2018-19 ODYSSEYWARE COURSE DESCRIPTIONS

AGRIBUSINESS SYSTEMS

Agribusiness Systems is a semester-length high school elective that introduces the business, management, marketing, and financial skills needed to successfully produce food, fiber, and fuel for domestic and global markets. Nearly 16 percent of total U.S. employment and 14 percent of the U.S. gross domestic product can be attributed to agribusiness systems, which means agriculture, food, and natural resources play a pivotal role in the economic success of our nation. Students will learn about the components of the agribusiness system and how they interact to deliver food to our tables. They will also learn about the key elements of a successful agribusiness enterprise: economics, financial management, marketing and sales, and government policies and regulations.

OBJECTIVES

- Introduce the components of agribusiness systems.
- Explain key business and management principles and issues for the agribusiness enterprise.
- Present an overview of the knowledge and skills needed by agribusiness enterprises.
- Expose students to career opportunities in agribusiness.
- Analyze and interpret agricultural policies in relation to their effects on the agribusiness system and agribusiness enterprises.
- Understand the impact of green practices and sustainability principles on natural resources and how they affect food production.
- Recognize the need for accurate records and financial practices to maintain a successful agribusiness enterprise.
- Analyze budgets and forecasts to determine business strategies.
- Develop interpersonal and communication skills and critical thinking skills that are necessary for a successful career in the constantly changing agribusiness industry.
- Demonstrate an understanding of global markets, trade policies, and food security and safety issues that affect the agribusiness industry.

ANIMAL SYSTEMS

The role of animals in civilization has an ancient history, and they are no less prominent in today's society. For example, pigs were domesticated in China as long as 10,000 years ago and are still vital to our lifestyle today. But we know that pigs are also intelligent beings. What are their preferences for habitat and treatment, and what are their social and reproductive habits? Animals today are used for clothing, food, transportation, agriculture, herding, companionship, guide assistance, and crime fighting, and research continues to reveal new uses. As our scientific understanding of animal systems grows, so do our best practices, ethical considerations, and research applications. How mankind treats animals impact their well-being and productivity. The course provides students with a wealth of information on livestock-management practices, animal husbandry, physiological systems, the latest scientific trends, and innovations in food production. Changes in practices, regulations, and legislation for animal welfare continue as new research provides solutions to medical, ethical, and practical concerns. The course reviews current topics, such as advancements in technology and research, and defines areas of discussion while maintaining focus on best-management practices. How the research translates to management practices is a vital area of study and discussion.

OBJECTIVES

- Understand the role of animal agriculture in society.
- Examine and apply best-management practices in animal agriculture.
- Compare animal welfare versus animal rights.
- Evaluate and select superior animals to be used for reproductive purposes.
- Investigate animal-performance data.
- Explore careers in animal agriculture.
- Study the environmental impact of animal management and production systems.

This is an introductory course in animal systems at the high-school level. An interest in animal physiology, husbandry, livestock, veterinary practice, animal welfare, or food production would be desirable for students of the course. The information gained will be helpful in making educational decisions for undergraduate or graduate study. A student might use the knowledge gained from the course to further an interest in becoming a chef, a researcher, a doctor, a wildlife-management professional, or any number of applicable careers. No previous experience in or knowledge of these careers is required for the course. Some students will have more experiential knowledge of animals; however, hands-on experience is not a requirement. The course covers livestock anatomy, physiology, and reproductive systems, but medical knowledge is not required for the course.

ART HISTORY

Art History is a year-long elective designed to enable students to develop knowledge of the history and theory of art and the relationship between artist, artwork, and society. Students will research and critique periods, styles, and works of art from early civilizations through modern and contemporary art.

BUSINESS LAW

This course is designed to provide students with the knowledge of some of the vital legal concepts that affect commerce and trade, after first gaining some familiarity with how laws are created and interpreted. Students will then be introduced to the types of businesses that can be created to engage in commerce as well as the contractual and liability considerations that can impact a business. Laws that affect how a business is regulated will also be reviewed, particularly the impact of administrative rules and regulations on a business. Global commerce and international agreements, treaties, organizations, and courts that can affect business will be discussed to get a better sense of what it means to "go global" with a business. Consumer and environmental protections will be explained as well as bankruptcy options, should a business go insolvent. Lastly, no business exists without experiencing some kind of dispute or another, and so we will review the options that exist for dispute resolution and alternative dispute resolution to provide a better understanding of how best to deal with such matters.

OBJECTIVES:

- Develop a general overview of the legal system in the United States.
- Understand the types of businesses and corporations that exist.
- Develop insight into the formation of contracts.
- Learn about torts and liability considerations regarding torts.
- Develop an understanding of ethics and civil and criminal procedures.
- Develop an appreciation of the administrative law process along with the Commerce Clause and its effect on employment law.
- Comprehend the information about intellectual property law and e-commerce.
- Understand the global picture of international agreements and sources of international law, international trade, the UN and key organs and commissions, and the international courts created by treaties.
- Gain insight into consumer, environmental, and bankruptcy laws that can affect an individual and his or her business.
- Learn how to resolve disputes that may arise in the transaction of business through traditional or alternative means.

COURSE REQUIREMENTS

While there are no formal requirements for this course, it is important to understand that this is a challenging course requiring your best critical-thinking skills. The ability to conduct research, make lateral connections, and consider options not clearly outlined is a function of those who successfully practice the law. This course uses scenarios and case studies to apply the concepts offered and encourages creative (but legal and ethical) thinking. For the student who is considering a career in the law, this course is a good primer.

CAREER MANAGEMENT

Career management is a semester-length high school elective course that assists students in their preparation for career selection. The course is designed to improve workforce skills needed in all careers including:

- communication
- leadership
- teamwork
- decision making
- problem solving
- goal setting
- time management

Students will complete activities that help identify personal interests, aptitudes, and learning styles. Students will use results of self-assessments to determining careers that may prove personally satisfying. Students will complete an in-depth career research activity that can be repeated for each future career decision. Students will also create a career portfolio as they work through the curriculum. In addition to the default course program, Career Management includes alternate lessons, projects, and tests for use in enhancing instruction or addressing individual needs.

CIVIL WAR

You are about to embark on the fascinating history of the Civil War. It is a story of human choices that linked the past to the present and influenced the future. It is a drama of how one nation changed through times of conflict and cooperation. It is a tale of two children (the North and South) living under the same roof (The United States) and how they disagreed over the issues of states' rights and slavery. As you study the Civil War, you will detect patterns in the way people thought and acted. You will see familiar patterns in how battles were won and lost. You will also note how events happening today affect the future. The principle of cause and effect applies in everything you do. Even today, there are some people who believe the South won the Civil War or that the North had no right to abolish slavery. Others cannot believe that people from the South found nothing wrong with enslaving fellow human beings. For all these people, their view of history differs from one another based on their perspective.

