

Westlake CTE Course Descriptions

2018 – 2019

AGRICULTURE

AGRICULTURAL COMMUNICATION AND LEADERSHIP

1.0 Credit Grades 10-12 Gowans

Students will learn skills needed to manage an agricultural business. The course should be taught as a part of a sequence of courses related to a specific technical area, i.e. animal science or plant science. Instruction includes economic business principles and structures, business enterprise analysis, accounting, taxes, insurance, productivity, financing, capital resources, purchasing, government programs, commodity groups, contracts, estate planning, marketing, salesmanship, and the supplication of computer hardware and software in agriculture.

AGRICULTURAL SYSTEMS AND TECHNOLOGY I (Ag Mechanics 1)

1.0 Credit Grades 10-12 Bevan

Students will develop knowledge and skills in the application of principles and techniques of power, structural, and technical systems used in the agricultural industry, particularly agricultural production and service. Instruction includes classroom and laboratory learning and the application of the concepts taught through supervised agricultural experience. Students will develop basic skills in areas of hot and cold metal work, tool reconditioning, plumbing, and painting, bill of materials preparation, small gas engines, and welding. The basic practices associated with soil and water management are included; Safety and proper use of tools and equipment will be emphasized.

AGRICULTURAL SYSTEMS AND TECHNOLOGY II (Ag Mechanics 2)

Prerequisite: Ag Systems 1 or teacher approval

1.0 Credit Grades 10-12 Bevan

Students will develop knowledge and skills in the application of principles and techniques of power, structural, and technical systems used in the agricultural industry. Emphasis will be on selecting, operating, maintaining, servicing, and using agricultural power units and equipment. The course also includes agricultural uses of concrete and electricity. Safety and the proper use of safe practices will be integrated throughout the instruction. The instructional method will involve applications of concepts being taught through classroom and laboratory instruction and supervised agricultural experience. *NOTE: This course builds on knowledge and skills developed in Agricultural Systems and Technology I*

ANIMAL SCIENCE 1

1.0 Credit Grades 10-12 Gowans

Exposes students to a wide range of scientific principles such as genetics, anatomy, physiology, nutrition, diseases, pests, and management practices. The scientific processes of observation, measurement, hypothesizing, data gathering, interpretation, analysis, and application are stressed. This course will cover a wide range of animals from cows and horses to dogs, rabbits and hamsters. Career opportunities and educational preparation are examined. Learning activities are varied with classroom, laboratory, and field experiences. The course will include agricultural leadership.

PLANT AND SOIL SCIENCE 1

.5 Credit Grades 10-12 Gowans

Students will develop knowledge and skills in a wide range of scientific principles, such as genetics, disease, pests, and management practices. The scientific processes of observation, measurement, hypothesizing, data gathering, interpretation, analysis, and application are stressed. Career opportunities and educational preparation are examined. Learning activities are varied, with classroom, laboratory, and field experiences emphasized.

EQUINE SCIENCE

.5 Credit Grades 10-12 Bevan

This course prepares students to care for horses and horse equipment; to train horses for various work and athletic or entertainment roles; and to manage horse training breeding and housing programs and facilities. Students will also cover horse sciences which include genetics, anatomy, physiology/nutrition, diseases and pests. Learning activities are varied, with classroom, laboratory, and field experiences emphasized to care for the horses and horse equipment.

BIOLOGY AGRICULTURE SCIENCE

1.0 Credit Grades 10-12 Searle

Designed to meet the requirement for the Biology Science Credit. The standards and objectives for this course are the same as the standards and objectives for Biology, the only difference being the degree of emphasis on agriculture. Students completing this course will become cognizant of current technologies, methods, and changes in agricultural science and are expected to know and apply the standards outlined in the core curriculum as they relate to the industry of agriculture. The course will include agricultural leadership.

FLORICULTURE (FLORAL DESIGN)

.5 Credit Grades 10-12 Searle

Prepares individuals to produce, process, and market plants used primarily for ornamental, recreational, and aesthetic purposes and to establish, maintain, and manage horticulture enterprises such as floriculture, and greenhouse operation and management. Course will include practical applications in the area of retail floriculture. Instruction includes hands-on activities involving basic design principles and elements.

This course will also include instruction in field and laboratory applications. The course will include agricultural leadership.

VET ASSISTING

1.0 Credit Grades 10-12 Gowans

This course provides the opportunity for students to explore different avenues of the veterinary profession. Students will be exposed to veterinary science and principles which include anatomy, physiology, chemistry, animal health and disease, dentistry and laboratory procedures. Students will provide hands-on care as they develop skills in the area of surgical assisting, bandaging, wound care, oral care and general nursing care.

