Analyze the U.S. political system and compare and contrast this with other political systems.
- Evaluate the political systems of various nations in both the developed and
- developing world.

POLS245 Pol Sci Perspectives US/Global

Credit Hours: 4

Students in this course will learn characteristics of different systems of government (e.g., monarchy, autocracy, oligarchy, theocracy, representative democracy, direct democracy, authoritarianism, totalitarianism, limited and unlimited government) and will explore the similarities and differences between the political system of the United States and other contemporary and historical governments. Additionally, students will learn how to apply methods used in conducting political science research . They will learn how history, geography and economics impacts political science. Core rights and responsibilities of citizenship in a democratic society will be examined within the context of their impact on public policy. Prerequisite(s): ENGL110

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Analyze public policy questions within the context of the development of political theory through examination of historical documents.
- Interpret the relationship between political science and related disciplines such as history, geography, and economics.
- Summarize core democratic values and discuss the rights and responsibilities of democratic citizens in general and U.S. citizens in particular.
- Explain the fundamental principles of government in the United States and the legal system that supports it.
- Describe the formation of international relations and U.S. foreign policy.
- Summarize the functions and operation of the U.S. federal government, Michigan's state government, and Michigan's local governments.
- Explain the electoral process and the right to vote in the United States.
- Identify the characteristics of different systems of government including monarchy, theocracy, representative democracy, authoritarianism, totalitarianism, and limited government.

PSYC101 Introductory Psychology **Credit Hours:** 3

This course provides an overview of psychological principles. Students learn basic theories and concepts to understand the dynamics of human behavior in a variety of settings. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Identify and discuss early and contemporary theories of psychology
- Articulate an understanding of the major principles of sensation and perception
- Demonstrate an understanding of the relationship between psychological factors and physical health
- Evaluate and apply the theories of development across the lifespan
- Articulate the basic principles and major theories concerning learning, memory and cognition
- Discuss the symptomatology, etiology and treatment of psychological disorders
- Identify and discuss the major theories related to social psychology
- Demonstrate an understanding of the states of consciousness such as sleep, attention, dreaming and drug use
- Discuss and apply the major theories of motivation and emotion
- Identify and discuss the biological bases of behavior
- Identify the steps of the scientific method and explain how this method applies to psychology
- Demonstrate the ability to think critically and analytically in relation to psychological findings
- Demonstrate an understanding of the relationship between cultural/social factors on individual behavior

PSYC113 Stress Management for Life

Credit Hours: 3

This course explores various techniques used to manage stress and promote personal health throughout life. Students will develop career skills useful for assisting health care clients in reducing stress. Various techniques that can be used in life to promote a sense of inner control and balance will also be provided. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Explore the role of stress in the development or exacerbation of many diseases and states of psychological or behavioral dysfunction, and support these arguments with scientific evidence.
- Compare the mechanisms by which specific stress management techniques improve physical and psychological functioning.
- Evaluate the role of exercise and lifestyle alterations as means of reducing stress.
- Create a personal plan for managing stress, following an appraisal of life patterns at school, in the workplace, in the family, and in society.
- Critique themselves and their peers in the delivery of quality instruction of a variety of stress management techniques.

PSYC127 Healthy Living **Credit Hours:** 3

This course explores the most recent, scientifically-based personal health information relevant to the entire lifespan. Students critically review health information from various sources and gain skill in analyzing their own health-related behaviors and attitudes. In the process, students learn strategies, techniques, and behaviors to optimize their own well-being and the well-being of their families. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Appraise health information from a wide variety of sources for scientific accuracy and usefulness in addressing health concerns.
- Evaluate a variety of case scenarios and health profiles from persons of diverse ages and cultures.
- Construct a personal health diary.
- Analyze personal health practices and beliefs, with respect to nutrition, exercise, drugs, sexuality and reproduction, use of professional health care services, stress management, interpersonal relationships, and exposure to environmental pathogens.
- Develop plans for minimizing health risk factors.
- Evaluate interventions to address identified health concerns.

PSYC201 Abnormal Psychology **Credit Hours:** 3

This course will provide an overview of abnormal behavior and psychological disorders. Research methods used in the field of abnormal behavior will be identified and relevant research findings will be compared. A variety of perspectives including biological, environmental, psychological and socio-cultural influences on the development of mental health disorders will be examined. The definition, classification and treatment of a variety of psychological disorders will also be explored. Legal considerations surrounding mental disorders and the mental health field will be addressed. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): PSYC101

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Demonstrate an understanding of abnormal behavior from a historical perspective.
- Demonstrate an understanding of the differences between ""abnormal"" and ""normal"" behavior.
- Recognize and evaluate cultural and social issues as related to abnormal behavior.
- Demonstrate an understanding of current classification systems in use for the identification of psychological disorders.
- Apply biological, psychological, and socio-emotional theories as well as the integration of these perspectives to the causality of psychological disorders.
- Understand the process of assessing psychological disorders.
- Compare and contrast approaches that are used to treat psychological disorders.
- Identify and evaluate mental health issues as they relate to the law.
- Examine and critically review the research on psychological disorders.

PSYC240 Sport Psychology **Credit Hours:** 3

This interactive Sport Psychology course introduces students to psychological concepts pertinent to performance in competitive sports and physical activity. Variables affecting stress, motivation, goal setting, leadership, and imagery are among the concepts examined. Individual personality style as it relates to athletic competition, exercise, and the career world is also covered. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): ENGL109

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate the different motivational constructs and the implications on goal setting, imagery, stress and anxiety.
- Analyze psychological factors for improving human performance and effectiveness in physical activities and the career world.
- Analyze individual personality types and how this impacts self-confidence and participation in sports.
- Identify leadership styles in conjunction with athletics, classroom, and work environment.

PSYC270 Dimensions Of Aging **Credit Hours:** 3

This course provides the basic knowledge in gerontological psychology and issues that concern the aging population. Students will discuss physical and mental issues of the aged. Other concerns of the aged, including social, financial, and support systems, will be identified. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): ENGL109

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Assess social bonds, family, friends, and family support systems for the aged.
- Explore the issues of death and dying.
- Analyze theories on retirement, age discrimination, retirement preparation programs, and the right to choose – mandatory or not mandatory – as it relates to retirement.
- Distinguish between the various types of elder abuse.
- Identify current legislation and programs that service older population.
- Apply the biopsychological, social and cultural principles to the aging population.
- Identify stereotypes and images that society has placed on the aging population.
- Identify challenges faced by caregivers and support systems
- Analyze the impact of the aging population on society including the health care system
- Explore community services available to the aging population.

SOCY101 Introductory Sociology

Credit Hours: 3

This course provides an overview of sociological theory. Students learn sociological models of society; basic units of social life and social institutions; and fundamental social processes derived from sociological theory and perspectives. Students also evaluate the role of the individual in society. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate the causes and effects of change on society
- Compare the theories of sociology
- Analyze the structure and interaction of parts of society
- Analyze various roles of individuals and groups in society
- Apply scientific methods and interpretation of data
- Recognize the variety of groups in society

SOSC201 Diversity in Society **Credit Hours:** 3

This course introduces students to the complex issues surrounding diversity in U.S. society and to the need for understanding difference in an increasingly globalized world. Students will explore the social-historical context of multiple experiences on individual, cultural and institutional levels. They will analyze the complex interactions regarding diversity in organizations. Students will also evaluate their own thoughts, attitudes, and behaviors in order to understand their roles in a diverse society. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Analyze the benefits of inclusion and the consequences of ignoring diversity in the workplace and society.
- Connect key social and cultural systems to environmental and historical circumstances.
- Communicate the value of cultural competence in the workforce and in local and global communities.
- Identify practices related to Diversity, Equity, and Inclusion that maximize one's ability to meet organizational goals.
- Recognize one's own positionality in relation to diverse groups.
- Discuss the social-historical backgrounds of diverse groups in U.S. society.

SOSC238 Risk & Resilience in Family

Credit Hours: 3

This course will provide students with a basic understanding of child and family development and the complex nature of family risk and resilience. Students will examine current public policies and safety net programs, particularly in the areas of child protection and strengthening families. Using relevant models, students will identify and apply appropriate strategies and assessments to increase personal and family resilience. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): ENGL109

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Design strategies for building family strengths.
- Apply assessments to identify your family's strengths and risks using recognized models such as the Circumplex model, A,B,C, - X model of Stress, System's Theory, and genograms.
- Analyze societal trends affecting children and families.
- Identify the strengths of your own family and the families with whom you may work.
- Explain the family strengths framework.
- Describe the range of parenting styles and skills and education opportunities that help parents gain parenting skills.

SOSC241 World Regional Geography **Credit Hours:** 3

This course teaches concepts and principles of world geography with particular emphasis on regions and places. Students learn the necessary geographic foundations to build an informed view of global current events. Students also learn to identify places and regions and understand the relationship of physical systems, human systems, and spatial patterns. Politics, economics, development, and war are explored in the global context, with specific examples. Students will study both the physical and cultural characteristics of the world as they develop insights into the relationship between environment and culture. Students learn to use maps that display and analyze data from the principle regions of the world. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate the essential themes of world regional geography.
- Analyze regional problems and world events critically from a geographical perspective.
- Analyze the consequences of cultural phenomena, including agriculture, urbanization, colonization, economic development, political boundaries, and ethnic diversity, in regions of the world.
- Illustrate the importance of physical geography to cultural development.
- Apply the principles of world regional geography to gain further understanding of the roles and responsibilities of the major world powers in key global issues.
- Apply geographical insights to personal and professional contexts.
- Identify the major physical and cultural regions of the world, noting differences and similarities.

SPAN111 Beginning Spanish I **Credit Hours:** 3

This first semester Spanish course is an introduction to listening, speaking, reading and writing skills, and Spanish-speaking cultures. The course recognizes the practical importance of language with special emphasis on speaking skills. It assumes no previous knowledge of the language. Students learn basic vocabulary and language structure, and begin exploring diverse segments of Spanish-speaking cultures. Note: A grade of C or better is required to take the next course in the sequence. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Select the appropriate Spanish language elements necessary to communicate effectively at a beginning level
- Interpret at a beginning level both written and oral Spanish language messages
- Construct written and spoken Spanish sentences, paragraphs, and workplace messages using appropriate nouns, articles, verbs and adjectives.
- Compare the society and culture of diverse segments of Spanish-speaking peoples

SPAN121 Beginning Spanish II **Credit Hours:** 3

This second semester Spanish course is a continuation of language skills and cultural understanding in SPAN111. The course recognizes the practical importance of language with special emphasis on speaking skills. Students expand their vocabulary, language structure, and continue examining diverse Spanish-speaking cultures. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Completion of SPAN111 with a C or above.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Demonstrate a beginning level of competence in Spanish structure and usage.
- Comprehend spoken and written Spanish at a beginning level.
- Construct written and spoken Spanish language messages at a beginning level using appropriate grammatical units.
- Demonstrate knowledge of the society and culture of diverse segments of Spanish-speaking peoples.

