

Transportation Aviation Management							
Principles		CTE Concentrator A		CTE Concentrator B		Pathway Capstone	
7214	Principles of Aviation Management	7217	Private Pilot Theory	7207	Aviation Safety and Operations		Aviation Management Capstone

Principles of Aviation Management

7214

This course provides the student the opportunity to develop an understanding of various aspects of the aviation industry to include general regulations and laws associated with the field. Included is an overview of the aviation field and all employment opportunities. Areas of study include aerodynamics, aircraft systems, performance, weight and balance, physiology, regulations, cross country planning, weather, and decision-making skills. Students will also learn of the departments associated with an airport and their impact on the industry as a whole.

- Prerequisite/Co-Requisite: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Postsecondary Alignment:

- ITCC: AVIT 111, AVIT 120

Key Competencies:

- Identify the various employment opportunities associated with civil and military aviation.
- List and discuss all regulating agencies used in the industry.
- Use of Aviation within industry and business.
- Describe all systems used within the airport proper and national airspace.
- Identify all aircraft classifications.
- Development an in-depth working knowledge of the fundamentals of aviation.
- Differentiate commercial, military, and general aviation principles.
- Interpret and implement aviation regulations.
- Develop a knowledge of aerodynamics theory.
- Create a working knowledge aircraft systems.
- Develop decision making and problem solving skill related to flight.
- Demonstrate the ability to pass the FAA Private Pilot knowledge exam

Private Pilot Theory

7217

The student will receive ground school knowledge required for certification as a private pilot with an airplane single engine land rating. Areas of study include aerodynamics, aircraft systems, performance, weight and balance, physiology, regulations, cross country planning, weather, and decision-making skills.

- Prerequisite/Co-Requisite: Principles of Aviation Management
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Postsecondary Alignment:

- ITCC: AVIT 123, AVIT 124

Key Competencies:

- Perform Pre and Post Flight checks.
- Perform in-flight maneuvers and instrument checks.
- Describe emergency situations and perform emergency operations.
- Utilize navigation equipment.
- Gain experience flying modern aircraft.
- Perform Pre and Post Flight checks.
- Perform in-flight maneuvers and instrument checks.
- Describe emergency situations and perform emergency operations.
- Utilize navigation equipment.
- Gain experience flying modern aircraft

Aviation Safety and Operations

7207

This course is an overview of general aviation operations, including the operation and management of the Fixed Base Operation (FBO). It introduces the challenges and complexity of aviation security faced by aviation professionals across the industry and traces the evolution of current security approaches and explores technologies and processes targeting threat mitigation and improved operational efficiency. Emphasis will be placed on financial and operational considerations as well as on regulatory requirements and constraints.

- Prerequisite/Co-Requisite: Principles of Aviation Management
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Postsecondary Alignment:

- ITCC: AVIT 132, AVIT 135

Key Competencies:

- Understand the role of the Fixed Base Operator in the National Airspace System.
- Identify general aviation management functions.
- Describe and outline corporate aviation including business use of aircraft, corporate flight departments, and the types of aircraft used by that industry.
- Identify and describe the linkages among the manufacturers, fixed base operators, and corporate operators.
- Compare and contrast the inter-working of the unique components of the general aviation industry.
- Demonstrate an understanding of marketing techniques.
- Demonstrate understanding of basic aviation fiscal administration.
- Understand the role of human resources in the general aviation environment.
- Identify general aviation organization and administrative functions.
- Identify functions of the flight line and front desk.
- Outline and explain the Federal Aviation Regulations that apply to general aviation flight training and maintenance.
- Demonstrate an understanding of aviation management information systems.
- Demonstrate an understanding of basic general aviation maintenance procedures.
- Demonstrate an understanding of general aviation safety and liability.
- Demonstrate an understanding of general aviation physical facilities.
- Develop an outline of the essential characteristics of natural and man-made threats to national and international aviation.
- Solve problems as an individual and in coordination with team members.
- Compose historical timelines reflecting methods and outcomes used to counter aviation security threats.
- Identify functions and interdependencies of local, national, and international aviation security agencies.
- Differentiate between individual privacy and national security related to aviation.
- Exhibit the knowledge, skills, and attitudes necessary to be a success the chosen area of the aviation industry.
- Develop an ability to do basic research, interpret and analyze the data and make useful presentations based on that research.
- Develop the basic knowledge, skills, and attitudes needed to be useful participants in the student's profession, society, and country, i.e. higher order thinking, communicating, interacting, managing information, and valuing.