LANDSCAPE MANAGEMENT (in conjunction with Greenhouse Management)

.5 Credit Grades 10-12 Searle

Students will develop knowledge and skills that will provide a foundation for courses in animal science, plant science, horticulture, natural resources, agricultural systems and technology, or Ag Science II. Topics covered will be basic animal, plant, and soil science, natural resources, food science technology, agribusiness, personal and leadership development, and agricultural career awareness. Through this course, students will develop agricultural literacy.

GREENHOUSE MANAGEMENT
(in conjunction with Landscape Management)

.5 Credit Grades 10-12 Searle

Students will develop knowledge and skills related to the floriculture industry. Floral design and greenhouse operations and management will be the primary units of study. Students will be prepared to create floral arrangements, produce commercial plant species in a controlled environment, and manage commercial and experimental greenhouse operations.

SUMMER VOCATIONAL AGRICULTURE PROGRAM (Summer Ag Program)

.5 Credit Grades 9-12 Gowans/Bevan

This program is an intensive, individualized, and experiential education experience that includes the practical application of the formalized instructional competencies. Teacher supervision of the student's summer vocational agriculture (SAE) program should be a major part of the summer program. Regular work with the Utah agriculture science and technology record book is required as well as student leadership development. All summer applied technology agricultural education programs must be in compliance with state standards for summer applied technology agricultural education programs.

BUSINESS & MARKETING

RETAILING

.5 Credit Grades 10-12 Page

Retailing is a program that will prepare the student to operate businesses that sell, rent, or lease goods and services. This course will provide insight into the theory behind buying, selling, storing, pricing, promoting, displaying, financing, and other activities necessary for successful business operations.

ACCOUNTING I

.5 Credit Grades 11-12 McAfee/Dunn

Students will develop skills beginning with an understanding of the basic elements and concepts of double-entry accounting systems. Skills will include understanding the accounting cycle; entering transactions in journals; posting to ledgers; compiling end-of-period worksheets; adjusting and closing entries, statements, and reports; completing banking activities and payroll systems; and writing and communication examples. Proficiency in the use of the touch system with the electronic calculator is suggested.

ACCOUNTING II

Prerequisite: Accounting 1

1.0 Credit Grades 11-12 McAfee

Students will learn how businesses keep their records. Students develop an understanding of the principles and procedures in handling cash, recording in journals and posting to ledgers, preparing financial reports and handling payrolls. Students learn to systemize information about transactions into accounts and records, verify accuracy of data by applying auditing principles, and operate bookkeeping and calculating machines. Applications of the accounting principles may be learned on the microcomputer as part of the instruction.

SPORTS MARKETING

.5 Credit Grades 10-12 Page

This is an introductory course which will help students develop a thorough understanding of the marketing concepts and theories that apply to sports and sporting events. The areas this course will cover include basic marketing, target marketing and segmentation, sponsorship, event marketing, promotions, sponsorship proposals, and sports marketing plans. This course will also delve into the components of promotion plans, sponsorship proposals and the key elements needed in sports marketing plans.

ECONOMICS

(CTE or Social Studies Credit)

.5 Credit **Grades 10-12** **Peay**

This course focuses on the study of economic problems and the methods by which societies solve them.

Characteristics of the market economy of the United States and its function in the world and methods of applying economics to one's life will be explored.

ENTREPRENEURSHIP

.5 Credit **Grades 10-12** **Page**

Students will gain an understanding of the marketing and management principles necessary to start and operate their own business. They will develop an awareness of the opportunities for small business ownership and develop the planning skills needed to open a small business. They will understand the specific strategies of business management and marketing and the economic role of the entrepreneur in the market system. Entrepreneurship is designed for students interested in business and marketing who want to develop the skills, attitudes, and knowledge necessary for successful entrepreneurs.

DIGITAL BUSINESS APPLICATIONS

.5 Credit **Grades 10-12** **Page**

The business world is progressively more reliant on digital technologies. The Digital Business Applications course is designed to prepare students with the knowledge and skills to be an asset to the collaborative, global, and innovative business world of today and tomorrow. Concepts include the overall digital experience, digital communications, digital media and the exploration of career choices. This course also provides practical experience in professionalism using various forms of presentation skills, including speaking, podcasting, and digital portfolio relating to the globalization of business.

FAMILY & CONSUMER SCIENCE

CHILD DEVELOPMENT

.5 Credit **Grades 10-12** **Omer**

This course provides an excellent opportunity for young men and women to gain an understanding of how children grow and develop. They learn the value and importance of the dedicated participation of both fathers and mothers in helping children reach their full potential. Topics covered include parenting skills, positive guidance, prenatal development, healthy environments; and the growth and positive care of infants, toddlers, and preschoolers. Students participate in preparing and presenting quality learning games and activities. The class culminates with a preschool in which students participate together to plan and carry out learning activities and games for young children.