SPAN211 Intermediate Spanish I

Credit Hours: 3

The third semester Spanish course is a continuation of language, skills and cultural understanding at an intermediate level. The course recognizes the practical importance of language with special emphasis on speaking skills. Students continue to expand their vocabulary and language structure, and deepen their understanding of diverse Spanish-speaking cultures. Note: A grade of C or better is required to take the next course in the sequence. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): SPAN121

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Demonstrate an intermediate level of competence in Spanish structure and usage.
- Construct written and spoken Spanish sentences, paragraphs, essays and workplace messages using appropriate grammatical units.
- Comprehend spoken and written Spanish at an intermediate level.
- Demonstrate appreciation and understand the society and culture of diverse segments of Spanish-speaking peoples.

SPAN221 Intermediate Spanish II **Credit Hours:** 3

The fourth semester Spanish course is a continuation of language skills and cultural understanding from SPAN211. The course recognizes the practical importance of language with special emphasis on speaking skills. Students continue to expand their vocabulary and language structure, and build a well-rounded view of diverse Spanish-speaking cultures. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Completion of SPAN211 with a C or above

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Select the appropriate Spanish language elements necessary to communicate effectively at an intermediate level.
- Interpret at an intermediate level both written and oral Spanish language messages.
- Construct written and spoken Spanish sentences, paragraphs, essays, and workplace messages using appropriate grammatical units.
- Demonstrate an intermediate level of competence in Spanish structure and usage.
- Comprehend spoken and written Spanish at an intermediate level.
- Demonstrate a deeper understanding of the society and culture of diverse segments of Spanish-speaking peoples and be able to compare them.

STAT219 Introduction to Biostatistics **Credit Hours:** 3

This course introduces students to foundational statistical methods common to the medical and health fields. Students will learn how to use the collection, analysis, presentation, and interpretation of data in the context of the health sciences. Analysis of real-world data sets will be performed using statistical software. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): MATH120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Analyze a data set using graphic and numeric descriptive methods.
- Compare data sets using appropriate graphic and numeric measures.
- Use simple linear regression and correlation to study the relationship between two quantitative variables.
- Interpret the results and draw conclusions from elementary inferential methods (e.g., one and two sample t-tests).
- Construct appropriate confidence intervals and interpret the results.
- Use discrete and continuous probability distributions for modeling and inference.
- Compute and interpret risk and odds ratios
- Understand the terms and concepts related to the probabilities of medical conditions and their associated diagnostic tests (e.g., prevalence, sensitivity, specificity, etc.)
- Understand the effect of sampling size and technique on statistical inference.
- Apply Minitab and other software as appropriate to the course content.

STAT220 Introduction to Statistics **Credit Hours:** 3

This is the basic statistics course in which students learn to collect, analyze, present and interpret data. Descriptive and inferential statistical methods are applied in problem-solving and decision-making situations. Analysis of large, real-world data sets will be performed using statistical software. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): MATH120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Analyze a data set using graphic and numeric descriptive methods.
- Compare data sets using appropriate graphic and numeric measures.
- Use simple linear regression and correlation to study the relationship between two quantitative variables.
- Design, perform, and interpret the results of basic hypothesis tests.
- Construct appropriate confidence intervals and interpret the results.
- Use discrete and continuous probability distributions for modeling and inference.
- Understand the effect of sampling size and technique on statistical inference.
- Apply Minitab and other software as appropriate to the course content.

ACCT200 Accounting Basics for Managers **Credit Hours:** 3

This course is designed strictly for the non-business major. It is a comprehensive survey course of financial and managerial accounting concepts that discusses the financial aspects of starting and growing a business. Specifically, the course explores the role of accounting in business, examining the balance sheet, profit/loss statements, and cash flow reports. Students will also learn how to analyze financial statements and financial trends. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Define and explain business activities, the role of accounting in business, and accounting principles.
- Understand accrual accounting concepts and apply knowledge to a merchandising business.
- Identify financial statements, apply analytical calculations to these statements and interpret results.
- Describe and discuss proper accounting treatment and reporting of cash; receivables; inventory; fixed and intangible assets; current liabilities; and stockholders' equity, including application of internal controls and regulations.
- Apply concepts of cost behavior, differential product analysis, product pricing, and capital investment in making business decisions.
- Develop budgets and understand their usage in evaluating variances and budgetary performance.

ACCT201 Accounting Foundations I

Credit Hours: 4

This course is an introduction to accounting principles emphasizing the operation of a business as a sole proprietorship and covers the complete accounting cycle for merchandising and service entities. Partnership accounting is also covered. The application of computer technology to accounting processes is integrated into this course. Note: A grade of C or better is required to take the next course in the sequence. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): BITS211

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create financial statements including multi-step income statement, statement of owner's equity, classified balance sheet
- Analyze and record business events for sole-proprietorships and partnerships.
- Apply applicable Generally Accepted Accounting Principles
- Apply applicable proper accounting treatment and reporting of cash, receivables, inventory, plant assets and current liabilities.

ACCT202 Accounting Foundations II

Credit Hours: 4

This course continues the study of accounting principles with special emphasis on corporations, and basic principles of managerial accounting. Note: A grade of C or better is required to take ACCT301. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): ACCT201 with a C grade or above.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create financial statements including multi-step income statement, statement of stockholder's equity, classified balance sheet and statement of cash flow.
- Create various managerial accounting reports
- Analyze and record business events for corporations using ratio analysis and other techniques.
- Apply applicable Generally Accepted Accounting Principles.

ACCT213 Cost Accounting **Credit Hours:** 3

This course is designed to provide an introduction to cost accounting and cost management techniques. The concepts of cost assignment to goods and services in the context of job order, process, and activity-based costing are covered. The behavior of costs, standard costing and variations-as well as schedules, summaries, and reports used in costing systems-are also introduced to the student. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): ACCT202

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create appropriate management cost reports for manufacturing and service organizations.
- Evaluate the performance of an organization through budget and variance analysis.
- Analyze cost behavior.
- Apply proper accounting treatment and reporting of business transactions for manufacturing and service businesses within a(n):
- (a) Job order cost system
- (b) Process cost system
- (c) Activity based costing system
- Apply applicable overhead allocation

ACCT220 Accounting Information Tech **Credit Hours:** 3

This course is a study of currently available accounting-business software and the related applications. Students will learn how to operate, evaluate, and apply various software with accounting systems and accounting information systems. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): ACCT202

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply accounting terms, concepts, and processes to common business transactions using accounting software.
- Formulate standard financial statements and management reports using accounting software.
- Enter, manipulate and retrieve business data using accounting software.

BUSN210 Professional Ethics **Credit Hours:** 3

This course explores applied ethics, focusing on social and professional situations especially in the fields of business, law, and tech-nology. Students learn ethical theory as they examine the complexities of ethical dilemmas. Students also compare and contrast ethical and moral systems. In addition, students apply creative and critical thinking to ethical dilemmas involving professional and social responsibility. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Examine how ethical concepts can be used in the business context to resolve ethical dilemmas and improve ethical decision-making.
- Compare ethical and moral belief systems
- Describe how professional and social ethical decision making influences employee behavior and organizational culture
- Explain the social and legal ramifications of unethical practices
- Describe what the appearance of unethical or compromising practices in business situations means and what businesses should do to avoid such circumstances.

BUSN225 International Business **Credit Hours:** 3

This course focuses on the international dimensions of business by clarifying and classifying country differences with regard to political economy. International Trade Theory, Foreign Direct Investment, and the Global Monetary System are explained. Emphasis is placed on competing in the global marketplace. International business situations dealing with trade, ethical dilemmas and globalization are examined with the use of proper case analysis techniques. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): MGMT211

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Compare and contrast international market entry strategies
- Analyze the impact of the political, legal, economic, social, cultural, technological environment on international business strategy and structure
- Explain international finance concepts including trade and investment, the international monetary system and balance of payments
- Describe international trade theories
- Summarize the differences between international and domestic business operations

BUSN265 Entrepreneurship **Credit Hours:** 3

This course provides foundational knowledge of the entrepreneurial process and its applications in new ventures and other aspects of business management. It addresses the elements of a good business plan, and explains how to build new venture teams and secure financial support. Using case analysis, simulations and experiential learning, the student will develop the ability to recognize and evaluate new business opportunities and define basic strategies for enterprise growth and development. This is the first course in the Entrepreneurship Specialty. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): MGMT211 and MKTG211

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Develop basic business models and plans
- Explain the entrepreneurial concept and processes.
- Identify business opportunities using industry, competitior, and feasilbility analysis methods.
- Identify the methods used to acquire financial support for a new venture.

FINC211 Corporate Finance **Credit Hours:** 3

This course covers the fundamental principles of corporate finance. Students will be introduced to various methods of company analysis, the term structure of interest rates, the relationship between risk and return, time value of money principles, security analysis, cost of capital and capital structure, and capital budgeting techniques. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): ACCT201

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Interpret financial statements of a corporation using trend analysis, and industry comparisons.
- Describe the financial environment relating to markets, institutions, and interest rates.
- Illustrate the relationship between risk and return by applying the Capital Asset Pricing Model.
- Apply the techniques of time value of money to investments and capital budgeting decisions.
- Examine the capital structure of a corporation and its effect on corporation's cost of capital.

FINC212 Advanced Corporate Finance **Credit Hours:** 3

This advanced course deals with topics concerning financial management and strategy. Theoretical as well as practical topics are discussed. Topics include financial planning and forecasting, the management of capital, and risk analysis in capital budgeting, as well as the working theories of capital structure and dividend policy. Students increase their analytical and problem-solving abilities in finance through the use of case studies and integrated PC software in applying various topics facing the modern financial manager. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): FINC211

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Demonstrate knowledge of working capital management issues.
- Implement risk analysis in making capital budgeting decisions.
- Apply financial planning and apply forecasting techniques in financial management.
- Examine various sources of financing, and the advantages and disadvantages of each source
- Demonstrate DUES in solving a financial management problem.