Aviation Management Capstone

This course is an introduction to the aviation weather service program. Course includes the National Weather Service, Flight Service Stations, International Civil Aviation Organization, and analyzing and interpreting of weather reports and maps. Additionally, this course will prepare students for certification as an Instrument Pilot with an Airplane Single Engine Land rating.

Areas of study include basic instrument flying, flying instruments, IFR charts and approach plates, IFR regulations and procedures, ATC clearances, and IFR flight planning

- Prerequisite/Co-Requisite: Principles of Aviation Operations, Private Pilot Theory, and Aviation Safety and Operations
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max

Postsecondary Alignment:

- ITCC: AVIT 138, AVIT 202, AVIT 205

Key Competencies:

- Development basic knowledge of meteorology and its effect on the aviation environment.
- Demonstrate how the aviation weather service program functions.
- Learn about industry changes both current and in the future that will effect flight planning and flight safety.
- Interpret and explain weather reports, forecasts, weather charts, and flight briefings.
- Learn the limitations of weather observations and forecasts.
- Create go/no-go decisions.
- Build professional communications skills.
- Develop a working knowledge of flight in IFR conditions.
- Demonstrate knowledge of and ability to interpret FAA Instrument flight regulations.
- Develop knowledge of air traffic procedures, radio navigation as applied to instrument flying.
- Create a working knowledge of aircraft systems as applied to instrument flying.
- Develop decision making and problem-solving skills related to instrument flight.
- Demonstrate the ability to pass the FAA Instrument Pilot knowledge exam.
- Demonstrate a working knowledge of instruments.
- Interpret and implement instrument flight regulations.
- Create a working knowledge of radio navigation, aircraft operations, and performances as applied to instrument flying.
- Develop decision making and problem-solving skills related to instrument flight.
- Demonstrate the ability to pass the FAA Instrument Pilot knowledge exam.



Arts, AV Tech, and Communications							
Interior Design							
Principles		CTE Concentrator A		CTE Concentrator B		Pathway Capstone	
7132	Principles of Interior Design	7127	Interior Design Fundamentals	7128	Materials, Finishes and Design		Interior Design Capstone

Principles of Interior Design

7132

This course provides students with an overview of skills and strategies necessary to reach their educational, career, and life objectives. Topics include time management, study skills, learning styles, campus and community resources, critical thinking, utilization of technology, career skills, and diversity in society. Content also introduces students to fundamental design theory. Investigations into design theory and color dynamics will provide experiences in applying design theory, ideas and creative problem solving, critical peer evaluation, and presentation skills. The course provides an understanding of conventional and green building practices, building structures, residential construction techniques, building materials and plan reading. Includes building codes, sustainable design practices, and the preparation of site and construction plans, elevations, sections, three-dimensional drawings details and hand renderings as they relate to construction and presentation drawings.

- Prerequisite/Co-Requisite: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Postsecondary Alignment:

- ITCC VISC 101, EDSN 107

Key Competencies:

- Develop and demonstrate a working design vocabulary.
- Define and apply design process theory.
- Communicate specific design concepts.
- Recognize and employ the elements and principles of design.
- Recognize and employ color theory and color perception.
- Demonstrate creative and visual problem-solving skills through exercises and/or projects utilizing vector/raster-based graphics programs and/or other traditional processes.
- Generate ideas notes and thumbnails manually.
- Review and discuss historical foundation of design in art.
- Develop oral justification and persuasive discussion skills.

- Engage in critical peer evaluation.
- Demonstrate accurate reading of construction documents and understanding of drawing sequencing.
- Identify basic architectural styles.
- Illustrate proficiency in basic drafting skills: architectural lettering, use of scale, architectural symbols, legends and labeling.
- Apply technical drafting skills through the use of exercises to create construction documents including: dimensioned floor plans, accurate line weights and lettering, foundation and framing plans, interior and exterior elevations, working section detail drawings, cross sections, and floor and window schedules.
- Formulate building and structural solutions based on considerations such as sustainable strategies, orientation and climate, economics and building codes
- Create representational drawings illustrating contour, shade and shadow techniques, and rendered floor plans, site plans, elevations and pictorial drawings, using appropriate drafting techniques
- Critique construction documents to include appropriate use of structural/architectural nomenclature.