EARLY CHILDHOOD EDUCATION I

Prerequisite: Child Development

1.0 Credit **Grades 10-12** **Omer**

This yearlong course prepares individuals for child related careers and/or more extensive parenting skills through personal interaction with children. Instruction is given in developing positive relationships with and learning experiences for children, childcare policies and management, guidance techniques, and health and safety concerns. On-site preschool and/or child care experiences will be a major component of the course.

Previous completion of the Child Development course is REQUIRED.

EARLY CHILDHOOD EDUCATION II

Prerequisite: Early Childhood Education 1 and Child Development

1.0 Credit Grades 10-12 Omer

The primary focus of this class is to complete steps to apply for the Child Development Associate (CDA) credential through hands-on, on-site early childhood education experience. This course prepares individuals for careers and entrepreneurial opportunities in early childhood education. Experiences include: Program planning and management, resource and facility management, peer mentoring, supervising recreational and play activities, and preparing, implementing and evaluating learning experiences for children. FCCLA may be an integral part of the course. This class may be repeated as students work to complete their CDA requirements.

EARLY CHILDHOOD INTERN

1.0 Credit Grades 10-12 Omer

The primary focus of this class is hands-on, off-site early child development experiences. This course prepares individuals for careers related to early childhood education. Experiences include: program planning and management, resource and facility management, supervising recreational and play activities, preparing and implementing a large variety of learning experiences for children, the application of individual teaching skills, and preparation for a career and/or entrepreneurial opportunities.

FASHION DESIGN STUDIO

(Formerly known as Fashion Strategies)

.5 Credit Grades 10-12 Holt

This course explores how fashion influences everyday life and introduces students to the fashion industry. Topics covered include: fashion fundamentals, elements and principles of design, textiles, consumerism, and fashion related careers, with an emphasis on personal application.

APPAREL DESIGN & PRODUCTION 1

(Formerly known as Clothing I)

.5 Credit Grades 10-12 Holt

In Clothing I you'll master the basics of sewing and making clothes to suit your personal taste and budget. Guaranteed to take the frustration out of sewing. Projects may include; fashion garments, backpacks, denim items, polar fleece vests, quilts, accessories and home decor items. Embellishing techniques, embroidery computer technology and serger machine methods are taught. Sewing is a skill you will be happy you learned. Student leadership (FCCLA) may be an integral part of this course. **Supply cost dependent on student use**

APPAREL DESIGN & PRODUCTION II

(Formerly known as Clothing II)

Prerequisite: Apparel Design & Production 1 or Sports Sewing

.5 Credit Grades 10-12 Holt

This course is designed to allow students to develop clothing construction and consumer skills. Students of all skill levels will explore fabric selection, sewing skills, and clothing care. Student leadership (FCCLA) will be an integral part of this course. **Supply cost dependent on student use**

SPORTS & OUTDOOR PRODUCT DESIGN I

(Formerly known as Sports Sewing 1)

.5 Credit Grades 10-12 Holt

This course teaches students basic construction skills, but is specialized to concentrate on specific fabrics or projects such as outdoor clothing or sports clothing. The basic standards, objectives and indicators as listed in Clothing 1 should be taught in this course. Students enrolled in this course may qualify to take the state skill certification test #350. Student leadership (FCCLA) may be an integral part of this course.

TEXTILE DESIGN

Prerequisite: Apparel Design I or II and Sports & Outdoor Product Design)

.5 Credit Grades 11-12 Holt

This course is designed to focus on entrepreneurial opportunities and careers in design fields. Experiences may include pattern design, surface design, clothing construction and manufacturing, fitting and alteration, and interior fabrication. The study and application of textile sciences and technology in this course provides students with laboratory-based experiences that will strengthen their comprehension of concepts and standards outlined in Science, Technology, Engineering and Math (STEM) education. Student leadership (FCCLA) may be an integral part of the course.

Note: Students can repeat the course for credit as they work towards certification.

INTERIOR DESIGN I

.5 Credit Grades 10-12 Holt/Backus

Students will explore their creativity in the field of interior design. Identification of the elements and principles of design are emphasized. Other topics included are furniture arrangement basics, floor plan evaluation, area planning and careers. Class projects will provide applications in the study of: architecture, furniture styles and constructions, surface treatments and backgrounds, design and function of space and lighting. FCCLA will be an integral part of the course.

INTERIOR DESIGN II

Prerequisite: Interior Design 1

.5 Credit Grades 10-12 Holt

Students will explore their creativity in the field of interior design. Identification of the elements and principles of design are emphasized. Other topics included are furniture arrangement basics, floor plan evaluation, area planning and careers. Class projects will provide applications in the study of: architecture, furniture styles and constructions, surface treatments and backgrounds, design and function of space and lighting. FCCLA will be an integral part of the course.