FINC215 Investment Planning **Credit Hours:** 3

This course is an introduction to investment fundamentals, including risk and return; investment information sources; market indexes; analysis of the economy, industry and companies; and investments in stocks, bonds, and mutual funds. Students will also be introduced to international investing, active versus passive investment strategies, fundamental and technical analyses, and other investment vehicles such as options, warrants, and convertibles. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): FINC211

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Examine the relationship between investment objectives and investment vehicles.
- Identify sources of investment information.
- Relate security markets, economic conditions, and companies' performance.
- Contrast investments in mutual funds, bonds, preferred stocks, common stocks, and foreign investments.
- Discuss the risk of various investment vehicles and their rate of return.
- Construct an investment portfolio and evaluate its performance using major indexes as benchmarks.
- Demonstrate the active and passive strategies of investing.
- Distinguish between fundamental and technical analysis.
- Compare and contrast options, warrants, and convertibles.

FINC220 Money/Banking-Treas Mgt Focus **Credit Hours:** 3

This course is a study of the United States banking system, as well as how the government and the Federal Reserve Board influence bank operations and US monetary policy. Students will become acquainted with the principles of monetary theory and how the banking system is a key player in its implementation. Building on concepts learned in macroeconomics, topics will include the structure of the financial services industry; regulatory structure of the banking industry; the bank planning process; the functions of the central bank; and an introduction to international banking. Students will increase their analytical and problem-solving abilities in finance, while learning to analyze monetary and fiscal policy as practiced by the Federal Reserve. Students will also study banks' financial statements and will be introduced to credit analysis, investment management, and loan administration. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.
Prerequisite(s): ECON200 or ECON201 and FINC211

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- 1 Discuss the principles of money.
- Classify the types of financial institutions in the United States.
- Determine the creditworthiness of bank loan customers and evaluate the various loans made by banks.
- Summarize the functions of central banks, especially the Federal Reserve System.
- Interpret financial statements of commercial banks and evaluate their performance.
- Describe the current bank-operating environment.
- Summarize the functions of the international banking system and the role of U.S. banks in that system.

FINC222 Behavioral Finance **Credit Hours:** 3

This class is an introduction to the effect of psychology on the behavior of people in the financial field, such as portfolio managers, financial planners, investors, brokers, etc. The forces that determine risk-taking behavior in the field of investing will be explored, forces that include greed, hope, and fear. The class discusses the effect of human reactions on important aspects of market behavior and price movements. Issues include the errors committed by financial practitioners who rely on rules of thumb when making investment decisions or processing information, the effect of investors' biased reactions to public announcements about securities, and the effect of perceptions of risk and return characteristics of various asset classes on portfolio management and security selection. A comparison of technical and fundamental analysis strategies and their relationship with behavioral finance is also discussed. Cases demonstrating the application of behavioral concepts to finance will be used. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): FINC215

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Differentiate the psychological forces affecting human reactions to financial information.
- Discuss the effect of reactions on important aspects of market inefficiency, stock market prices, and their deviations from fundamental values.
- Discover the mistakes made due to psychological factors, avoid making those mistakes, and profit from other people’s mistakes.
- Examine the role which behavioral phenomena play in finance-related areas such as portfolio theory, asset pricing, corporate finance, and option pricing.
- Demonstrate an understanding of behavioral finance by solving case problems.

FINC230 Financial Planning & Insurance **Credit Hours:** 3

This course is a study of financial planning and wealth-creation techniques for individuals. Case studies will be utilized to evaluate and establish financial goals of individuals. Tax considerations, fringe benefits, investment techniques, insurance, and retirement and estate planning will also be discussed. Students will learn the application of well-established models and methods in personal financial planning and will be acquainted with concepts, logic methodology, and terms used in the field. Current thinking and developments in the field of financial planning will be presented. The subject of risk management will also be covered, including the various types of insurance: life, health, disability, long-term care, and property, as well as liability insurance. Regulatory, ethical, and legal issues will be discussed. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): FINC215

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Prepare and interpret the personal financial statements.
- Construct a personal budget for achieving financial goals.
- Calculate personal taxes and integrate tax-planning strategies into a personal financial plan.
- Differentiate the various strategies for managing cash and obtaining credit.
- Examine the various types of personal risk and risk management alternatives for health, disability, life, long-term care, property, and liability.
- Discuss regulatory, ethical, and legal issues facing financial planners and insurance agents.

FINC290 Finance ABA Internship **Credit Hours:** 1

Attend Mandatory Internship Workshop at least two semesters prior to your desired internship course semester. The required internship workshop and approval process can be found at:https://my.davenport.edu/internships This associate-level internship is the integration of previous classroom instruction with new learning acquired through on-the-job work experience. The experience should be related as closely as possible to the student's major field and individual interest. The course is variable credit (1, 2 or 3) with 1 credit requiring 50 hours of career-related work time at the internship site; 2 credits require 100 hours and 3 credits require 150 hours. The course may be repeated for up to a total of 3 credits. FINC290 allows students to take an additional internship earlier in their career, but students must also meet the minimum 3 credits of their internship requirement through FINC490. Internship hours will be scheduled in partnership between the student and the site and reported via weekly reports filed by the student in the academic course. Students will be supported to identify site possibilities; however, responsibility for selection by the internship employer rests with the student. The internship may be either paid or unpaid. An appropriate faculty member and the internship site supervisor will evaluate the student's performance. Note: Any unexcused non-attendance or dismissal from an internship will result in a grade of F. A grade of C or better is required to pass this course. A criminal background check and drug screen may be required by the Internship site. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Sophomore status and the completion of BUSN210, FINC235, MGMT211; minimum cumulative GPA of 2.0 and minimum major GPA of 2.3.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Synthesize ethical and behavioral standards imposed upon an organization's professionals.
- Evaluate the internship experience through the design and completion of an internship reflective paper detailing the specific experiential learning and the classroom instruction that supported the experience.
- Apply an employee's accountability for both assigned and implied tasks.
- Apply substantive, procedural, and theoretical knowledge obtained in the classroom to practical, value-enhancing work product.
- Apply professional behavior in terms of communications, attire, attitude, promptness, and participation.

HRMG213 Human Resource Management **Credit Hours:** 3

This course is an overview of the responsibilities of a human resource management department in a business setting. The elements of job analysis, recruitment, selection, training and assessment, are described. Additionally, compensation and benefits administration, labor relations and the legislative and legal decisions affecting human resource policy are explored. Various workplace situations are examined through the use of problem solving exercises and discussion. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): HLTH211 or MGMT211

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply employment laws applicable to human resource management to manage issues of discrimination, safety, labor relations, wage and hourly compensation, and benefits.
- Examine differences in global human resources' practices.
- Explain the roles, responsibilities, and constraints in all functional areas of human resource management in the context of an organization.
- Identify the key functional areas managed by human resource departments within the organization.

HRMG290 Human Resource Mgmt Internship **Credit Hours:** 1

Attend Mandatory Internship Workshop at least two semesters prior to your desired internship course semester. The required internship workshop and approval process can be found at:https://my.davenport.edu/internships This associate-level internship is the integration of previous classroom instruction with new learning acquired through on-the-job work experience. The experience should be related as closely as possible to the student's major field and individual interest. The course is variable credit (1, 2 or 3) with 1 credit requiring 50 hours of career-related work time at the internship site; 2 credits require 100 hours and 3 credits require 150 hours. The course may be repeated for up to a total of 3 credits. HRMG290 allows students to take an additional internship earlier in their career, but students must also meet the minimum 3 credits of their internship requirement through HRMG490. Internship hours will be scheduled in partnership between the student and the site and reported via weekly reports filed by the student in the academic course. Students will be supported to identify site possibilities; however, responsibility for selection by the internship employer rests with the student. The internship may be either paid or unpaid. An appropriate faculty member and the internship site supervisor will evaluate the student's performance. Note: Any unexcused non-attendance or dismissal from an internship will result in a grade of F. A grade of C or better is required to pass this course. A criminal background check and drug screen may be required by the Internship site. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Sophomore status: 9 credit hours or more in residency at Davenport University; 6 or more credit hours of HRMG classes completed at Davenport University; minimum cumulative GPA of 2.0 and minimum major GPA of 2.3.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Explain the ethical and behavioral standards imposed upon the organization's Human Resource Management professionals.
- Apply basic procedural and theoretical Human Resource Management knowledge obtained in the classroom to practical, value-enhancing work tasks.
- Practice an employee's accountability for assigned tasks.
- Apply professional behavior in terms of communications, attire, attitude promptness, and participation.
- Evaluate the internship-specific experiential learning in relation to classroom instruction that supports the experience.

LEGL210 Business Law Foundations **Credit Hours:** 3

This survey course covers the fundamental principles of business law, including the legal system, dispute resolution, government regulation torts, and crimes affecting business, contracts, sales, and agency. Court decisions are used to encourage analytical thinking. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): ENGL110

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Explain the legal environment in which business functions including methods of resolving disputes through the courts and alternative dispute mechanisms, the role of the US Constitution in the regulation of business and the power and function of administrative agencies in the regulation of business.
- Differentiate criminal law from tort law as it applies to the legal environment of business.
- Distinguish between the various types of intellectual property.
- Analyze the various forms of business organizations and the advantages and disadvantages of each form of organization.
- Apply legal principals of regulation in the areas of employment and labor law, consumer protection, environmental, and international law.
- Describe the elements of contract formation, performance, breach and remedies.
- Discuss agency relationships, how they are formed and the duties and liabilities of each party.