Interior Design Fundamentals

7127

This course provides students with an overview of the field of environmental design. Exercises include small scale space analysis and functional planning based on user needs, application of the principles of design, furniture arrangement and selection, materials and finishes considerations and presentation techniques. Content also provides an intensive study of textiles from fiber sources, identification and classification to finish and sustainable qualities. Also introduces the study of interior textile fabrications including window treatments, upholstery, carpet and wall coverings.

- Prerequisite/Co-Requisite: Principles of Interior Design
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Postsecondary Alignment:

- ITCC EDSN 103, EDSN 104

Key Competencies:

- Coordinate the elements and principles of design into a harmonious space.
- Demonstrate basic client interviewing skills.
- Demonstrate a competency of furniture and fixture selection and arrangement through projects involving living areas, kitchens and support space, bedrooms and bathrooms.
- Develop project solutions with concern for function, lifestyle, sustainability and aesthetics.
- Utilize appropriate space allowances with concern for proxemics and human factors.

- Demonstrate basic drafting skills. 7. Prepare client presentation a. Select materials. b. Layout and compose presentation c. Use appropriate equipment and mounting materials d. Color rendering of floor plan utilizing various media
- Prepare an oral presentation to include: a. Appropriate use of interior design vocabulary b. Justification of design solution
- Identify fiber, weave and finish.
- Properly select fabric for client needs based on fiber, weave, weight, & finish.
- Produce accurate textile specifications for residential and commercial spaces based on knowledge of fire and building code and equipment needs.
- Identify, measure for, specify and determine installation requirements for a variety of window treatments and upholstery for client's needs.
- Design creative, attractive window and upholstery treatments for standard and problem situations with an appropriate use of fabrics and finishes.
- Prepare drapery and upholstery presentations to include:
 - Drawing and inking of various sketches illustrating design solutions.
 - Render a finished project accompanied by appropriate fabric swatches, enabling clients to visualize finished product.
- Prepare an oral presentation for class critique to include:
 - Appropriate use of textile vocabulary
 - Justification of design solution

Materials, Finishes, and Design

7128

This course examines the physical properties and characteristics of furniture, materials, finishes, and architectural detailing. Content addresses environmental issues and problems in specifying, estimating, and installing these materials. Study also involves the requirements and space planning for kitchens and baths, utilizing industry standards.

- Prerequisite/Co-Requisite: Principles of Interior Design; and Interior Design Fundamentals
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Postsecondary Alignment:

- EDSN 201, EDSN 211

Key Competencies:

- Research and find information sources for varying project considerations.
- Identify appropriate materials selection for a variety of client needs.
- Recognize the installation requirements of various materials.
- Utilize proper finish selections based on accurate knowledge of product properties, use, specification liabilities, building codes and fire safety criteria.
- Accurately specify, measure, cost, order and oversee installation of various materials.

- Specify appropriate interior components such as moldings, doors, hardware, fireplaces and architectural details.
- Specify appropriate ceiling treatments, window coverings, floor coverings, wall coverings, upholstery, and a variety of building materials and finishes.
- Measure and figure quantities and pricing for window treatments, wall coverings, floor coverings, and upholstery.
- Coordinate guidelines for contract documents and specifications.
- Demonstrate an understanding of how to use the Sweets catalogs.
- Understanding of cabinet construction including joinery, materials of construction, hardware, etc.
- Write accurate specifications for architectural detailing including commercial floor and wall systems, interior finishes, doors, windows, trim and moldings, hardware, and custom case goods.
- Prepare contract documents to include:
 - Typed finish schedules, control sheets or purchase requisitions
 - Floor plans keyed to schedule
- Prepare work orders to communicate to the crafts person the fabrication concept and pricing.
- Prepare an oral presentation for project critique to include:
 - Appropriate use of interior finishes vocabulary
 - Justification of design solution
- Analyze client requirements, research possible solutions and choose best plan.
- Prepare visual design plan for client as well as craft-persons assisting.
- Prepare various documents to assure the justification, purchase, ordering, installation, and billing of job.
- Recognize the standard sizes, brands and capabilities of various appliances, fixtures and cabinetry as well as HVAC equipment.
- Communicate requirements and possibilities of custom work in support areas.
- Describe and discuss code restrictions governing these areas.