CONSUMER MATH

Consumer Math is an introduction to the many ways in which math can be used in everyday life. The course gives practical advice on how to handle situations that involve money and math principles. Consumer Math focuses on the basic skills and methods of arithmetic and provides students the opportunity to develop experience with algebraic techniques of evaluating variables and equations, including geometric formulas and interest equations. Students will also be introduced to topics in statistics. Upon completion of the course, students should be able to do the following:

- Use basic math operations on fractions, decimals, and percentages.
- Interpret graphs and charts.
- Understand sets and basic set theory.
- Calculate simple probabilities.
- Calculate statistical measures of variation.
- Use similarity and right triangle ratios for indirect measurement.
- Calculate taxes, discounts, and interest amounts.
- Apply math to everyday concerns, as well as to the realms of business and government.

COUNSELING AND MENTAL HEALTH SERVICES

The mental health field is diverse. There are many different options available to those interested in working in the counseling and mental health field. This course introduces and exposes the students to some topics, issues, and populations that are related to the counseling and mental health field. Students will first receive information about on the history of the mental health system in the United States and about some common mental illnesses. They will then explore different counseling and mental health topics, populations, mental health needs of these populations, and workplace settings. Some topics and populations discussed are addiction, dual diagnosis disorders, vulnerable children,

different vulnerable populations, and mental health issues in the criminal justice system. Some workplace settings of counseling and mental health workers analyzed are the criminal justice system, school systems, acute psychiatric care settings, community mental health centers, and child protective services.
This course will also introduce students to various careers in the mental health field. Some of the professions reviewed are, psychiatrists, psychologists, school counselors, social workers, social and human service assistants, dual diagnosis disorder counselors, recovery coaches, correctional counselors, forensic psychologists, crime victim advocates, geriatric psychiatrists, and recreational therapists. The roles, responsibilities, and duties of these workers along with the educational, licensure/certification, job outlook, and salaries of these professions are discussed. Lastly, the ethics and competencies important to these professions are presented. Students are provided with resources in order that they may be able to conduct online research of schools and credential requirements of their individual states. This course will equip students with information and resources on counseling and mental health careers, and the coursework will give students the opportunity to apply some of this knowledge in practical scenarios.

OBJECTIVES

- Describe and compare careers in counseling and mental health in terms of academic preparation, skill sets, licensing, employment potential, and continuing education.
- Describe the professional behaviors and skills required for human service occupations.
- Analyze the role of mental health workers in assuring fair and ethical treatment for human service clients.
- Evaluate consequences of unethical behavior for both the clients and human service workers.
- Identify personal qualities necessary for success in the field of counseling and mental health.
- Demonstrate basic oral communications skills involved in interviewing and working with clients in a human services setting.
- Demonstrate the ability to present information to various groups and audiences using appropriate technology.
- Produce written documents of professional quality appropriate to the purpose of the communication and intended receiver.
- Recognize the importance of inter-professional teamwork and communication in the human service arena.
- Recognize the role that social problems play in the development of various mental and or behavior disorders.
- Identify mental health models used by mental health workers to assist them in understanding client problems.
- Describe selected interventions used by mental health professionals.
- Recognize different work environments of mental health workers.

The Student should understand the following concepts about the counseling field:

- A mental health system exists in the United States.
- Basic understanding of the educational system in the United States.
- Understand that the goal of mental health careers is to help others.
- School counselors, therapists, social workers, and psychiatrists are some professionals who work in the mental health field.

DIGITAL ARTS

Digital Arts is a semester-long elective designed to provide computer science students with an introduction to visualization-graphics programming on computers. To equip students for today's digitally driven lifestyle, this course focuses on using a digital camera and the practical application of digital imaging and editing programs. Additionally, students will work with audio-editing programs, and will also examine 3D technology and cinematography.

EARLY CHILDHOOD DEVELOPMENT AND SERVICES

Early Childhood Development (ECD) is an introductory course offering a detailed overview of both developmental stages and areas of early childhood, and how early childhood education professionals provide optimal assistance during these important years of growth and learning. An examination of the history, theories, teaching models, research, and policies that grew with the advance of early childhood education, as well as an introduction to the achievements of many leaders in this field, provide students a thorough grounding in the science and practice of early childhood education. This

course further provides students with keen insight into why these years are so important to the life of the child, what areas of physical, emotional, and cognitive development are manifested from birth through age five, and what developmentally appropriate practices are proving to be most effective.

Students will see how state, county, and community programs and non-profit social service organizations benefit from a combination of contributions and regional and federal funding mandated through national legislation; students will also appreciate the role ECE professionals play in their work with families, organizations, and licensing administrators. Students will be able to identify the advances, the challenges, the results, and the trends in ECE, explore a wide spectrum of professional possibilities, and learn the requirements and responsibilities of those positions. The complex interaction of state and federal policymaking on program funding and availability is covered in depth, as are codes of ethics and legislation affecting the quality of preschool and kindergarten programs.

Diversity is a key topic, and inclusion of families and children of cultural, economic, linguistic, and ethnic and ability diverse backgrounds are covered in depth. The rights, programs, and services available for children with disabilities and their families are reviewed. As the areas of study show, the need for highly qualified, engaged professionals in preschool classrooms, child care centers, and school readiness programs is growing. Teachers and other professionals in the field need to be not only educated in ECD, but also adept at building positive relationships between teacher and child and parent and colleagues, with the sensitivity to, enthusiasm for, and awareness of diversity issues and developmentally appropriate practices requiring skill and ongoing training.

Through creative projects in each unit, leading to completion of the capstone project, students become the professionals they are studying to be, hypothetically designing preschool curricula, counseling parents and working with infants with disabilities in mental health home intervention visits, researching credentials and education pathways for careers, investigating state funding and licensure requirements for programs, and getting involved in advocacy for major issues in the field. This course prepares students to make more informed decisions about their education and career pathway possibilities, endowing them with a solid understanding of the field and its importance in the well-being and success of not just a few young children and their families but of society and future generations.

OBJECTIVES

- Compare and contrast careers in early childhood development with regard to scope, academic preparation, certification, skill set, roles and responsibilities, and continuing education.
- Identify the historical, cultural, and social foundations of early childhood development and the related services.
- Describe agencies and organizations that support the profession of early childhood education and development.
- Recognize milestones of typical development in young children.
- Identify communication and problem-solving skills necessary to develop best practices in the field for young children and their families.
- Examine ethical and legal implications of working with young children and their families.

This is an introductory course in early childhood development (ECD) and early childhood education (ECE); there are no prerequisites. Students enrolled in the course are assumed to be interested in ECD and ECE and possibly considering a career as an ECE professional. The course offers a wealth of information on many aspects of the field, including education, credentialing, licensing, and endorsement area requirements for various positions.

ESSENTIALS OF BUSINESS

This semester-long course is an introduction to the goals, processes, and operations of business enterprises for students. The main focus is on the functions that a company – whether a multinational corporation or a corner grocery store – must manage effectively to be successful. These include accounting, finance, human resource management, marketing, operations management, and strategic planning. Attention is also given to the legal environment in which businesses operate, and the importance of business ethics and corporate citizenship. Throughout the course, students may be asked to answer questions or to reflect on what they've read in their notes. The notes are not graded. Rather, they are a way for students to extend their thinking about the lesson content. Students may keep handwritten or typed notes. Upon completion of the course, students should be able to do the following:

- Apply business concepts to their lives
- Compare and contrast market economies with controlled economy
- Describe the six areas of human resource management
- List and define the legal forms of business ownership
- Name and describe the components of successful business communication
- Analyze ways in which technology is changing business operation.