MGMT290 Management Internship **Credit Hours:** 1

Attend Mandatory Internship Workshop at least two semesters prior to your desired internship course semester. The required internship workshop and approval process can be found at:https://my.davenport.edu/internships This sophomore-level internship is the integration of previous classroom instruction with new learning acquired through on-the-job work experience. The experience should be related as closely as possible to the student's major field and individual interest. The course is variable credit (1, 2 or 3) with 1 credit requiring 50 hours of career-related work time at the internship site; 2 credits require 100 hours and 3 credits require 150 hours. The course may be repeated for up to a total of 3 credits. MGMT290 allows students to take an additional internship earlier in their career, but students must also meet the minimum 3 credits of their internship requirement through MGMT490. Internship hours will be scheduled in partnership between the student and the site and reported via weekly reports filed by the student in the academic course. Students will be supported to identify site possibilities; however, responsibility for selection by the internship employer rests with the student. The internship may be either paid or unpaid. An appropriate faculty member and the internship site supervisor will evaluate the student's performance. Note: Any unexcused non-attendance or dismissal from an internship will result in a grade of F. A grade of C or better is required to pass this course. A criminal background check and drug screen may be required by the Internship site. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Sophomore status: 9 credit hours or more in residency at Davenport University; 6 or more credit hours of Management classes; minimum cumulative GPA of 2.0 and minimum major GPA of 2.3.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Explain the ethical and behavioral standards imposed upon the organization's
- Management professionals
- Apply basic procedural and theoretical Management knowledge obtained in the classroom to practical, value-enhancing work tasks
- Practice an employee's accountability for assigned tasks.
- Apply professional behavior in terms of communications, attire, attitude promptness, and participation
- Evaluate the internship-specific experiential learning in relation to classroom instruction that supports the experience

MKTG211 Marketing Foundations

Credit Hours: 3

This course explores the role of marketing in society and in the success of an organization. Students learn and apply the strategies, tactics and terminology used by market-oriented businesses. Through critical thinking exercises and case analysis, students become familiar with the primary tools of marketing including market segmentation, product, pricing, marketing communication, research, and marketing channel strategies. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): ENGL109

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply the Inbound Sales approach in a business to business environment.
- Apply Inbound Sales practices within a Customer Relationship Management (CRM) systems in a sales context.
- Evaluate trends in career options for sales representatives.

MKTG212 Professional Selling **Credit Hours:** 3

This course introduces the theory and practical application of professional selling techniques with a focus on customer needs, behavior, and relationship building. Students learn the theory, practice, and procedures of successful selling while examining the personal attri-butes necessary for a successful sales career. Student presentation skills are enhanced through sales role-playing. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): MKTG211

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply the Inbound Sales approach in a business to business environment.
- Apply Inbound Sales practices within a Customer Relationship Management (CRM) systems in a sales context.
- Evaluate trends in career options for sales representatives.

MKTG214 Public Relations Foundations **Credit Hours:** 3

This course introduces the principles for managing relationships with the organization's various audiences, including customers, employees, government, investors, and media. Students develop an understanding of public relations and learn to recognize, examine, interpret, and implement public relations activities and communications. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): MKTG211

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Interpret public relations practices including management and planning, ethics, research, communications, and public opinion.
- Examine public relations activities as they appear in events and the media.
- Write a proper news release.
- Clarify public relations activities with strategic processes involving objectives, strategies, tactics, and budget processes.
- Outline the practical communication applications of public relations as used to influence public opinion.
- Relate public relations activities with key publics, including employees, multicultural communities, government, investors, consumers, and the media.

MKTG290 Marketing Internship **Credit Hours:** 1

Attend Mandatory Internship Workshop at least two semesters prior to your desired internship course semester. The required internship workshop and approval process can be found at:https://my.davenport.edu/internships This associate-level internship is the integration of previous classroom instruction with new learning acquired through on-the-job work experience. The experience should be related as closely as possible to the student's major field and individual interest. The course is variable credit (1, 2 or 3) with 1 credit requiring 50 hours of career-related work time at the internship site; 2 credits require 100 hours and 3 credits require 150 hours. The course may be repeated for up to a total of 3 credits. MKTG290 allows students to take an additional internship earlier in their career, but students must also meet the minimum 3 credits of their internship requirement through MKTG490. Internship hours will be scheduled in partnership between the student and the site and reported via weekly reports filed by the student in the academic course. Students will be supported to identify site possibilities; however, responsibility for selection by the internship employer rests with the student. The internship may be either paid or unpaid. An appropriate faculty member and the internship site supervisor will evaluate the student's performance. Note: Any unexcused non-attendance or dismissal from an internship will result in a grade of F. A grade of C or better is required to pass this course. A criminal background check and drug screen may be required by the Internship site. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Sophomore status: 9 credit hours or more in residency at Davenport University; 6 or more credit hours of Marketing classes completed at Davenport University; minimum cumulative GPA of 2.0 and minimum major GPA of 2.3.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Explain the ethical and behavioral standards imposed upon the organization's professionals
- Associate basic procedural and theoretical content area knowledge obtained in the classroom to practical, value-enhancing work tasks
- Employ an employee's accountability for assigned tasks.
- Demonstrate professional behavior in terms of communications, attire, attitude promptness, and participation
- Evaluate the internship-specific experiential learning in relation to classroom instruction that supports the experience.

PSMG250 Investigative Tech & Procedure **Credit Hours:** 3

This course provides an overview of the principles, methods and techniques used for conducting a criminal or civil investigation. The legal framework for investigation, including coverage of evidentiary rules and ethical issues are examined. Interviewing techniques are also explored with emphasis on the ethical and legal issues associated with conducting the interviews. Practical application techniques are reinforced using case studies and hands-on -exercises. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): LEGL211

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply ethical principles relating to investigation.
- Identify the principal types of investigation.
- Analyze fact situations to determine the appropriate investigation methodology.
- Analyze and draw conclusions regarding evidentiary issues relating to various types of evidence.
- Apply methods for locating witnesses, sources of information including public and privately held documents, and other types of evidence.
- Identify the elements of an investigation including, jurisdictional issues, crime scenes, surveillance collecting and preserving evidence and interrogation.
- Conduct an effective interview, use of case management, report writing, checklists and other information-gathering tools, use of effective interpersonal skills, and post-interview documentation

RMGI221 Risk Mgmt & Insur Analysis **Credit Hours:** 3

This course introduces the principles of risk management, risk mitigation and insurance processes. Students will focus on developing awareness of the challenges, the tools, and the process of designing and implementing a risk management program, including, but not limited to, utilizing insurance as a form of risk management. The course also explores how big data and data analytics provide key insights to risk management. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Co-requisite(s): MATH120 or MATH125, and MGMT211

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate areas of risk within a given organization
- Compare and contrast various risk management techniques
- Explain the concepts of risk, loss, exposure and insurance
- Identify data requirements to assess a specific risk

HLTH100 Cardiopulmnary Resus/First Aid **Credit Hours:** 1

This course provides the student with the BLS for Healthcare Providers (AHA) and Heartsaver First Aid (American Heart Association). The BLS portion covers core material such as adult and pediatric CPR (including two-rescuer scenarios and use of the bag mask), foreign-body airway obstruction, and automated external defibrillation. The first aid portion (Heartsaver First Aid) of the course teaches how to manage illnesses and injuries in the first few minutes until professional help arrives. This course is intended for those who may have a duty to respond to a first aid or cardiac emergency secondary to job responsibilities or regulatory requirements. Note: This course is graded on a Pass/Fail basis. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Identify the signs of heart attack, cardiac arrest, stroke, and choking.
- Perform the appropriate procedure for rescue breathing on adults, children, and infants.
- Apply the use of barrier and bag-mask devices to maintain ventilation on adults, children, and infants.
- Demonstrate accurate technique for CPR on adults, children, and infants.
- Perform the proper method of foreign body airway obstruction relief on adults, children, and infants.
- Demonstrate the proper operation of automatic external defibrillators (AED) including the importance and safety issues associated with the use of automatic external defibrillators (AED).
- Assess victims for signs of circulation to determine appropriate CPR intervention.
- List the first aid steps for medical emergencies, including: breathing problems, fainting, diabetes, and seizures.
- List the first aid steps for injury emergencies, including: bleeding, oral injuries, shock, broken bones, sprains, bruises, burns and electrocution
- List the first aid steps for environmental emergencies, including bites and stings, temperature-related emergencies and poison emergencies

HLTH110 Medical Terminology **Credit Hours:** 3

This course introduces the concept of a system-based approach to learning the professional language of those who are directly or indirectly engaged in health care. Word building through knowledge, use of prefixes, suffixes, root words, and combining forms is a central theme of this course. Spelling, pronunciation, abbreviations, medical symbols, and use of a medical dictionary are also emphasized. Note: A grade of C or better is required to pass this course successfully. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Translate medical language.
- Evaluate medical terms to reinforce knowledge of basic anatomy and physiology
- Understand the origin of common medical terms
- Spell, pronounce, define, and identify words and word parts
- Use medical terms and abbreviations correctly in written work
- Identify scholarly articles related to medical terminology.
- Define the complete meaning of a medical abbreviation

HLTH202 Death and Dying

Credit Hours: 3

This course examines issues and concerns involved in helping patients and family members facing the problems of terminal illness and death. Students will be introduced to death-related issues for everyday life, including suicide, bereavement, euthanasia, and hospice care. Living will and advanced directives are discussed. This course also examines current medical concerns regarding the care and treatment of a terminal patient. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): ENGL109

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Analyze and compare the changing social, psychological, cultural, religious, spiritual, ethical and historical changing patterns of death beliefs and traditions related to varying modes of death, across the lifespan.
- Investigate individual and family grief and bereavement issues through recognition of theories, models of coping, spiritual, religious, and cultural beliefs, and end of life practices and institutions, including care facilities, burial practices, funeral homes, crematoriums, and cemeteries.
- Describe the physiology of death and dying.
- Compare the effectiveness of the medical model of dying and palliative model of dying on end of life care from an individual, family, and cultural perspective.
- Assess the impact of legalities and legal instruments on end of life decision making for individuals and families from diverse religious and cultural backgrounds.

HLTH210 Health Care Orgnztns & Systems

Credit Hours: 3

This course provides the student with an introduction to health care organizational systems and related resources. Discussions will include history and development of health care in the United States. Students gain a theoretical understanding of various health care provider roles in the overall organizational planning, management, quality, and assessment pertaining to major health policy issues and disciplines in the United States. Topics will compare and contrast the delivery of health care to those of other countries. Note: A grade of C or better is required to pass this course successfully. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): ENGL110 Prerequisite(s): ENGL109

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Synthesize the knowledge of the delivery, organization, and structure of healthcare services in the United States with identification of various healthcare roles, functions, and professional disciplines.
- Assess professional and practice-related ethical issues pertaining to healthcare delivery in the United States.
- Assess and debate healthcare organizations' structure and operation and the impact on cost, quality, and access.
- Compare and contrast the US healthcare system with other healthcare systems.
- Compare and contrast external healthcare standards, regulations, and initiatives with governmental mandates.
- Evaluate the role of healthcare financing and the impact on the delivery of healthcare in the United States.
- Apply knowledge-based research techniques and software applications commonly utilized in healthcare.