Interior Design Capstone

This course allows students to gain supervised career exposure, specifically related to career objectives through this course. Students will gain on-the-job experience while earning course credit allowing them to further explore the necessary competencies need to work in the Housing and Interior Design field.

- Prerequisite/Co-Requisite: Principles of Interior Design
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max

Postsecondary Alignment:

- ITCC EDSN 280

Key Competencies:

Next Level Programs of Study



- Practice appropriately within a design-related setting, working with the management and employees and exhibiting good work habits.
- Integrate workplace policies including confidentiality, dress codes and behaviors appropriate to the work setting.
- Assemble and analyze data and work experience within the student's occupational specialty.

Architecture and Construction							
Plumbing and Pipefitting							
Principles		CTE Concentrator A		CTE Concentrator B		Pathway Capstone	
7133	Principles of Plumbing and Pipefitting	7129	Plumbing and Pipefitting Fundamentals	7120	Advanced Plumbing and Pipefitting		Plumbing and Pipefitting Capstone

Principles of Plumbing and Pipefitting

7133

Principles of Plumbing and Pipefitting covers much of the NCCER Level I curriculum for Plumbing and is a prerequisite to future plumbing courses. Its modules cover topics such as an introduction to the plumbing profession, basic safety, tools used in the plumbing trade, an introduction to plumbing drawings, and all basic skills needed to continue education in the plumbing program.

- Prerequisite/Co-Requisite: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Postsecondary Alignment:

--

Key Competencies:

--

Plumbing and Pipefitting Fundamentals

7129

Plumbing and Pipefitting Fundamentals will build on the knowledge and skills developed in the principles course. Students will gain a better understanding of a variety of plumbing materials and fittings. As well as focus on common plumbing installations including piping, drains, fixtures and valves.

- Prerequisite/Co-Requisite: Principles of Construction Trades
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Postsecondary Alignment:

--

Key Competencies:

Advanced Plumbing and Pipefitting

7120

Advanced Plumbing and Pipefitting prepares students for more advanced installations including structural penetrations, insulations, and water heaters. Additionally, students will gain a better understanding of basic electricity and fuel systems that are required for these advanced installations.

- Prerequisite/Co-Requisite: Principles of Construction Trades; and Plumbing and Pipefitting Fundamentals
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Postsecondary Alignment:

Key Competencies:

Plumbing and Pipefitting Capstone

Available for the 2022-2023 School Year

- Prerequisite/Co-Requisite: Construction Trades: General Carpentry and Construction Trades: Framing and Finishing
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum

Postsecondary Alignment:

Key Competencies:

Business Management and Administration							
Supply Chain Management							
Principles		CTE Concentrator A		CTE Concentrator B		Pathway Capstone	
7152	Principles of Business	7155	Supply Chain Management Fundamentals	7142	Advanced Supply Chain Management		Business Management Capstone

Principles of Business

7152

Principles of Business examines American business including business ownership, organization principles and problems, management, control facilities, administration, financial management, and development practices of American business enterprises. This course will also emphasize the identification and practice of the appropriate use of technology to communicate and solve business problems and aid in decision making. Attention will be given to developing business communication, problem-solving, and decision-making skills using Microsoft Word, Excel, Access, and PowerPoint.

- Prerequisite/Co-Requisite: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Postsecondary Alignment:
<ul style="list-style-type: none"> • ITCC: BUSN 101, BOAT 207 • VU: MGMT 100, COMP 110

Key Competencies:
<ul style="list-style-type: none"> • Identify the social, legal, economic, and ethical challenges of the business environment. • Identify management and leadership functions, and the relationship to operations and supply chain management. • Relate the characteristics of organizational structures to legal forms of business ownership including small business and entrepreneurship. • Examine the principles of short- and long-range financial planning, as well as the role of the stock exchanges in the financial markets. • Analyze business issues and events related to strategic decision-making in an international and global context. • Describe the marketing mix/marketing concept and its relationship to purchasing, production, distribution, and quality. • Interpret the importance of communication and technology to the success of the organization. • List and describe the human resource functions in business.

- Examine career opportunities in business.
- Explain the purpose of information systems to support organizations and enhance productivity.
- Explain the physical components and operation of microcomputers.
- Use word processing, spreadsheet, database, and presentation applications to perform key business tasks.
- Explain the difference between computer operating systems and user software programs.
- Identify when to use appropriate features within a software application.
- Utilize internet applications and “cloud” technologies in business situations.
- Utilize collaboration technologies.
- Explain security goals, response to threats, and safeguards.
- Discuss issues related to the ethical use of information technology.