FORENSICS: USING SCIENCE TO SOLVE A MYSTERY

This course is the overview of modern-day forensic science careers at work using science concepts to collect and analyze evidence and link evidence to the crime and suspects in order to present admissible evidence in courts of law. Modern-day forensic science practices have come into being thanks to the contribution of science and legal professions seeking ways to study crime scenes and criminal activities in an effort to stop crime. Of particular interest in this course are the various applications of medicine in the field of forensic science. This course identifies science concepts and critical thinking in the area of forensic science. Following the presentation of the concepts, students are encouraged to conduct online research exploring examples and applying the concepts just learned. Links to case studies and interactive learning tools are supplied along with high-quality research sites. Projects are assigned throughout the course that allow students to actively apply the information just learned. These projects include simulated crime-scene investigation, actual DNA separation, development of a cyber-security plan, and the identification of specific forensic skills used during the course of a very large murder case. The focus of this course is to assist students in making career choices. Secondary school students who complete this course will have gained an awareness of the diversity of careers available in the forensic field. In addition, attention is drawn to many similar careers in medicine and computer science. Included in this overview of careers is the consideration of job descriptions and availability, educational and training requirements, licensing and certification, and typical annual salaries. Students who take this class will become equipped to make more informed career choices in regards to the forensic and medical science fields. At the same time, students will survey the history and scope of present-day forensic science work. In this course, students will fulfill the following objectives:

- Compare and contrast the professions in the field of forensic science in terms of job descriptions, educational and training requirements, licensing and certification, and legal and ethical considerations.
- Examine the history of forensic science and the contributions of physical evidence, fingerprints, ballistics, animation, and molecular techniques in solving crimes and identifying victims and perpetrators.
- Assess the contributions of medical professionals in the development of forensics as a science.

There is a great deal of research and related online study incorporated into this course. The student will be at a great disadvantage if the suggested work is not completed. It is recommended that the student have successfully completed a secondary-level course in biology and have a good background in physical science.

FUNDAMENTALS OF COMPUTER SYSTEMS

The Computer Fundamentals course will provide students with an understanding of computers and how they operate as well as a basic understanding of how to manage and maintain computers and computer systems. These skills will provide students with the ability to configure computers and solve computer problems. Students will learn details about the different elements of computers and computer systems. They will learn to identify hardware devices and their functions. They will be instructed on the role of operating systems as well as how to install and customize the Windows operating system. Students will learn about networking and the Internet. They will also be introduced to security issues in order to protect themselves and their computers and data. Students will also learn about some of the software applications typically used on computers today, such as Microsoft Office. In addition, students will learn specifics about maintaining and troubleshooting computers, including managing files, backing up systems, and using the administrative tools in the Windows operating system. Lastly, the students will learn the basics of customer service and working as a help desk support technician.

OBJECTIVES

- After completing this course the student will understand computers and their functions, as well as develop basic customer service skills, and be able to effectively meet customer needs.
- Students will be able to implement problem-solving techniques to understand the nature of computer problems. They will also understand hardware components, software, and the Internet, so they are able to develop, maintain, and update computer systems.
- After this course, students also will be able to use the Internet to update computer systems and complete other IT service-related tasks. They will be able to install, configure, or modify software and operating systems to ensure optimal system function.
- Students will be able to perform computer backup procedures to protect information. They also will be able to recognize potential security threats and understand the procedures for maintaining security.
- After this course students will be able to provide IT support and training for computers and networks.

Fundamentals of computer systems course requirements

For topics in this course, it is helpful for students to be familiar with the basics of using desktop or laptop computers as well as accessing Web sites over the Internet. If students are not familiar with these topics, it is recommended, though not required, that they familiarize themselves with the operating system and Web browser they will be using for this course. This includes turning on a computer and logging into an account, if necessary, exploring the different types of software available, navigating through some of the operating system menus to understand the available tools, and doing a basic search on the Internet.

FUNDAMENTALS OF DIGITAL MEDIA

This course gives an overview of the different types of digital media and how they are used in the world today. Students examine the impact that digital media has on culture and lifestyle. The course reviews the basic concepts for creating effective digital media and introduces a number of different career paths that relate to digital media. Students will examine some tools used to create digital media and discuss best practices in the creation of digital media. This includes an overview of the process used to create new media pieces as well as the basics concepts of project management. In the course, students will examine the use of social media, digital media in advertising, digital media on the World Wide Web, digital media in business, gaming and simulations, e-commerce, and digital music and movies. Students will review ethics and laws that impact digital media use or creation.

OBJECTIVES

- Discuss different types of digital media.
- Explain the value of using online video and audio for business.
- Discuss careers in digital media.
- Compare and contrast digital media and traditional forms of media.
- Discuss living in a digital society and the changes resulting from it.
- Discuss project management as a career.
- Describe the evolution of social media.
- Discuss ethics and social media.
- Identify some challenges that the gaming industry will face in the future.
- Compare the different types of computer languages.
- Determine the role digital media plays in globalization.
- Explain the limitations of doing business on the web.
- Describe some different laws that relate to digital media.
- Explain the canons of journalism.
- Describe some expected changes in social media and advertising.
- Determine what type of schooling is necessary for their chosen career.

INTRODUCTION TO CAREERS IN ARCHITECTURE AND CONSTRUCTION

The goal of this course is to provide students with an overview of careers in Architecture and Construction in order to assist with informed career decisions. This dynamic, rapidly evolving career cluster is comprised of three pathways (fields): Design and Pre-Construction (Architecture and Engineering); Construction (Construction and Extraction); and Maintenance and Operations (Installation, Maintenance, and Repair). The Architecture and Construction career cluster is defined as careers in building, designing, managing, maintaining, and planning the built environment. The built environment is not limited to buildings and structures—or to urban environments. A much broader view of the built environment helps students gain a better and more holistic understanding of the impact of the Architecture and Construction industries. The built environment encompasses all zones of human activity-from natural conservation areas with minimal human intervention to highly dense areas with tall skyscrapers and intricate highway systems to suburban cul-de-sacs. The interrelated components that make up the built environment are as varied and unique as the professionals who help shape it.

OBJECTIVES

- Differentiate each Pathway within the Career Cluster and describe the careers in each pathway
- Locate and evaluate career information in order to make an informed decision about career goals
- Identify skills, abilities, and talents needed for careers in Architecture and Construction and analyze how these relate to interest profiles
- Describe and characterize key technical and creative requisites for each educational path that fits the student's primary area (or areas) of interest
- Analyze the impact of the "green economy" on careers in Architecture and Construction.
- Research and predict the growth of industries that comprise the Career Cluster; analyze the ways that technology, innovation, and creative thinking have impacted these industries
- Describe and differentiate key attributes of careers
- Argue how Architecture and Construction careers may change as the economy grows or shrinks
- Evaluate the impact and importance of the regulation of Architecture and Construction in the following areas: planning and zoning, environmental regulations, OSHA regulations, building codes, and regulations ensuring equal access such as the Americans with Disabilities Act (ADA)

This is an introductory course in careers in architecture and construction. As such, there are no prerequisites other than interest in the subject for the student. Students will need online access in order to locate the research materials they will need to review. Some course projects also require online research. Microsoft Office software or the equivalent is required since the student will create presentations using PowerPoint. Certain projects suggest some minimal physical field work, but virtual alternatives are available should students lack access to the suggested physical sites. Communications skills, personal skills in recall and observation, experience assessment, and self-analysis are part of certain projects.