HLTH211 Healthcare Management **Credit Hours:** 3

This course provides a foundation in management principles with special application and focus on the health care industry. The course will focus on organizational resource management in the health care industry including strategic planning, governance, leadership, change management, communication, human resource management, training and development, organizational development, financial management, ethics, project management and contract management. Case analysis will be applied through the discussion of various health care management-related situations. Note: A grade of C or better is required to pass this course successfully. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): ENGL110 Prerequisite(s): ENGL109

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate ethical principles in diversity and business practice through case study analysis.
- Identify information management principles used for strategic planning. (3)
- Identify leadership roles as it pertains to change, human resources, interdisciplinary, strategic and organizational management. (3)
- Evaluate finance, project and vendor/contract management methodologies. (3)
- Describe appropriate methods for training and development.(2)

HLTH220 Pharmacology **Credit Hours:** 3

This course focuses on the principles of understanding basic Pharmacology and the effects medications have on the body and disease. Names of the top fifty most commonly used medications, their classification, and side effects will be discussed. Safety with respect to calculation and administration of medications will be emphasized. Note: A grade of C or better is required to pass this course successfully. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Prerequisite(s): BIOL120, BIOL115 or BIOL221 and BIOL221L

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Formulate effective communication in reports of the action, rationale for use, common and/or life-threatening side effects and patient teaching issues for each major classification of medications.
- Rank major classifications of pharmacotherapeutics by prototypes as used in the treatment of commonly occurring diseases.
- Evaluate pharmacological terminology pertinent to specific categories and classifications of medications in relation to drug effects on commonly occurring diseases.
- Differentiate pharmacology use and its effects across the lifespan, when administering medications to culturally diverse populations for commonly occurring diseases.
- Distinguish between legal and ethical principles related to research and practice of medication administration.
- Compare and contrast physiology and pathophysiology that must be considered in assessing correct dosages administered to “at risk” populations such as the fetus, infant, child, pregnant woman, and the frail elderly.
- Predict potential drug-drug interactions and drug-food interactions based on physiologic responses to pharmacological agents and apply critical thinking skills for appropriate intervention.
- Explain the correct measures to ensure the prevention of medication errors, employing critical thinking skills to determine the effectiveness of medication administration on care outcomes.
- Identify the roles of the healthcare professional in relation to medication administration and education in both acute care and community health settings.
- List the five concepts of human functioning to assess appropriate/inappropriate responses to therapy.

- Cite historical perspectives contributing to the development of pharmacology through the present.

HLTH230 Health Care Law and Ethics **Credit Hours:** 3

This course will provide the opportunity to explore basic law as it is applied to health related issues and the health care community. The student will be introduced to the concepts of medical ethics and will explore the major ethical issues currently facing health care professionals, with an emphasis on maintaining the highest legal, moral, and ethical standards in their profession. Note: A grade of C or better is required to pass this course. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. successfully.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Interpret and monitor current confidentiality policies and procedures, privacy and security in various healthcare settings.
- Describe the legal and ethical impact of health information and records management laws and regulations (patient rights, advocacy, advanced directives, etc.)
- Identify and articulate practical decision-making relative to ethical dilemmas commonly found in the current healthcare setting.
- Describe the legal system and fundamental legal concepts applicable to the healthcare field.

HLTH250 Healthcare Reimbursement Mgmt

Credit Hours: 3

This course is an introduction to health care reimbursement systems used throughout the United States. Students will gain a detailed understanding of various payment methodologies currently used (i.e. managed care, third party payers, federal programs, etc.), and apply this understanding to the monitoring and management of the revenue cycle. Students will verify completeness of clinical documentation, manage the use of clinical data systems used in claims management and utilize the principles of health care finance to monitor healthcare facility revenue. Current HIPAA guidelines will be covered along with financial ethics and the identification and eliminations of financial fraud and abuse. Note: A grade of C or better is required to pass this course successfully. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply revenue cycle and reimbursement principles. (3)
- Identify fraud surveillance activities in healthcare organizations. (3)
- Identify documentation in the health record that supports billing reimbursement processes to meet regulatory requirements. (2)

BITS101 Computer Essentials **Credit Hours:** 3

This course is designed for novice computer users. The primary focus is the development of keyboarding ability since this skill is a prerequisite to computing success. Other areas to be studied include configuring the Windows desktop and managing files with Windows Explorer. Students will also learn the basics of operating a computer for simple word processing tasks, searching the Internet, and effectively using e-mail. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- key straight copy for 3 minutes at a rate of 25 correct words per minute with a maximum of three errors
- efficiently use the Windows interface to move, resize, minimize, maximize, and close windows as well as to control windows properties
- customize the Windows desktop
- create, move, copy, delete, and rename files and folders with Windows Explorer
- create, save, open, and print a document in word processing software
- effectively perform Internet searches for specific information
- send and receive e-mail with his/her Davenport account
- send and open an attachment to an e-mail message
- save and open a file downloaded from the Internet
- identify basic terminology related to the Windows environment and the Internet

BITS209 Dynamic Presentations **Credit Hours:** 1

Students create dynamic, computerized presentations using the advanced tools of professional-caliber presentation software. Students will learn to enhance presentations with custom animations, transitions, action controls, and a variety of multimedia objects. In addition to design techniques, students study the tools for professionally delivering a presentation within various environments. This course is recommended for all students who will need to make polished presentations in their career. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Prerequisite(s): CISP100

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create dynamic PowerPoint presentations using advanced software tools such as custom animations, transitions, layout variations, and action controls
- Incorporate text, graphics, and multimedia objects to enhance the message of a computerized slide show
- Prepare portable presentations for various media and environments including web-based and tutorial applications
- Demonstrate creativity while applying key presentation design techniques
- Use a digital camera, scanner, and projector to create and present slide shows
- Enhance a presentation through the use of speaker's tools
- Integrate related software files within PowerPoint
- Use time-saving features such as slide master and templates to create a presentation quickly yet consistently.

BITS211 Microcomp Appl Spreadsheet

Credit Hours: 3

Students create and manipulate spreadsheets with MS Excel to solve business applications. It is expected that students have a familiarity with spreadsheet software, as the course quickly progresses to advanced features, including data validation, linked workbooks, pivot tables, lookup functions, solver, and scenario manager. By the end of the semester, students will have the prerequisite skills to take applicable certification testing. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.
Recommended Prerequisite(s): MATH120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Plan, create, and format an Excel spreadsheet to solve business applications
- Create formulas manually and with the formula function.
- Create and format a variety of charts and their components.
- Apply special spreadsheet commands such as sorting, filtering, linking workbooks, pivot tables, and lookup functions.
- Analyze spreadsheet data through solver, goal seek, data tables, and scenario manager.
- Export and import data with varied sources.
- Demonstrate the prerequisite spreadsheet skills for MS Excel expert certification.

BITS212 Microcomputer Apps Database

Credit Hours: 3

Students learn to create and manipulate databases to solve business applications. The course begins with the basic structure and configuration of tables, queries, forms, and reports. It then advances to more complex queries, custom forms and reports, macros, and the integration of databases with the web and other programs. At the end of the semester, students combine these features into a functional database which has a user-friendly interface. By the end of the semester, students will have the prerequisite skills to take applicable certification testing. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Prerequisite(s): CISP100

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create and modify tables with various field properties.
- Create and modify table relationships.
- Solve business questions by filtering, sorting, and creating simple condition and complex queries including parameter, list-of-values, pattern match, find unmatched, find duplicates, and crosstab.
- Apply action queries such as make-table, append, history, delete, and update to appropriate business scenarios.
- Create and modify database forms for user-friendly input.
- Create and modify database reports for professional and meaningful output.
- Import and export data with various sources
- Create and link a database file with web pages and HTML documents.

BITS213 Microcomputer Apps Desktop Pub **Credit Hours:** 3

Students learn to design high-quality, marketable publications with industry-standard page composition software. Sample projects include newsletters, brochures, letterheads, business cards, and on-line materials. Publication design principles and software competency are integral components of this course. Students work on team projects and pre-press activities which are critical components of desktop publishing. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Prerequisite(s): CISP100

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create professional-quality publications such as newsletters, brochures, flyers, letterheads, and business cards using Adobe InDesign CS2.
- Apply software functions such as font and color attributes, page layout, and graphic features to produce attractive publications which adhere to standard design theory
- Plan and produce an original publication as a team effort
- Critique publications as to their effectiveness for the intended audience and purpose
- Critique publications on acceptable design practices by using appropriate publishing terminology

BITS214 Microcomputer Applications **Credit Hours:** 3

This course expands on prior word processing knowledge. Students study advanced commands and features of industry-standard word processing software for production of various business documents. Some areas of study include macros, mail merge, sharing data, compiling specialized tables, collaborative tools, and forms. Upon successful completion of this course, students will have the prerequisite skills to take applicable certification testing. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.
Recommended Prerequisite(s): CISP100

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate business documents for accuracy in style, format, grammar, and spelling.
- Integrate word processing functions with Internet activities and MS Office Suite applications.
- Create/incorporate macros, mail merge, templates, and shared document features to improve word processing efficiency.
- Design visually-appealing documents through the use of font attributes, borders, clip art, WordArt, SmartArt, drawn objects, and charts.
- Create tables, columns, styles, sorts, fill-in forms, envelopes, and labels.
- Assemble long documents with section breaks, indexes, table of contents, page numbers, bookmarks, headers/footers, and footnotes/endnotes.
- Demonstrate the prerequisite word processing skills for MS Word expert certification.

CISP100 Introduction to Computers **Credit Hours:** 3

This course introduces students to computer hardware, software, and terminology. Hands-on lab exercises will be extensive and focused on Internet usage, file management, and microcomputer software (word processing, spreadsheet, database, and presentation). Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Prerequisite(s): Keyboarding 25 wpm

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create word processing documents with integrated objects including tables and pictures.
- Create proficient PowerPoint presentations.
- Create spreadsheets with multiple sheets and charts.
- Create a database and output reports based on database queries and filters.
- Demonstrate proficient file management on a PC.
- Discuss current ethical and legal issues related to computers in society.
- Locate and share information on the Internet (www and e-mail).
- Discuss current events specific to Information Technology.
- Define basic computer terms such as hardware, software, kilobyte, operating system, etc.
- Demonstrate proficient email skills including attachments.