Supply Chain Management Fundamentals

7155

Supply Chain Management Fundamentals is a study of the various components of logistics and the strategic supply chain concepts included in the field of logistics and supply chain management. Topics covered include: supply chain strategy, planning and design, customer service, transportation, purchasing, forecasting, inventory and warehouse management. Also discussed are global supply chain management, managing supply chain risk and financial control of logistics performance.

- Prerequisite/Co-Requisite: Principles of Business
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Postsecondary Alignment:

- ITCC: LOGM 127, LOGM 227

Key Competencies:

- Understand the economic importance of logistics in both individual applications and global implications.
- Understand the role of logistics in modern manufacturing.
- Understand the effect of distribution in customer service relationships.
- Define supply chain management and understand issues involved in creating and maintaining supply chain strategies.
- Discuss the different types of information systems and their use in logistics systems.
- Distinguish the basic concepts and characteristics of different forms of transportation and the influence of transportation on plant and warehouse locations.
- Apply techniques and methods for effective inventory management from a lean manufacturing perspective.
- Design a warehouse operation layout considering safety, material handling, automation, information systems and lean manufacturing concepts.

- Discuss global implications of supply chain management and logistics systems with respect to current technology.
- Explain the central components of a logistics system and their integration.
- Analyze improvement opportunities for today's manufacturing logistics systems.
- Summarize the procedures and issues involved in supply chain strategy and planning and designing the supply chain network.
- Discuss the impact of logistics on customer service.
- Define the role and techniques of order processing and information systems in the supply chain.
- Distinguish the basic concepts and characteristics of the different modes of transportation.
- Discuss the importance and characteristics of purchasing to a business and within the entire supply chain network.
- Apply techniques and methods involved in effective inventory management, warehouse management, and materials handling.
- Apply techniques to maintain financial control and measurement of logistics performance.
- Understand supply chain risks and barriers.
- Apply Total Quality Manage to the Supply Chain.
- Apply techniques and methods involved in effective global supply chain management.

Advanced Supply Chain Management

7142

Advanced Supply Chain Management will build upon the knowledge and skills developed in the fundamentals course by focusing on specific aspects of Supply Chain Management such as procurement, operations management, and transportation systems.

- Prerequisite/Co-Requisite: Principles of Business, Supply Chain Management Fundamentals
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum

Postsecondary Alignment:

- ITCC: LOGM 229, LOGM 228 or LOGM 267

Key Competencies:

Domain: Transportation

- Describe the role and history of transportation in both public and private sector commerce.
- Select the best mode of transportation given product attributes and costs associated with the selected transportation mode.
- Discuss the development and operation of carrier operation in motor carriers, railroads, water carriers, air carriers, pipeline, and international transportation.
- Summarize the regulations and cost structure of carrier operation in motor carriers, railroads, water carriers, air carriers, and pipeline.
- Calculate costing and pricing in transportation.
- Describe the importance of relationship management.
- Discuss proper techniques for the negotiation and bidding process.

- Explain Safety principles related to logistics.
 - Explain key warehousing principles such as receiving, storage, order cycle practices and inspection.
 - Explain order management principles such as staging, labeling, and loading.
 - Discuss protective packaging and materials handling.
 - Review hazmat documentation and MSDS.
 - Explain import and export control including customs and regulatory compliance.
- Domain: Procurement**
- Describe the demands placed on procurement and supply chain managers by business stakeholders.
 - Summarize the impact of procurement and supply chain management on the competitive success and profitability of modern organizations.
 - Discuss the ethical, contractual, and legal issues faced by procurement and supply chain professionals.
 - Summarize the increasingly strategic nature of procurement, especially the fact that procurement is much more than simply buying goods and services.
 - Summarize the procurement process.
 - Discuss supplier development, evaluation, selection, and measurement techniques.
 - Define appropriate techniques used to measure supplier quality.
 - Summarize appropriate negotiation and contract management techniques.
 - Describe methods to strategically manage costs in procurement management.
- Domain: Operations Management**
- Describe operations management
 - Develop and employ basic customer demand forecasts
 - Plan the timely production of goods and services
 - Manage the acquisition of factors of production
 - Manage the operations process
 - Plan for and manage the distribution of the resulting goods and services
 - Understand the need for and insure the accomplishment of quality goods and services