INTRODUCTION TO CAREERS IN ARTS, A/V TECHNOLOGY, AND COMMUNICATIONS

This introductory course provides comprehensive information on five separate areas of arts and communications as potential educational and career pathways. Students who are interested in careers across a broad spectrum of professional positions, including fine artist, telecommunications administrator, magazine editor, broadcast journalist, or computer graphics artist, will gain useful perspective on industry terminology, technology, work environment, job outlook, and guiding principles. Each of the five units covers a specific area within its two chapters. Unit 1 focuses on audiovisual (A/V) technology in film, the arts, and businesses such as advertising. Students learn about job opportunities in a variety of settings and the training programs, degrees, and experience they may need to qualify for them. Unit 2 covers the performing arts, including careers both on and offstage. Unit 3 examines the exciting field of visual arts in depth, with discussions of artistic design principles, animation design, the work and training of multimedia artists, and developments in the burgeoning field of special effects and animation in studios worldwide. Unit 4 enters the world of printing technology and print publishing, including digital media. Students study technological evolution and advancements in printing since the invention of paper. A timeline of (predominantly U.S.) journalism gives students a

glimpse into magazine editing, digital printing technology, broadcast journalism, and the legal and ethical issues of news reporting today. Finally, in unit 5, students examine the telecommunications industry and learn more about careers in networking, phone technology, and communications and the training or certification needed for various specific positions.

Objectives

- Analyze the impact of the news media on society.
- Discuss the job responsibilities of various careers within the performing arts.
- Analyze the principles of animation and how and why imagery moves on the screen.
- Describe various A/V technology careers and their job requirements.
- Analyze various careers in printing technology, including educational and training requirements.
- Argue how art history influences modern visual arts.
- Outline the principles of design and assess their influence in all aspects of the visual arts.
- Demonstrate technical skills and the use of various equipment and tools used in audio/video production.
- Demonstrate the importance of mastering software tools used in digital art.
- Describe how art directors differ from fine artists.
- Describe key positions in film production and explain the duties and responsibilities of each position.
- Evaluate the influence of digital technology on the work of visual artists.
- Evaluate the economic outlook of careers in A/V technology and film.
- Examine the career opportunities and requirements in performing arts.
- Examine the educational requirements of various careers in A/V technology in film.
- Examine the interdependent relationship between editorial and technical elements in the news media.
- Explain skills needed to operate equipment and tools used in technical positions.
- Explain the dynamics of art created by collaborative teams compared to that of an individual multimedia artist.
- Explore career pathways in the production and distribution of media.
- Identify careers in fine arts and how to supplement income with artistic skills.
- Summarize the effects of technological advances on the news media and the communications industry.
- Summarize features of transmission lines and network connectivity.

As this course targets students interested in potential careers in the arts, some artistic ability or experience is assumed. However, there are many technical and writing careers presented in this course as well, so the course offers a wealth of information for all students interested in working in arts management, in printing publishing, in news, and in communications fields (such as advertising, marketing, or sales, and in telecommunications). Most of the careers and professional fields outlined in this course stress the need to understand terminology, the roles of others, and the importance of working as a team. Students need to consider interpersonal skills and should be able to discuss or consider workplace issues, including ethical and legal responsibilities, when working with others. Combining training and work experience during post-secondary education is a winning pathway in many of the careers evaluated. The course explores viable options and gives students opportunities to research specifics for their own plans. Students need an aptitude for independent research, creative and critical thinking skills, and the ability to understand technical vocabulary and procedures at a foundational level.

INTRODUCTION TO CAREERS IN EDUCATION AND TRAINING

The Introduction to Careers in Education and Training course will introduce students to the field of education and training, and the opportunities available for early-childhood care, primary school, secondary school, higher education, vocational training, and adult and continuing education. The students will gain an understanding of the career options available in teaching, administrative work, and support services. They will also explore the education and background experience needed to succeed in these careers. Students will learn about the evolution of the modern educational system in the United States, and the policies and laws that govern educational institutions. They will also discover the similarities and differences between the ethical and legal obligations of working with adults versus working with children. Students will learn about the skills needed to be effective communicators. They will also learn how to

differentiate between different types of learning theories, and they will explore how to implement current principles from educational psychology into the classroom. Students will also learn how to create a safe and healthy learning environment. They will discover the federal laws and agencies that set health-and-safety standards, and they will learn how these regulations are enforced in the workplace. The objective of this course is to introduce the student to the field of education and training, and to explain the career opportunities that are available in this field.

OBJECTIVES

- Apply communication skills with students, parents, and other groups to enhance learning and a commitment to learning.
- Demonstrate critical-thinking skills while processing educational communications, perspectives, policies, and/or procedures.
- Categorize risks to safety, health, and the environment in education and training settings.
- Demonstrate group-collaboration skills to enhance professional education and training practice.
- Analyze ethical and legal policies of professional education and training practice.
- Describe legal rights that apply to individuals and practitioners within education and training settings.
- Define state and federal professional development requirements to maintain employment and to advance in an education and training career.
- Apply organizational skills and logic to enhance professional education and training practice.
- Demonstrate group-management skills that enhance professional education and training practice.

INTRODUCTION TO CAREERS IN FINANCE

The Introduction to Careers in Finance course provides the fundamentals of the financial services industry in the United States and explores the jobs and career opportunities that the industry offers.

Unit 1 introduces the financial services industry and the financial systems that operate in the US and internationally.

Unit 2 examines securities markets and investment companies, looks at how companies evaluate and mitigate risk, and discusses the valuation of stocks and bonds.

Unit 3 discusses the roles and responsibilities of corporate finance and accounting, analysis of financial statements, capital budgeting, and capital structure.

Unit 4 focuses on banking services, including how the industry is organized and regulated and how risks are managed.

Unit 5 looks at the insurance industry, including how it is organized and regulated, how it addresses risks, and the career opportunities it offers.

OBJECTIVES

- Explain the financial system.
- Evaluate career opportunities in financial services.
- Describe the role of intermediaries in finance.
- Examine and define the key agencies governing US banking and securities industries.
- Characterize the impact of international finance on US financial system regulations.
- Review the attributes of a well-functioning financial system.
- Evaluate the role of regulatory bodies in ensuring compliance with regulations.
- Identify the importance of transparency in the financial system.
- Identify different types of securities and markets.
- Describe how diversification works with risk and return.
- Discuss how to analyze a bond for investment purposes.
- Describe, compare, and apply the main techniques used for equity valuation.
- Analyze the methods used to assess the value of a futures contract.