CISP111 Requirements Planning/Develop **Credit Hours:** 3

This course surveys the main components of the business systems cycle. The five phases of the systems development life cycle (SDLC) (systems planning, system analysis, systems design, systems implementation, and system operation and support) will be investigated. Students will look at how many of the typical business needs are incorporated into a business system. These may include invoicing, accounts receivable, order entry, inventory, accounts payable, payroll, manufacturing, and sales/marketing. Participation in a group project, site visit, or case study will give students a sense of group dynamics in real-world systems development projects. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Prerequisite(s): CISP100

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Document software design by using diagram modeling and project mangement software.
- Explain the five phases of the software development life cycle (SDLC).
- Describe how systems analysts interact with users, management, and other information systems professionals in a typical business organization.
- Identify the major information system's components such as: hardware and software requirements, type of computer programs, types of computer files, systems documentation, and computer programming fundamentals.

CISP211 E-Business Technologies **Credit Hours:** 3

This course is an introduction to Internet and Web based technologies, and methods improving purchase and logistics activities. Main topic areas include web-based technologies used to create new business opportunities, business strategies for e-commerce, hardware and software requirements, security concerns, payment systems, MRP, ERP concepts, cloud technology. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): CISP111

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Describe web and internet technologies supporting businesses.
- Describe the infrastructure and components of the internet.
- Explain how web-based technologies have impacted business practices to become more transparent.
- Explain security, privacy, and legal issues relating to e-business.
- Explain ERP and MRP concepts and how such applications integrate all facets of a business' operation.
- Describe the flow of material and information in a supply chain and where internet web-based technologies make an impact

CISP220 Web Page Applications **Credit Hours:** 3

This foundational course in web page design and development provides hands-on experiences in HyperText Markup Language (HTML), Cascading Style Sheets (CSS), and JavaScript to develop, validate, link, publish, design, and maintain web pages using industry standard tools. Topics covered include HTML forms, responsive design, interactive content, media usage, cascading style sheets, and the publishing process. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Develop a working website using HTML, CSS, and JavaScript
- Implement inline, embedded and external style sheets
- Utilize various types of forms, lists, positioning, media and special effects
- Publish content to web servers using industry standard deployment tools
- Explain web accessibility initiatives and internationalization guidelines

CISP238 Server Side Scripting I **Credit Hours:** 3

Students learn to combine front-end and back-end web development using the Model-View-Controller software pattern. Students create database-driven web pages that can retrieve and manipulate data contained in a database using an entity framework to solve specific problems. Note: This course requires a C or better grade in order to take the next course in the sequence. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): CSCI232, CSCI234, CSCI239, or CISP242

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create asynchronous front end web pages using JavaScript and XML (Ajax)
- Utilize data access frameworks.
- Implement data validation, such as regular expressions, to insure data is validated on both the client and server
- Utilize source code control
- Publish to a remote server using FTP and web deployment tools
- Explain each component for the MVC design pattern.
- Execute a program including debugging and tracing the flow, from the client side through the back end web server to the database
- Utilize tools and methodologies that integrate security best practices throughout the software development life cycle to mitigate
- risks, reduce attack surfaces, and increase the quality of software development efforts

CISP242 Visual BASIC Programming II

Credit Hours: 3

This course is a continuation of Visual BASIC Programming I. Emphasis will be placed on how to work with databases from within Visual Basic. Other topics include utilizing class modules, creating DLL's, utilizing common controls and the Windows API functions, and deploying and debugging an application. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): CSCI231

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Discuss object-oriented concepts and techniques and how they apply to the design of a program.
- Apply problem-solving techniques in identification and analysis of program needs.
- Design a logical program solution.
- Test and debug the Visual Basic application.
- Demonstrate the ability to deploy a Visual Basic application.
- Demonstrate how to apply object-oriented concepts to promote code reuse both within a program and across multiple programs.
- Describe how a Visual Basic program interacts with a database and how to retrieve and manipulate the data within the database.

CISP246 3D Modeling

Credit Hours: 3

This course provides the student with an introduction to 3D modeling. Students will utilize polygonal and NURBS modeling to develop surfaces, shapes, and basic animations. Topics covered include lighting, rendering, paint effects, and particles. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): CISP111

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Implement models using Polygonal Modeling.
- Implement models using NURBS Modeling.
- Demonstrate basic animation techniques.
- Demonstrate character setup and rigging.
- Implement lighting and texturing for animations.

CISP247 Database Design

Credit Hours: 3

This course will examine the major types or data models of Database Management Systems (DBMS): hierarchical, network, relational, and object-oriented. The principles and problems of database design, operation, and maintenance for each data model will be discussed and compared. Topics that will be covered include design theory, query language, relational expressions, SQL, stored procedures, client-server interfaces, entity relationship diagrams, normalization, and database security. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Prerequisite(s): CISP111

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Access the data structure in the context of database security.
- Apply the different modeling and design techniques for a DBMS, including normalization and ERD diagramming.
- Explain advantages and disadvantages of the four types of database design: hierarchical, network, relational, and object-oriented.
- Describe the developing changes in database design and implementation, including XML applications.
- Identify the role of SQL in database application development.

IAAS256 Windows Digital Forensics **Credit Hours:** 3

This course surveys the technical knowledge of the Windows operating system that any digital forensic analyst should know to examine digital media. The course focuses on collecting and analyzing data from a Windows operating system to provide information that can be used for both civil and criminal litigation. User based activity and software/hardware artifacts are analyzed along with acquisition of digital media in a Windows based environment. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): IAAS221 and NETW101

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Describe Windows supported file systems (i.e.: Fat, NTFS, exFat)
- Discuss Windows processes and what they mean to a forensic examination.
- Identify, secure and image Windows based systems (PC's, Physical and Virtual servers).
- Identify and describe Windows forensics artifacts and what they mean to a forensic examination.
- Research and discuss new and updated applications and what they mean to a forensic examination.
- Evaluate Hardware and software required to build a digital forensics lab used for Windows investigations.
- Perform a basic forensic examination on digital media of a Windows system.

CSCI222 Biometric Fundamentals **Credit Hours:** 3

This course will present an overview of the topics fundamental to Biometrics. Those topics will include an introduction to the Biometric modalities currently being used today (such as Face, Finger, and Iris). Performance evaluation of biometric systems will be explored as well as understanding the components that make up a biometric system. An overview of the sciences that allow biometrics to be used today will also be briefly covered (Computer Vision, Pattern Recognition, Machine Learning, and Statistical Inference). Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.
Prerequisite(s): IAAS221 or IAAS224

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Critique the distinct biometric modalities currently being used in industry and research.
- Evaluate biometric systems using match scores and non-match scores.
- Critique the Biometric Menagerie and how it affects biometric system performance.
- Explain basic algorithms used in the field of biometrics.
- Summarize the components of a biometric system.

CSCI231 Introduction to Programming **Credit Hours:** 3

This is an introductory course in object-oriented programming. Students learn fundamental programming concepts including structured programming, operations on data and decision-making, looping, recursion, pointers, scope and class of variables strings, numeric arrays, sorting, and an introduction to data structures. Emphasis will be placed on the design, development, and testing of programs used to solve practical problems. Note: A grade of C or better is required to take the next level of programming courses CSCI 232, CSCI 234 and CSCI239. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Write simple computer programs in C# using Classes, Inheritance, and Polymorphism.
- Create and destroy objects dynamically.
- Redefine operators to work with Classes.
- Demonstrate use of concept Inheritance.
- Use the concept of Polymorphism.
- Allocate memory dynamically and delete it when it is not needed.
- Write output of a program to a file on the disk and read data from a file on the disk.
- Use single and multidimensional arrays, searching and sorting techniques

CSCI232 Object-Oriented Program w/ C++ **Credit Hours:** 3

This course is a continuation of object-oriented programming utilizing C++. Students learn to design, code, test, and debug programs using object-orientated techniques. Emphasis is placed upon topics such as problem solving, programming structure, arrays, strings, pointers, classes, inheritance, polymorphism, constructors, copy constructors, destructors, overloading operators, virtual functions, I/O file streams, and data files. Students learn how to strengthen problem solving skills and analytical techniques as they apply to their programs a variety of data types, input/output, operators, decisions, looping, and functions. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.
Prerequisite(s): CSCI231 completed with a grade of C or better

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Write simple computer programs in C++ using Classes, Inheritance, and Polymorphism.
- Create and destroy objects dynamically.
- Redefine operators to work with Classes.
- Demonstrate use of concept Inheritance.
- Use the concept of Polymorphism.
- Allocate memory dynamically and delete it when it is not needed.
- Write output of a program to a file on the disk and read data from a file on the disk.
- Use single and multidimensional arrays, searching and sorting techniques.
- Utilize security tools and methodologies to address security requirements in the design phase of a software development project that identifies threats and reduces the attack surface of the system under development.

CSCI234 Object-Oriented Program w/ C# **Credit Hours:** 3

This continuing course in object-oriented programming exposes students to C# programming and object-oriented analysis and design techniques. Students will design, develop, and test applications used to solve practical problems. Topics explored include classes, inheritance, polymorphism, interfaces, database access, extensible markup language, and network programming. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): CSCI231 completed with a grade of C or better

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Write simple computer programs in C# using Classes, Inheritance, and Polymorphism.
- Create and destroy objects dynamically.
- Redefine operators to work with Classes.
- Demonstrate use of concept Inheritance.
- Use the concept of Polymorphism.
- Allocate memory dynamically and delete it when it is not needed.
- Write output of a program to a file on the disk and read data from a file on the disk.
- Use single and multidimensional arrays, searching and sorting techniques.
- Utilize security tools and methodologies to address security requirements in the design phase of a software development project that identifies threats and reduces the attack surface of the system under development.

CSCI239 Object-Oriented Program w/Java

Credit Hours: 3

This course investigates advanced topics in object oriented programming using the Java programming language. Data structures, Trees, Linked Lists, Abstract Data Types, Binary Trees, Graphs, Searching and Sorting Algorithms are covered. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): CSCI231 completed with a grade of C or better

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Discuss and define object-oriented concepts and techniques.
- Design Graphical User Interfaces.
- Identify/Describe the Java variables, primitive data types, and arithmetic operators.
- Demonstrate the knowledge of loops, branches, and logical structures.
- Demonstrate the use of objects, strings, and arrays.
- Demonstrate the knowledge of structured error handling.
- Demonstrate the ability to solve problems and create stand-alone programs utilizing JAVA programming techniques and methodologies.
- Describe multithreading benefits and issues.
- Design applications which interact with information contained in database systems.
- Utilize security tools and methodologies to address security requirements in the design phase of a software development project that identifies threats and reduces the attack surface of the system under development.