Business Management Capstone

Available for the 2022-2023 School Year

- Prerequisite/Co-Requisite: Business Office Communications and Business Record Keeping and Intelligence
- 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum

Postsecondary Alignment:

- ITCC: BUSN 105, ACCT 101, BUSN 201, BOAT 216

Key Competencies:

Domain: Management

- Define management, managers, and the basic management functions.
- Evaluate classical, behavioral, quantitative, and contemporary management theories in regard to process, motivation, and expected outcomes. Distinguish between the external, task, and internal environments of organizations.
- Discuss social responsibility, the meaning of ethics in the business setting, and the social audit.
- Assess the roles of goals and goal setting in the planning process and identify barriers that may interfere with goal setting.
- Appraise the strategic planning process and the process of strategy implementation.
- Structure and support the steps in the decision-making process.
- Identify and describe the major purposes for and types of forecasting techniques.
- Discuss the nature of work specialization, departmentalization, and scheduling within the scope of management.
- Discuss how organizational activities are coordinated and describe the management of organizational conflict.
- Appraise international business practices and evaluate against cultural and political values.

Domain: Accounting

- Recognize the meaning and function of accounting, its importance, and basic US accounting rules and the body most responsible for their development.
- Use the accounting cycle, including analyzing and recording transactions and preparing basic financial statements in accordance with accrual accounting principles.
- Account for buying and selling merchandise, including using LIFO, FIFO, and weighted average to assign values to cost of goods sold and ending inventory.
- Recognize the purpose, advantages, disadvantages, and limitations of internal controls. Prepare a bank reconciliation.
- Account for uncollectible accounts receivable using the allowance method.
- Account for notes receivable, including interest accruals.
- Account for notes payable, including interest accruals. Recognize acceptable accounting for basic payroll and other short-term liabilities.
- Recognize the cost of a plant asset and use accepted method(s) to depreciate a plant asset. Account for the disposal of a plant asset. Recognize acceptable accounting for other non-current assets.
- Calculate the present value of bonds at issuance and account for borrowing by issuing bonds.
- Account for issuing common and preferred stock, treasury stock transactions, and for dividends.
- Prepare a multi-step income statement and a classified balance sheet. Given cash pieces, prepare a statement of cash flows.
- Analyze a set of financial statements for profitability and liquidity.
- Discuss the difference between financial and managerial accounting and identify the characteristics, process, organization, and the profession of managerial accounting.
- Define and discuss the concepts, procedures, and characteristics of a manufacturing process with a job order cost system.
- Distinguish between the process cost system and the job-order cost system and describe and illustrate a process cost accounting system.
- Describe the nature and objectives of budgeting, including procedures and various reports.
- Describe and illustrate methods used for evaluation of capital investment proposals, capital rationing and planning, and controlling capital investment expenditures.

- Describe and explain the nature and types of decentralization.
- Define and discuss responsibility accounting for investment centers and transfer pricing.
- Describe and illustrate inventory control, quantitative techniques for estimating costs, and the learning effect in estimating costs.
- Define and explain the managerial use of expected value concept, variance analysis using expected value, and maximum concepts of decision-making policies.
- Define and illustrate the usefulness of financial statement analysis, types of analysis, basic analytical procedures, solving analysis, profitability analysis, and selection of analytical procedures.
- Describe the nature of concepts of working capital, analysis of cash, and cash flow from operations.

Domain: Business Law

- Discuss state and federal judicial systems and jurisdictions.
- Identify the sources of laws as applied to business.
- Apply appropriate legal principles to contractual obligations.
- Understand the parameters of the various business structures.
- Apply the laws of agency and debt adjustment to factual situations.
- Recognize the obligations and rights of parties to negotiate instruments.
- Recognize the rights and obligations of parties as regards personal and real property.
- Recognize the rights and obligations of the parties to sales and lease of goods contracts.
- Apply the Uniform Commercial Code to sales contracts and differentiate common law and Uniform Commercial Code situations.
- Understand the application of consumer protection laws.
- Recognize the importance of both Federal and State employment laws to effective organizational leadership.
- Understand the importance of protecting intellectual property rights.