- Discuss the roles and responsibilities of corporate finance.
- Create a framework to understand the analysis of financial statements.
- Describe how money grows over time when invested through compounding.
- Identify issues affecting the cost of capital.
- Describe the elements of a company's capital structure.
- Explain how a company can use its profits to increase its value.
- Describe the nature, structure, and functions of banking firms.
- Explain how banks mitigate their risks.
- Describe the role of the Federal Reserve in supporting banks.
- Summarize the nature and types of risks faced by businesses and how they use insurance to manage those risks.
- Explain nontraditional risks and how companies address them.
- Summarize the types of jobs and careers offered by insurance companies.
- Discuss the role of state insurance commissioners in regulating insurance companies.

INTRODUCTION TO CAREERS IN GOVERNMENT AND PUBLIC ADMINISTRATION

Introduction to Careers in Government and Public Administration will provide students with an overview of American politics and public administration, including how political institutions and public management systems at the local, state, and federal levels exercise supervisory authority and maintain accountability. Students will learn about the foundations of the U.S. government, the separation of powers, the federal civil service system, and the relationship between the government and state and local officials. They will also learn about governmental powers of the states and of local governments, such as education, law enforcement, and transportation. Students will learn about politics in the United States and the electoral process, political attitudes and opinions, and American political parties. They will also learn about the structure of U.S. federal governmental institutions, the nature of bureaucracy, and the functions of the executive, legislative, and judicial branches of government. Students will also learn about policy making in American government, including discussions of foreign and defense policies. After completing this course, students will have a fundamental understanding of U.S. government and public administration. They will be able to explain the history and structure of the government, how the government functions and relates to state and local governments, and how the government creates and enforces public policies.

OBJECTIVES

- Explain the missions, responsibilities, and type of government agencies.
- Describe the federal civil service and the importance of intergovernmental cooperation.
- Identify ideas behind the federal system, including how the federal government interacts with state and local governments.
- Explain the political party system.
- Discuss the electoral process and the role of mass media.
- Compare and contrast the three branches of U.S. federal government—executive, legislative, and judicial.
- Describe the policy making process and the differences between types of public policies.

INTRODUCTION TO CAREERS IN MANUFACTURING

The Introduction to Careers in Manufacturing course provides the fundamentals of manufacturing in the United States and explores the jobs and career opportunities that manufacturing offers.

Unit 1 provides an overall view of manufacturing in the United States, including how it evolved, how manufacturers are organized, and the impact of manufacturing on our society and economy.

Unit 2 examines the elements of process design, management, and improvement through quality assurance plans, production and quality control, and performance measurement systems.

Unit 3 focuses on jobs and careers in manufacturing, including the need for skilled workers, the outlook for manufacturing in the U.S., and the competencies that manufacturers value and develop in their workers.

Unit 4 focuses on key elements in manufacturing systems and types of manufacturing processes. It also covers research and development, product design, process design and management, and lean manufacturing.

Unit 5 addresses two areas of concern for manufacturers: compliance and safety. It introduces the regulatory and safety environments in which manufacturers work and the steps they take to comply with regulations, as well as the steps some manufacturers take to go beyond compliance to create a high-performing workplace.

OBJECTIVES

- Evaluate the impact of manufacturing, including the Industrial Revolution and Second Industrial Revolution, on the U.S. society and economy.
- Describe the value of manufacturing to and its impact on American society and economy.
- Analyze possible careers available in manufacturing and its subsectors and in manufacturing operations.
- Interpret the trends in manufacturing technologies and how they will change the industry and our lives.
- List the benefits of standards in manufacturing processes and products.
- Identify the goals of quality assurance, including process redesign, management, and improvement.
- Estimate the diversity of and potential for growth in manufacturing career opportunities, including the need for skilled workers.
- Describe the personal effectiveness, academic, and workplace competencies, and evaluate their value to manufacturers.
- Summarize the manufacturing research and development process and the types of jobs needed to perform it.
- Characterize the role of product design in manufacturing, and list the steps in a typical product design process.
- Describe how manufacturers design, manage, and improve their processes.
- Compare the types of production systems and processes.
- Define manufacturing process, and identify the types of jobs such processes offer.
- Describe the benefits, key principles, and elements of lean manufacturing.
- Examine the purpose of regulations for manufacturers.
- List the main compliance areas for manufacturing.
- Evaluate the impact of regulations on manufacturing, on public health and safety, and on environmental protection.
- Summarize the most common safety hazards in manufacturing.
- Describe the key components of an effective workplace safety program.
- Characterize the attributes of a high-performing workplace.
- these careers are directly impacted by local, state and federal laws.

INTRODUCTION TO CAREERS IN MARKETING

The Introduction to Marketing course will provide students with an overview of marketing, which is an essential element for any company that produces products that are bought and used by individuals. Students will learn about what marketing is and how the process of marketing works, the role of market research and how companies incorporate ethics into their marketing strategies. They will also learn about the importance of strategic planning for marketers, the five step marketing strategic process, and strategies for growth. Students will learn about the environment in which marketers operate. This includes the microenvironment, which refers to entities and influences close to the company or marketer, and the macro environment, which refers to influences that impact all of society, such as culture, social trends, and technology. They will also learn about the Four P's of the marketing mix: product, price, promotion, and place. Students will evaluate the importance of each of these four elements and learn specifically about how technology has changed the approach to the marketing mix. They will also learn about international markets and how to approach marketing at a global level. After completing this course, students will have a fundamental understanding of the principles of marketing. They will be able to explain the marketing process, marketing strategic planning, the marketing environment, and the trends, opportunities, and challenges in the marketing world today.

OBJECTIVES

- Understand what marketing is and its role both within the company and society.
- Understand how marketing achieves its primary objective of adding value.
- Learn the marketing process and how it impacts marketing strategic planning.
- Understand the various components of the marketing environment.
- Analyze the elements of the marketing mix (the Four P's) and determine how each element contributes to the marketing effort.
- Become aware of the impact technology has had on marketing.
- Recognize the need for ethical practices and know the types and consequences of unethical behavior.

INTRODUCTION TO CAREERS IN THE HEALTH SCIENCES

This course is an overview of health careers and overriding principles central to all health professions. Units include:

- science and technology in human health
- anatomy, physiology, and disease development
- privacy, ethics, and safety in health care
- communication and teamwork in the healthcare environment
- health careers; creating a diverse workforce of lifelong learners
- The course provides a foundation for further study in the field of health science. When students complete the course, they will be able to discuss the potential career choices and have an understanding of basic concepts that apply to many different career choices.