CSCI258 Introduction to Game Design **Credit Hours:** 3

This course introduces students to the game development process from storyboarding the initial concept to the final marketing documentation. During this course, students will utilize multiple game development methodologies to move a project through the major stages of game design with each student assuming one or more of the development team roles. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): CISP111

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create a budget that accurately reflects the estimated work required to complete a project.
- Develop a working game prototype or simulation based on currrent industry standards.
- Demonstrate the use of prototying, storyboarding, character and genre development in the preproduction of development of game.
- Create viable testing plans addressing the critical phases in the development lifecycyle.
- Differentiate between different gaming theory methods.
- Describe the behavior in games using the concepts of game theory methods.
- Explain key development team roles and responsibilities.
- Describe the game development process from pre-production to post-production.

CSCI260 Software Engineering **Credit Hours:** 3

The key objective of this course is to learn modular design of software and documenting the design using symbolic representations, i.e., UML diagrams. The course will cover software life-cycle models and different phases of the software development process. Object-oriented techniques are key to the course. However, this is not a programming course. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): CSCI231

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Apply modular design of software development and documentation.
- Understand and apply each of the phases of software development processes.
- Apply logical steps and practical problem-solving processes in software development.
- Understand and Apply software engineering techniques when developing software
- Create symbolic representations to document software design
- Analyze and critique a demonstrable software package as a team using software engineering process.

CSCI268 Assembly Lang & Comp Arch

Credit Hours: 3

This course will examine the fundamentals of machine organization, assembly language, and machine language to expose the student to the fundamental operating principles of a central processing unit and related components. Topics may include instruction set architecture, assembling and linking, memory addressing modes, parameter-passing conventions, pipelining, cache and virtual memory organization, I/O and interrupts, registers, RISC vs. CISC, and data representation. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): CISP111

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Discuss how different data types are represented and organized in hardware and the mechanisms utilized to detect and handle errors.
- Diagram the organization of hardware components of a contempory CPU.
- Discuss the steps in the instruction execution cycle and how superscalar designs and pipelining may be employed to increase performance.
- Demonstrate the design and implementation of assembly language programs that perform I/O and utilize interrupts.
- Compare and contrast the RISC architecture and the CISC architecture discuss the appropriate use of RISC vs. CISC in development scenarios.

CSCI280 Artificial Intelligence **Credit Hours:** 3

This course will present an introduction to the field of Artificial Intelligence. Topics will include problem solving, search techniques (including game playing), inductive learning, decision trees, reasoning, and natural language understanding. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): CSCI231 and MATH250

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Implement a search algorithm
- Differentiate between various search algorithms.
- Explain the current machine learning algorithms
- Summarize types of probabilistic reasoning and inference.

IAAS221 Security Foundations **Credit Hours:** 3

This course will provide an overview of information security from both the perspectives of the organization and that of personal computing. Topics include security management practices, physical security, security architecture, business continuity and disaster recovery planning, access control systems, security controls, cryptography, telecommunications and network security, operations security, law and ethics, and personal computer security. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Recommended Prerequisite(s): CISP100

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- discuss effective security management practices.
- discuss the rationale and methods for controlling access to network systems.
- describe cryptography and symmetric & asymmetric key cryptography
- discuss security models and operations security.
- discuss software application and database security issues.
- discuss disaster recovery, business continuity, and legal & ethical issues.
- describe the threats to physical security.
- discuss topics relevant to security for personal computers.

IAAS224 Implementing Network Security **Credit Hours:** 3

This course will provide hands-on, practical techniques for implementing security in today's environment. The current risks and threats to an organization's data, along with methods of safeguarding this data, will be discussed. Students will build on previous knowledge to implement basic security services on any type of computer network. This course prepares students for the CompTIA Security+ exam. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): NETW141

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Describe the security purpose and function of network devices and technologies.
- Explain risk related concepts, and the importance of incident response procedures, business continuity plans, and disaster recovery plans.
- Identify different types of threats and vulnerabilities, as well as defense techniques.
- Carry our procedures to establish application, data, and host security.
- Implement authentication, authorization, and access control services.
- Apply various cryptographic tools."

IAAS240 Cisco Cyber Operations **Credit Hours:** 3

This course introduces students to the security concepts, common network and applications operations and attacks, and the types of data needed to investigate security incidents. Emphasis will be placed on understanding the IT infrastructure, operations, vulnerabilities, and function of a cybersecurity operations center (SOC). Students will learn how to monitor alerts and breaches, and determine and follow established procedures for response to alerts converted to incidents. Lab work is designed to simulate real-world networking. This course prepares students for the Cisco CyberOps Associate (200-201 CBROPS) certification exam. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): NETW217 Recommended prerequisite(s): NETW151 or NETW220 Co-requisite(s): IAAS221 or IAAS224

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Evaluate network security alerts and network intrusion data to identify compromised hosts and vulnerabilities.
- Apply incident response models to manage network security incidents.
- Describe characteristics of Windows and Linux operating systems, which support cybersecurity analyses.
- Identify attacks against network protocols and services using network monitoring tools.
- Identify methods to prevent malicious access to computer networks, hosts, and data.

IAAS245 Disaster Recovery **Credit Hours:** 3

This course will provide an overview of characteristics of disasters, their impact on population, infrastructure, economy, and disaster management cycle. Topics include the role, organization, and management of business continuity planning in planning for and surviving the impact of disaster, continuing to operate to serve clients or customers, and rapidly recovering to full operations. Other areas of interest include the business impact analysis process, how to manage it, and how to use the analysis as the first step in business continuity plan development. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): IAAS221 or IAAS224

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Describe the information security lifecycle,
- Explain the issues related to Prevention, Detection, and Response,
- Justify the preferred approach for handling an incident
- Explain cryptography, business continuity, and disaster recovery from a business perspective,
- Make the decisions related to company data security and explain the impact of those decisions on an organization,
- Decide what the most appropriate solution for a company is - building internal capabilities vs. outsourcing.
- Develop, either individually or in a team, a DRP.

NETW151 Cisco Networking Fundamentals **Credit Hours:** 3

(4 contact hours) This course introduces students to the architecture, structure, functions, and components of the Internet and other computer networks. The principles of IP addressing, the OSI model, and the fundamentals of Ethernet protocols & media are introduced. Students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IPv4 and IPv6 addressing schemes. Lab work is designed to simulate real-world networking. This course is the first of three networking courses to prepare students for the Cisco Certified Network Associate (CCNA) certification exam. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Co-requisite(s): MATH120 or MATH125; and NETW101

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Identify and describe the role of protocol layers in data networks.
- Explain fundamental Ethernet concepts such as media, services, and operations.
- Identify and describe the importance of addressing and naming schemes at various layers of data networks in IPv4 and IPv6 environments.
- Design, calculate, and apply subnet masks and addresses to fulfill given requirements in IPv4 and IPv6 networks.
- Explain fundamental Ethernet concepts such as media, services, and operations.
- Build a simple Ethernet network using routers and switches.
- Perform basic router and switch configurations using command-line interface.

NETW152 Cisco Routing & Switching **Credit Hours:** 3

(4 contact hours) This course describes the architecture, components, and operations of routers and switches in small networks, and introduces WLANs and security concepts. Students will learn to configure and troubleshoot routers and switches and resolve common issues in both IPv4 and IPv6 networks. Topics covered include VLANs and inter-VLAN routing, EtherChannel, and IPv4 & IPv6 static routing. Lab work is designed to simulate real-world networking. This course is the second of three networking courses to prepare students for the CCNA certification exam. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): NETW151

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Configure VLANs and Inter-VLAN routing applying security best practices.
- Configure redundancy, security, and wireless access on switched networks.
- Configure dynamic address allocation in IPv4 and IPv6 networks.
- Configure IPv4 and IPv6 static routing on routers.
- Describe network reliability, dynamic adressing, and first-hop redundancy protocols.

NETW201 PC Maintenance and Management **Credit Hours:** 3

This course introduces the student to a PC, its components, common troubleshooting techniques, and adjustments. Additional topics include PC and network security methods, computer hardware and software package selection, and managing the PCs within a company—keeping track of all serial numbers, warranties, and software licensing utilizing either a spreadsheet or database. This course is 90% hands-on. This course will not teach students to repair all problems; not all problems can be fixed. This course will also help prepare the student to take the CompTIA A+ examination. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): NETW101

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Examine and define PC components, common troubleshooting techniques and adjustments.
- Analyze symptoms to identify problems.
- Demonstrate general preventative maintenance and repair on a PC including:
- Replacing/upgrading video and sound cards
- Replacing power supplies, motherboards and various other components
- Upgrading the PC's RAM and hard drive
- Evaluate selection and installation of computer hardware and software packages.
- Create and manage an interactive hardware listing which will keep track of all PCs, hardware and the software used on each PC within a company.
- Identify, install and configure laptop and portable devices.
- Demonstrate proficiency with installation and configuration of printers and scanners.
- Demonstrate problem solving techniques by troubleshooting software and its interaction with hardware.

NETW217 UNIX Operating Systems **Credit Hours:** 3

This course covers operating system concepts in the UNIX environment. Topics include terminology, UNIX features and commands, UNIX system administration, and UNIX as a network server. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): NETW101

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Describe the UNIX architecture.
- Describe processes and threads, coordination and synchronization, scheduling, interrupts, and deadlock.
- Construct UNIX commands to control hardware functions.
- Describe memory management, input and output, and file systems.
- Describe UNIX shell programs and processes.
- Explain how UNIX is used as an operating system to control multi-user computer networks.
- Compare the strengths and weaknesses of UNIX as a network server.
- Describe how to perform system administration in a UNIX environment.
- Demonstrate problem-solving skills by troubleshooting operating system problems.

NETW220 Data Communications & Networks **Credit Hours:** 3

This course focuses on fundamentals of data communications systems and networks. Topics to be covered will include communications hardware and software, data transmission, protocols to include the LDAP, the OSI Reference Model, local area networks, wide area networks, and the Internet. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): NETW101 or CISP111 and MATH120 or MATH125

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Discuss the terminology, concepts, and capabilities of data communication systems.
- Compare different data transmission media and discuss the factors that influence the choice of a medium.
- Compare and contrast network topologies.
- Discuss the uses of the Internet.
- Explain data flow, transmission error sources, and methods of error detection and correction.
- Describe the functions of the seven layers of the OSI Reference Model.
- Discuss networking hardware, including: hubs, bridges, routers, modems, CSU/DSUs.
- Discuss data security issues.
- Demonstrate written proficiency by preparing a research paper on data communications topics.