Domain: Business Communications

- Utilize critical thinking, decision-making, and problem-solving techniques to promote sound, effective business communications.
- Analyze audience to determine appropriate language, tone, style, and format for specific communications.
- Compose routine and specific-purpose business letters including inquiry.
- Compose memorandums, reports, and telecommunications.
- Apply accepted rules of grammar, punctuation, capitalization, and spelling when composing and editing documents for accuracy, coherence, continuity, clarity, and format.
- Appraise and assess interactive listening techniques and nonverbal communications.
- Evaluate and discuss technical, legal, ethical, and global issues related to business communications.
- Examine and apply team skills in a classroom environment.
- Assess and edit written material in a team setting.
- Summarize material to prepare an effective document.
- Apply electronic and/or print research skills in assignments and special projects.
- Utilize computer skills to produce written business communications.
- Illustrate research findings in a written report using appropriate graphics, charts, and support materials.

Next Level Programs of Study



- Utilize social media tools and applications.

between humans and natural systems, wetlands, wildlife, safety, careers, leadership, and supervised agricultural experience programs.

- Recommended Grade: 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Fulfills a science course requirement for all diplomas
- Counts as a directed elective or elective for all diplomas

5211 Veterinary Careers I

(VET CRS I)

Veterinary Careers I is a lab intensive course that introduces students to animal care and veterinary medicine. Through classroom and field experiences, students will attain the necessary skills to demonstrate standard protocols that are used in veterinary careers. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from high school, to post-secondary opportunities, and to work in a variety of health science careers. Students are encouraged to focus on self-analysis to aid in their career selection. Job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program are also areas of focus. Participation in HOSA or FFA encourages development of leadership, communication, and career related skills, and opportunities for community service.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Animal Science; Advanced Life Science Animals
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a directed elective or elective for all diplomas

5212 Veterinary Careers II

(VET CRS II)

Veterinary Careers II is an extended laboratory experience designed to provide students with the opportunity to assume the role of a veterinary assistant, and practice technical skills previously learned in the classroom; all while working at a qualified clinical site under the direction of licensed veterinarians. These sites may include animal clinics, hospitals or research laboratories. Throughout this course, students will focus on learning about the healthcare system and employment opportunities at a variety of entry levels; an overview of the healthcare delivery systems, healthcare teams and legal and ethical considerations; and obtaining the knowledge, skills and attitudes essential for providing basic care in veterinary clinics, hospitals and other related locations. Additionally, students will learn essential job related skills that include; monitoring and caring for animals before and after surgery; maintaining and sterilizing surgical instruments; cleaning and disinfecting kennels and operating rooms; providing emergency first aid to animals; giving medication to animals; appropriate techniques for collecting specimens and performing routine lab tests; and feeding and bathing animals. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from high school, to post-secondary opportunities, and to work in a variety of health science careers. Students are encouraged to focus on self-analysis to aid in their career selection. Job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a

post-secondary program are also areas of focus. Participation in HOSA or FFA encourages the development of leadership, communication and career related skills, and opportunities for community service.

- Recommended Grade: 12
- Required Prerequisites: Health Science Education I or Veterinary Careers I
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a directed elective or elective for all diplomas

5228 Supervised Agricultural Experience (SAE)

(SAE)

Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agriculture field(s) in which they are interested. Students will experience and apply what is learned in the classroom, laboratory and training site to real-life situations with a standards-based plan for learning. Students work closely with their agriculture teacher(s), parents and/or employers to get the most out of their SAE program. This course can be offered each year as well as during the summer session. Curriculum content and competencies need to be varied so that school year and summer session experiences are not duplicative.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 1 semester course, 1 credit per semester, 8 credits maximum
- Counts as a directed elective or elective for all diplomas.
- Curriculum content and standards-based plan for learning should not be duplicated when this course is taken for multiple semesters.

5229 Sustainable Energy Alternatives

(SUS NRG)

Sustainable Energy Alternatives broadens a student's understanding of environmentally friendly energies. In this course students will use a combination of classroom, laboratory, and field experiences to analyze, critique, and design alternative energy systems. Class content and activities center on renewability and sustainability for our planet. Topics covered in this course include the following types of alternative energies: solar, wind, geothermal, biomass and emerging technologies. Leadership development, supervised agricultural experience, and career exploration opportunities are included in the study of this field. Sustainable energy is also included.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources; Natural Resources
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Fulfills a science course requirement for all diplomas
- Counts as a directed elective or elective for all diplomas