The student will:

- evaluate the history of health care with respect to current developments
- compare and contrast methods of communication within the health care community
- examine the roles and responsibilities of individuals as members of a health care team
- compare career options in health care with respect to educational requirements and licensure
- examine issues relating to workforce diversity and access to health care
- distinguish between ethical and unethical practices in health care
- analyze potential and existing workplace hazards that can compromise health care worker safety, and the safety of patients and coworkers
- evaluate the impact of science and technology on health care
- understand how to organize and structure work individually and in teams for effective performance and attainment of goals
- understand how to interact with others in ways to demonstrate respect for individual and cultural differences and for the attitudes and feelings of others
- understand the role of antibodies in the body's response to infection
- examine role of the skin in providing nonspecific defenses against infection
- analyze the organization of the body and functions and interactions of organ systems

INTRODUCTION TO CAREERS IN TRANSPORTATION, DISTRIBUTION, AND LOGISTICS

Transportation and Distribution Logistics is a course intended to introduce students to the complicated world of commercial transportation. This area of commerce is becoming increasingly complex and sophisticated, with work and career openings available at all levels of education. Most people, however, see only fragments of the big picture. Transportation is among the most crucial and defining elements of modern commerce. The ability to move people and goods from place to place requires vast investments of technology, and of manpower. Without that investment almost all aspects of modern life would grind to a halt.

OBJECTIVES

- Describe the nature and scope of the Transportation, Distribution, and Logistics Career Cluster and the role of transportation, distribution, and logistics in society and the economy.

- Describe the application and use of new and emerging advanced techniques to provide solutions for transportation, distribution, and logistics problems.
- Describe the key operational activities required of successful transportation, distribution, and logistics facilities.
- Identify governmental policies and procedures for transportation, distribution, and logistics facilities.
- Describe transportation, distribution, and logistics employee rights, and responsibilities, and employers' obligations concerning occupational safety and health.
- Describe career opportunities and means to achieve those opportunities in each of the transportation, distribution, and logistics career pathways.
- Understand the strengths and weaknesses of the major modes of transportation, and the technological innovations that are occurring in each area.
- Learn about the role of governmental agencies and their impact on transportation systems.
- Analyze financial data to develop budgets, and determine profitability, cost reduction, and asset utilization.
- Identify the job requirements and aptitude needed to successfully pursue different career pathways in the TDL areas.

INTRODUCTION TO HOSPITALITY AND TOURISM SYSTEMS

Travel and tourism is now the largest industry in the world: In the United States alone, over 7.5 million people work in this industry, and in 2010, 60 million international visitors came to the United States, spending $134 billion. All of the sectors of the travel and tourism industry work together to serve this growing market of visitors, who have a significant impact on the U.S. economy. This course establishes a foundation for the concept of tourism, travel, and hospitality as a system. Students will learn about the various segments of the travel and tourism industry and how they are interrelated and integral to international and domestic travel and tourism. This discussion will include travel agencies, tour companies, the airlines and other transportation sectors, lodging facilities, cruise lines, and marketing companies.

In this course, students will learn to:

- Explain why travel and tourism is important to our economy.
- Identify the six major sectors of the travel and tourism industry.
- Understand how geographic principles relate to traveler decisions.
- Understand the different types of airline flights and aircraft, the car-rental industry, and the rail-travel industry.
- Classify the different types and brands of lodging.
- Describe the types of service offered in the food-services industry.
- Describe the different kinds of cruise lines, ships, and popular cruise destinations.
- Understand the basic types of marketing.
- Understand the basic types of marketing and what marketing organizations do.
- Explain how the Internet and social media have changed the tourism industry
- This course requires that the student:
- have access to the Internet to view various travel-related Web sites and conduct research.
- should have access to Microsoft® PowerPoint® or a similar program.
- be able to contact various tourism companies for projects.

INTRODUCTION TO HUMAN SERVICES

This course introduces high school students to the possibilities for careers in the human services professions. Through anecdotes, lessons, and a variety of assignments and projects, students will learn about the broad variety of jobs available in the human services. These begin with entry-level positions, such as associate social workers, that require only a two-year Associate of Arts degree. At the apex of the profession, being a psychiatrist brings the most prestige and the biggest salary, but only after many years of school and training. Students will learn exactly what the human services are and the ethics and philosophies of the helping professions. The history of the profession will be covered, as well as the impact of the cultural, social, and economic environment on individual people, especially those who are in need of social services assistance. By the conclusion of this course, students will have a firm introductory understanding of the

social services professions. Employment at all levels of social work and related jobs is projected to grow rapidly over the next decade. Students will have a better idea of whether this is a career course they would like to explore further.

OBJECTIVES

- to provide students with information about the history and development of the human services field
- to offer insight into the practical as well as theoretical functions of the human services profession in society
- to offer students opportunities to identify and strengthen problem-solving abilities
- to develop or increase interpersonal communications skills, which are critical in human services or helping professions
- to help develop students' self-awareness while they explore whether the field of human services is a viable career path that fits with their values and personal characteristics

As an introduction to the human services professions, this course requires no specific academic prerequisites. Any student willing to do the assigned work will be able to complete this course successfully. The only real requirements are a desire to help others and a curiosity about human services as a possible career choice.

INTRODUCTION TO INFORMATION TECHNOLOGY

In this course, we introduce students to the knowledge base and technical skills that will help them to successfully compete for jobs within the Information Technology Career Cluster. Lessons are structured so that students learn and then demonstrate not only critical assessment and analytic skills, but also interpersonal skills that are valued so highly among IT employers. We explore a range of career tracks that include network engineers, application/programming developers, and systems analysts. These career paths are described in depth, discussing typical job responsibilities, educational and licensure requirements, working conditions, and job outlooks. The lessons help students place the evolution of technology and job opportunities in context so that they will understand their important role in furthering its development. We believe that the most successful IT professionals combine technical know-how with leadership ability. To this end, students learn that their acquired expertise comes with the responsibility to represent themselves and the companies they work for within the highest legal and ethical standards.

Objectives

- Identify the basic components and structure of a computer system and its use within a networking/communications environment.
- Design and implement a basic network while being introduced to multiple types of network systems.
- Apply both ethical and industry standard security policies to networks.
- Discuss the history and development and use of the Internet in business and society.
- Explain the development of human-centered technology interaction.
- Apply mobile computing technology capabilities to learning and business.
- Identify the variety of operating systems found on desktops, laptops, and mobile devices.
- Understand mobile application architecture, deployment, and marketing.
- Determine best practice application skills for the variety of information technology systems available to implement.
- Plan, develop, and implement an information system.
- Maximize use of the Internet within the home and business.
- Identify the structure of wireless communication networks and the mechanisms behind its functionality.
- Identify and develop protocols for use of the Internet within business.
- Identify and develop information system libraries and repositories of information.
- Develop an understanding of the logic behind object-oriented programming.
- Identify the multiple programming languages for use in mobile/Internet application development.

INTRODUCTION TO LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY

Law enforcement, public safety, corrections and safety professionals work daily to keep our cities and communities safe. There are few careers paths in the United States that can be as rewarding, challenging and important as a career in legal,

public safety, corrections or security fields. The sacrifices and challenges faced by these selfless individuals is virtually unparalleled by any other profession outside of the armed forces. Whether it be keeping innocent people from harm, bringing justice to victims, fighting fires, saving people from danger or ensuring evil-doers are locked away. These career fields offer great opportunities to those who choose to work in them. Life in the twenty-first century would not be possible without police officers, paramedics, firefighters, attorneys, corrections officers or security guards. In this course, you learned about the many careers that exist within the fields of law, law enforcement, public safety, corrections, and security. Besides learning about the training and educational requirements for these careers, you learned about the history of these fields and how they developed to their current state. You also learned how these careers are affected by and affect local, state and federal laws. Finally, you learned about the relationships between professionals in these fields and how collaborations between professionals in these careers help to create a safer, more stable society.