NETW235 UNIX/Linux Server Admin **Credit Hours:** 3

This course builds on previous experience in a UNIX environment to provide students with all the standard and advanced techniques necessary to set up and maintain a secure, effective Linux environment. Emphasis will be on using UNIX/Linux as a network server. Students will create and maintain users and groups, set up web, mail, and FTP services, and perform other UNIX/Linux server administration tasks. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): NETW217

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create and maintain users and groups.
- Create Web services.
- Create Mail services.
- Create FTP services.
- Demonstrate Unix server administration tasks.

NETW241 MS Implement Network Infrastr **Credit Hours:** 3

This course covers installing and configuring network protocols and services, such as DHCP, DNS, WINS, Remote Access Services, routing, Network Address Translation, and Certificate Services in a Windows Server environment. The course includes extensive use of hands-on exercises. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): NETW141

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Discuss and compare IPv4 and IPv6 addressing.
- Configure Dynamic Host Configuration Protocol (DHCP).
- Configure name resolution using Domain Name System (DNS).
- Manage file server resources.
- Configure Distributed File System (DFS).
- Set up print services.
- Configure Routing and Remote Access Services (RRAS), including routing and Virtual Private Network (VPN) access.
- Configure Network Policy Server (NPS).
- Implement Windows Server Update Services (WSUS).

NETW243 MS Administer SQL Server **Credit Hours:** 3

The course covers installation, configuration, administration, and troubleshooting the Microsoft SQL Server database management system. The course includes extensive use of hands-on exercises. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): NETW141

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Describe basic relational database concepts.
- Install Microsoft SQL Server.
- Implement login security and database permissions.
- Demonstrate the use of administrative tools to create and administer SQL Server databases.
- Discuss database backup strategy and replication technique.
- Monitor SQL Server performance.

NETW251 Cisco Enterprise Networking **Credit Hours:** 3

(4 contact hours) This course describes the architecture, components, and operations of routers and switches in a larger and more complex network. Students learn how to configure routers and switches for advanced functionality. The course emphasizes network security concepts and introduces network virtualization and automation. Students learn how to configure, troubleshoot, and secure enterprise network devices and understand how application programming interfaces (API) and configuration management tools enable network automation. Lab work is designed to simulate real-world networking. This course is the third of three networking courses to prepare students for the CCNA certification exam. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): NETW152

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Configure and troubleshoot DHCP and DNS operations for IPv4 and IPv6.
- Identify and describe the operations and benefits of the Spanning Tree Protocol (STP).
- Configure and troubleshoot STP operations.
- Identify and describe the operations and benefits of link aggregation and Cisco VLAN Trunk Protocol (VTP).
- Configure and troubleshoot VTP, STP, and RSTP.
- Configure and troubleshoot basic operations of routers in a complex routed network for IPv4 and IPv6.
- Configure and troubleshoot advanced operations of routers and implement RIP, OSPF, and EIGRP routing protocols for IPv4 and IPv6.
- Manage Cisco IOS® Software licensing and configuration files.

NETW253 Cisco Network Programmability **Credit Hours:** 3

Students in this course will be introduced to network automation, and its applications, including the integration of DevOps tools to automate the network efficiently and automate systems through code. Through network programming and automation, students will learn how to simplify tasks involved in configuring, managing, and operating network equipment, topologies, services, and connectivity. Additional topics will include open standards, tools, and network APIs, which may include Python, JavaScript Object Notation (JSON), Network Configuration Protocol (NETCONF), Representational State Transfer Configuration Protocol (RESTCONF), and Yet Another Next Generation (YANG). Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): NETW101 or CISP111

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Construct automation scripts that utilize specific device(s) to automate a task given the appropriate Software Development Kit.
- Construct a REST API payload to accomplish a task given the API's documentation.
- Troubleshoot a problem given the HTTP response code, the response payload, the request payload, and the API documentation.
- Apply the concepts of model-driven programmability using a standards-based configuration in a network environment.
- Identify the workflow given a script that invokes a documented API.
- Identify application security issues related to confidentiality in the handling of sensitive data in automation scripts.

NETW290 Networking Internship **Credit Hours:** 1

Attend Mandatory Internship Workshop at least two semesters prior to your desired internship course semester. The required internship workshop and approval process can be found at:https://my.davenport.edu/internships This associate-level internship is the integration of previous classroom instruction with new learning acquired through on-the-job work experience. The experience should be related as closely as possible to the student's major field and individual interest. The course is variable credit (1, 2 or 3) with 1 credit requiring 50 hours of career-related work time at the internship site; 2 credits require 100 hours and 3 credits require 150 hours. The course may be repeated for up to a total of 3 credits. Internship hours will be scheduled in partnership between the student and the site and reported via weekly reports filed by the student in the academic course. NETW290 allows students to take an additional internship earlier in their career, but students must also meet the minimum 3 credits of their internship requirement through NETW490. Students will be supported to identify site possibilities; however, responsibility for selection by the internship employer rests with the student. The internship may be either paid or unpaid. An appropriate faculty member and the internship site supervisor will evaluate the student's performance. Note: Any unexcused non-attendance or dismissal from an internship will result in a grade of F. A grade of C or better is required to pass this course. A criminal background check and drug screen may be required by the Internship site. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): Sophomore status; BUSN210 and NETW151 or NETW220; minimum cumulative GPA of 2.0 and minimum major GPA of 2.3.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Demonstrate adherence to ethical and behavioral standards imposed upon organizational professionals with access to personal and organizational information.
- Comprehend an employee's accountability for both assigned and implied tasks.
- Effectively and efficiently apply substantive, procedural, and theoretical knowledge obtained in the classroom to practical, value-enhancing work product.
- Act professionally in terms of communications, attire, attitude, promptness, and participation.
- Evaluate the internship experience through the design and completion of an internship reflective paper detailing the specific experiential learning and the classroom instruction that supported the experience.

UEDU151 Service/Experiential Learning **Credit Hours:** 0

BS-Urban STEM Education requires a minimum of 30 hours of service learning per academic year which can be obtained from partnerships in afterschool STEM programs, summer camps, tutoring and in-class teacher support opportunities. These experiences are designed to address community need while allowing students to cultivate culturally responsive teaching practices, proficiency in current STEM pedagogical strategies as well developing their commitment to high-need school districts within urban communities. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create lesson plans and activities relevant to a variety of service learning sites
- Develop effective communication with students and school stakeholders
- Assess K-12 student engagement in STEM activities and mastery of concepts
- Implement self reflective practices that promote continuous improvement of teaching skills
- Implement STEM focused and culturally responsive pedagogical practices when teaching K-12 students

UEDU152 Service/Experiential Learning

Credit Hours: 0

BS-Urban STEM Education requires a minimum of 30 hours of service learning per academic year which can be obtained from partnerships in afterschool STEM programs, summer camps, tutoring and in-class teacher support opportunities. These experiences are designed to address community need while allowing students to cultivate culturally responsive teaching practices, proficiency in current STEM pedagogical strategies as well developing their commitment to high-need school districts within urban communities. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): UEDU151

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

UEDU153 Service/Experiential Learning

Credit Hours: 0

BS-Urban STEM Education requires a minimum of 30 hours of service learning per academic year which can be obtained from partnerships in afterschool STEM programs, summer camps, tutoring and in-class teacher support opportunities. These experiences are designed to address community need while allowing students to cultivate culturally responsive teaching practices, proficiency in current STEM pedagogical strategies as well developing their commitment to high-need school districts within urban communities. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): UEDU152

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

UEDU154 Service/Experiential Learning **Credit Hours:** 0

BS-Urban STEM Education requires a minimum of 30 hours of service learning per academic year which can be obtained from partnerships in afterschool STEM programs, summer camps, tutoring and in-class teacher support opportunities. These experiences are designed to address community need while allowing students to cultivate culturally responsive teaching practices, proficiency in current STEM pedagogical strategies as well developing their commitment to high-need school districts within urban communities. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees. Prerequisite(s): UEDU153

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

UEDU191 Tutoring in Urban Schools

Credit Hours: 1

This course prepares students to tutor multi-cultural students within urban schools. Special emphasis will be placed on active learning and understanding the youth experience in a multicultural environment. Successful completers will be able to collaborate with culturally responsive mentor teachers to learn how to effectively connect with students of various ethnic, racial, cultural and socioeconomic backgrounds. Students will gain real-world experience in developing tutoring lessons and working one-on-one with diverse learners. Strategies which utilize technology to facilitate student engagement in self-directed instruction will also be introduced. The experiential learning component of this course will be observed and students will receive feedback and coaching on their teaching practices. Students enrolled in the BS in Urban STEM Education program must take this for one credit. For each credit hour there will be 15 contact hours of coursework and 30 hours of service. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Construct a tutoring lesson to target an area of support or enhance strengths for an individual learner.
- Modify instructional content to meet an individual student's needs utilizing data.
- Assess student progress in working one-on-one with racially, culturally, linguistically, and economically diverse populations of students through data.
- Analyze research-based best practices in tutoring urban populations of students.
- Examine students' interests in making learning relevant.

UEDU192 Teacher Assist Urban Schools **Credit Hours:** 1

In this course, students will observe and begin to cultivate the necessary skills, approaches, and mindsets needed to become an effective multicultural educator. Special emphasis will be placed on active volunteering, observing, and interviewing educators serving in various roles within an urban school setting. Successful completers will gain practical experience assisting teachers and observe how they use culturally responsive teaching practices in a diverse classroom. Students will also observe how teachers utilize technology and various educational resources to foster academic success. The service learning component of this course will be observed and students will receive feedback and coaching on their teaching practices. Students enrolled in the BS in Urban STEM Education program must take this for two credits. For each credit hour, there will be 15 contact hours of coursework and 30 hours of service. Applicable Course Fees can be found at https://my.davenport.edu/financial-aid/how-much-does-du-cost/tuition-and-fees.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:

- Create a lesson plan that incorporates learning objectives, teaching strategies, activities, and alignment of resources that maximize mastery of a specific concept.
- Analyze observed culturally responsive teaching practices that facilitate learning in a multicultural classroom.
- Examine the varying roles and responsibilities in multicultural education and how they impact diverse populations of students in school settings through research, observations, and interviews.
- Compare and contrast research-based multicultural education models to real-world strategies utilized in the classroom.
- Identify various resources that can meet the needs of multicultural student learners.