OBJECTIVES

- Analyze and interpret the differences between the public sector criminal justice system and private security.
- Understand the duties of the various career paths in the legal, public safety, corrections and private security fields.
- Recognize and be able to apply the different laws and regulations affecting the legal, public safety, corrections and private security fields.
- Develop the requisite interpersonal, conflict resolution and communication skills and critical thinking skills that are required to have successful careers in an ever-changing economic, technological, political, and social environment.
- Understand regulations and policies relating to human resource management, technologies, and sustainability to maintain safe and productive work environments.
- Demonstrate an understanding of legal, public safety, corrections and security practices.
- Apply analytical methods to understand the process of gathering and utilizing intelligence in crime prevention and providing security services.
- Understand the evolution of public safety in the United States.
- Recognize the different regulations and requirements required to obtain employment in the legal, public safety, corrections and private security fields.

For this course, students should know that:

- there are many available careers in the law enforcement, public safety, corrections and security fields;
- these careers have diverse career paths that combine educational and physical requirements with high standards for training

INTRODUCTION TO STEM

This semester-length high school elective introduces students to the four areas of Science, Technology, Engineering, and Mathematics through an interdisciplinary approach that will increase awareness, build knowledge, develop problem solving skills, and potentially awaken an interest in pursuing a career in STEM. Students will be introduced to the history, fundamental principles, applications, processes, and concepts of STEM. Students will explore some of the great discoveries and innovations in STEM and review and analyze some of the world's problems that still exist today. Students are introduced to several computer applications used to analyze and present technical or scientific information. They will also gain a higher understanding of the uses for images and measurement in everyday life. Finally, students will be challenged to use a selection of problem- solving strategies to solve a wide variety of unique problems representative of the kinds of strategies frequently used in these disciplines. Throughout the course, students will have the opportunity to gain a better awareness of their specific strengths through practical applications and awareness of the various careers in STEM.

OBJECTIVES

- Understand the STEM field along with the concepts, theories, practical applications, and STEM careers.

- Compare and contrast the different fields in STEM education, and examine the impact STEM education has on the world by reviewing some of the great STEM innovations and inventions.
- Describe the roles, duties, educational requirements, salaries, and outlook for different STEM careers.
- Formulate solutions to various world problems by conducting scientific experiments, collecting and analyzing the results of various experiments, and applying technology.

For topics in this course, students should have a basic knowledge of the STEM field: Science, Technology, Engineering, and Mathematics, and its importance in the world. They should also understand that people in the STEM field are dedicated to resolving and improving societal, economic, and environmental problems.

MEDIA STUDIES

This semester-long course is part of a worldwide educational movement called media literacy. The goal of the media literacy movement is to educate people about how the media impacts both individuals and society as a whole. Students will examine media such as magazines, the Internet, video games, and movies. They'll learn the kinds of strategies that advertisers use to persuade people to buy products. They'll also explore how news broadcasters choose which stories to air. Lessons and projects encourage students to examine ways in which media helps shape our culture and the ways in which our culture shapes the media. While many media literacy courses focus upon learning how to make media, this one will focus exclusively on analyzing the media.

MONEY MATTERS A

In this course students will explore global economics, and the impact of the free enterprise system on business and consumers. Students will learn about their financial options and goal-setting based on existing and projected economic indicators. Investments, income taxes, asset planning will also be investigated, as will risk management, and retirement and estate planning.

OBJECTIVES

- Use career planning concepts, tools, and strategies to explore, obtain, and develop a career in the area of financial planning.
- Demonstrate an understanding of the fundamental principles of money.
- Describe economic systems.
- Explain the impact of government on business activities within a free enterprise system.
- Discuss economic concepts impacting finance.
- Describe economic indicators impacting financial decision making.
- Determine the impact of global/international trade on business decision making.
- Employ sociological knowledge to facilitate finance activities.
- Apply psychological knowledge to facilitate finance activities.
- Analyze personal financial needs and goals based on current and projected economic factors.
- Manage personal finances to achieve financial goals.
- Describe the use of financial service providers.
- Compare and contrast investment strategies.
- Identify potential business threats and opportunities to protect a business's financial well-being.
- Demonstrate an understanding of methods to manage financial resources to ensure solvency.
- Understand the importance of financial markets in business.
- Develop an understanding of the nature of asset values.
- Use sources of securities information to make informed financial decisions.
- Simulate using debt and equity capital to raise funds for business growth

MUSIC APPRECIATION

The goal of this semester-long course is to provide instruction in basic musical elements, trace the development and growth of classical music, and give students a strong foundation for a greater appreciation of music. Students will examine music in the world around them and discover how they experience music. They'll be introduced to the basic elements and sounds of music and instruments. Students will learn the names and backgrounds of several famous

musical composers. Students will also learn how and where classical music began, how it developed over the centuries, and the ways in which music and culture affect each other. Lastly, students will examine the ways modern music has been influenced by classical music. This course also provides students with lessons in engaged listening. These special lessons allow students to listen and respond to music. A template for how to listen and respond is provided. Upon completion of the course, students should be able to do the following:

1. Describe effective techniques to listen and respond to music.
2. Identify and name common instruments by sight or sound.
3. Identify and define musical terms such as beat, meter, notes, and tempo.
4. Compare and contrast music from the Medieval, Renaissance, and Baroque periods.
5. List ways in which the societies of the Medieval, Renaissance, and Baroque periods affected their music.
6. Compare and contrast music from the Classical and Romantic periods.
7. List ways in which the societies of the Classical and Romantic periods affected their music.
8. Analyze the effects of classical and popular music on the music of the 20th century.

MUSIC THEORY

Music Theory is a semester-length fine arts elective for high school students. The course requires no prior instrumental, vocal, or music theory study. Using the piano keyboard as a visual basis for comprehension, the course materials explore the nature of music, integrating these concepts:

1. rhythm and meter
2. written music notation
3. the structure of various scale types
4. interval qualities
5. melody and harmony
6. the building of chords
7. transposition

Throughout the series of assignments, ear training exercises are interspersed with the bones of composition technique, building in students the ability not only to hear and appreciate music, but step-by-step, to create it in written form as well. This highly interactive course culminates in the students producing original compositions, which while based on standard notation, demonstrate facets of personal expression.

NATIONAL SECURITY CAREERS

This course discusses careers in national security. It provides you with the history, background, and recent advances in this field. Millions of people work in national security positions, from military enlisted personnel, writers, politicians, photographers, and law enforcement personnel to agents, investigators, scientists, and administrative personnel. Just about any career you can imagine is available in national security.

In Unit 1, students learn that the term national security means much more than just U.S. military, the CIA, or the FBI. National security includes the actions of the president, Congress, law enforcement, and many agencies working together to ensure the safety of the United States and our allies. The unit covers the major departments and agencies responsible for national security. It also presents the history, laws, and policies that guide these groups. In many cases, these laws and policies directly affect the lives of most Americans.

Unit 2 presents the policymakers and agencies that make up the national security bureaucracy. It outlines the national security roles of the president, presidential cabinet and advisors, the 17 national security agencies, and Congress. Oversight and funding are also discussed in this unit.

Unit 3 provides information on the history and national security roles of the U.S. armed forces. It covers the Army, Air Force, Navy, Marines, National Guard, and Coast Guard. Technological advancements are presented, as well as careers within these branches of the military.

Unit 4 covers intelligence agencies and federal law enforcement. It covers the roles, responsibilities, and legal limitations of intelligence and law enforcement. Intelligence gathering (operations) and analysis are presented, including careers with various intelligence and law enforcement agencies.

Unit 5 discusses national security challenges in the 21st century. Rising threats such as terrorism, rogue nations, and weapons of mass destruction are presented. The unit also explores chemical, biological, nuclear, and radiological weapons examples and threats.

OBJECTIVES

- Analyze and interpret the theories behind various national security policies.
- Understand the duties of the various career paths in the national security field.
- Recognize and be able to apply the different laws and regulations affecting national security policies.
- Develop the interpersonal, conflict resolution, communication. and critical-thinking skills that are required for successful careers in an ever-changing economic, technological, political, and social environment.
- Understand how various agencies interact to ensure the safety of the United States.
- Demonstrate an understanding of military, intelligence, and law enforcement practices.
- Apply analytical methods to understand the process of gathering and utilizing intelligence to detect threats to national security.
- Understand the evolution of national security in the United States.
- Recognize the importance of technology as part of the overall process of providing national security.
- Develop an appreciation.

PERSONAL AND FAMILY LIVING

This semester-long high school elective takes students on an interactive exploration of the challenges they may face as they transition into adulthood, including constructive conflict resolution, nutrition and health, building healthy families, financial responsibility, and long-term employment. Through this course, students will:

- Examine specific principles that will help develop their personal lives.
- Learn about proper nutrition, and demonstrate skill in preparing various food items.
- Prepare weekly and monthly budgets.
- Develop strategies for an employment search.
- Explore work and careers and how different interests, abilities and personalities influence employment decisions.
- Develop an understanding of relational dynamics with family members, friends, classmates, co-workers, and those encountered in the marketplace.

PLANT SYSTEMS

Plant Systems is a semester-length high school elective that introduces students to the basics of plant biology, soil science, agriculture, and horticulture, along with the environmental management practices involved in each, including integrated pest management, biotechnology, growth techniques, and crop management. Students will learn the basic parts of a plant, how plants are scientifically classified, and how they interact with water, air, nutrients, and light to undergo the processes of photosynthesis and respiration. Plant reproduction, including pollination, germination, and dispersal of seeds, is also presented.

OBJECTIVES

- Explain the elements of both plant science and plant systems.
- Discuss current research in plant systems and in the growing of plants.
- Compare the different kinds of crops crucial to North American agriculture in terms of both purpose and biology.
- Implement an agricultural plan using the conservation methods of multiple cropping and integrated pest management.
- Understand the various ways plants grow from their roots and stems.

- Understand the difference between genetic engineering and cross-breeding.
- Explain the advantages and disadvantages of GMOs.
- Describe some current threats to agriculture that are not addressed by current precision technology.
- Describe the importance of high-yield farming in the 21st century.
- Compare the similarities and differences between sustainable agriculture, sustainable crop intensification, and conservation agriculture.
- Perform self-guided career planning using online resources.

PRE-CALCULUS

The course primarily focuses on the skills and methods of analytic geometry and trigonometry while investigating further relationships in functions, probability, number theory, limits, and the introduction of derivatives.

OBJECTIVES

- Perform operations on functions including composition and inverses.
- Graph, evaluate, and solve exponential and logarithmic functions and equations.
- Utilize the unit circle in evaluating trigonometric identities; prove trigonometric identities; graph trigonometric functions and their inverses.
- Solve application problems involving right triangle trigonometry, special right triangles, and law of sines and cosines.
- Convert between Cartesian and polar forms; graph equations in polar coordinates.
- Graph and solve quadratic equations that include conic sections.
- Calculate probabilities, combinations, and permutations.
- Calculate summations and limits of functions.
- Relate analytical operations of limits, slope of a tangent line, and the definition of a derivative.

SPANISH III

Spanish III is a high school foreign language course that builds upon skills and concepts taught in Spanish III, emphasizing communication, cultures, connections, comparisons, and communities. Course materials are designed to support students as they work to gain a basic proficiency in speaking, listening, reading, and writing Spanish, and in cultural competency. Upon completion of the course, students should be able to do the following:

- Speak Spanish in everyday situations to communicate with other Spanish speakers.
- Write accurately and appropriately in Spanish to communicate with other Spanish speakers.
- Listen to and understand passages in Spanish related to various themes.
- Read and understand passages in Spanish related to various themes.
- Compare and contrast cultural aspects of Hispanic countries.
- Demonstrate an understanding of Hispanic countries and their corresponding cultures

TRIGONOMETRY

The materials cover a development of trigonometry from right triangle trigonometry to oblique triangles and the polar plane. Throughout the course, students will develop trigonometric formulas and use them in real-world applications, evaluate trigonometric proofs using complex trigonometric identities and solving trigonometric equations with regard to the unit circle. The course seeks to help students expand their knowledge and skills so that they may achieve the following goals:

- Use trigonometry as a tool for indirect measurement.
- Model natural phenomenon with trigonometric functions.
- Perform operations with complex numbers using trigonometry.
- Use trigonometric identities to evaluate trigonometric proofs and solve trigonometric equations with regard to the unit circle.
- Solve for unknown sides and angles of right and oblique triangles using right triangle trigonometry, law of sines and law of cosines.

In attaining these goals, students will begin to see the "big picture" of mathematics and understand how numeric, algebraic, and geometric concepts are woven together to build a foundation for higher mathematical thinking

VIETNAM ERA

What comes to mind when you think about the Vietnam Era? For many, that period represents a difficult time in U.S. history. It is defined by an unpopular war that claimed the lives of 58,000 Americans and some 3 million Vietnamese. In this course, you'll look at the history of the Vietnam War. The roots of the conflict stretch further back than you might know. You'll examine why the United States got involved in the conflict and why the United States failed to achieve its objectives. The lessons in this course will help you to answer the following questions:

- Where is Vietnam?
- What is the history of United States involvement in Vietnam?
- What factors caused the Vietnam War?
- How did international events such as the Cold War play into the conflict?
- What was happening in the United States during the war?
- What was the outcome of the Vietnam War?
- What can we learn from the Vietnam War?
- Also, as you grapple with the material in this course, keep these questions in mind:
- What is worth fighting for?
- Why do people fight wars?
- How is military intervention justified?
- How are foreign policy decisions made?
- How does war affect civilians and soldiers?
- What ideas shape people's view of war?

Your goals for this course include:

- Explain why the United States got involved in Vietnam.
- Identify U.S. objectives regarding Vietnam.
- Describe the United States home front during the Vietnam War.
- Identify the impact of the Vietnam War on soldiers and civilians.
- Identify the outcome of the Vietnam War.
- Explain the impact of the Vietnam War on American foreign policy.