ADULT ROLES & RESPONSIBILITIES

.5 Credit Grades 11-12 Omer

This course prepares students for the adult world. Learning to identify personal values, set goals, make decisions, and communicate along with addressing critical issues such as dating, teen pregnancy, abuse, and loss are discussed. Time, money and crisis management are addressed particularly as each impacts relationships, marriage and preventing throughout the life cycle. Emphasis is placed on uniqueness, accepting responsibility, and seeking positive alternatives. Student leadership (FCCLA) may be an integral part of this course.

FOODS AND NUTRITION I

.5 Credit Grades 10-12 Wilson/Backus

This course is designed for students who are interested in understanding the principles of nutrition and in maintaining a healthy life style. Attention will be given to the selection and preparation of food and personal health and well-being. Students will learn proper measuring and preparation techniques. Students will also be taught appropriate care and use of kitchen equipment and food safety procedures. Classroom work and cooking labs are a part of this course. Students are introduced to FCCLA as part of this course through a class project.

FOOD AND NUTRITION II

Prerequisite: Foods 1

.5 Credit Grades 10-12 Wilson

This course is designed for students who are interested in understanding the principles of nutrition and food preparation. Attention will be given to the selection and preparation of food and personal health. This is an introductory course for students wanting to take ProStart. Class cooking competitions are a part of this course. Students are introduced to more advanced culinary terms, knife skills and sauce making. Students will become more familiar with FCCLA.

PRO START 1ST AND 2ND YEAR

(Food Service/Culinary Arts)

1.0 Credit Grades 11-12 Wilson

Prerequisite: Foods I and II. Students must apply to be in this course through obtaining an application from the teacher.

This advanced course from the National Restaurant Association introduces students to careers in the restaurant industry. Basic communication skills; safety and sanitation, food preparation, meal planning, customer service, culinary terms and other topics are taught in this course. Students run a class business which gives the students hands on experiences in the Food Service Industry. FCCLA is an integral part of this course. Students are given competition and scholarship opportunities. *Students can earn concurrent enrollment credit through UVU.*

HEALTH SCIENCE

HEALTH SCIENCE INTRO

.5 Credit Grades 10-12 Whiting

Introductory anatomy and physiology, medical terminology, medical ethics, diseases and disorders are covered in sufficient depth to prepare students for a health technology program or for college preparation in the Health Science Advanced class & dissection labs. Also includes stitching lab. Designed to create an awareness of career possibilities in health-care and inform students of the educational options available for health technology and health science programs. *This class is typically a prerequisite for all Health Science classes.*

EMERGENCY MEDICAL RESPONDER

.5 Credit Grades 10-12 Whiting

This semester course provides students with advanced emergency medical information and skills. The course introduces students to a variety of career options in emergency medicine.

MEDICAL TERMINOLOGY

.5 Credit Grades 10-12 Adams

Medical Terminology is a one-semester course that helps students understand the Greek and Latin based language of medicine and healthcare. Emphasis is placed upon word roots, suffixes, prefixes, abbreviations, symbols, anatomical terms, and terms associated with movement of the human body. This course also stresses the proper pronunciation, spelling and usage of medical terminology. This class is helpful to anyone considering going into the healthcare field.

MEDICAL ANATOMY AND PHYSIOLOGY (CTE OR Science Elective Credit)

Prerequisite: Biology and Chemistry recommended

1.0 Credit Grades 11-12 Adams

The class will examine the structure and function of each of the twelve body systems. The student will develop a working knowledge of anatomy, physiology, medical terminology, medical ethics and pathophysiology. Lab exercises and dissections will be used to help the students become familiar with clinical procedures and disorders. The class is designed to prepare students for a variety of health technology programs and is a must for any student going into professions such as nursing, physical therapy, medicine, or dentistry.

EXERCISE SCIENCE / SPORTS MEDICINE

Prerequisite: Health

1.0 Credit Grades 11-12 Adams

This full-year course is designed to teach students components of exercise science/sports medicine; including exploration of therapeutic careers, preventative taping, first aid, injury prevention principles, the healing process, rehabilitation techniques, therapeutic modalities, sport nutrition, sport psychology, and performance enhancement philosophies. This class is designed for anyone considering a future in coaching, athletic training, therapy, and generally active people who wish to know how to care for their body.

INTRO TO PHYSICAL THERAPY

1.0 Credit **Grades 11-12** **Whiting**

This class introduces you to Physical Therapy. You will be exploring the body's bones and muscles and how they are key to movement. You will be learning how to perform rehab and create your own rehab programs. We will explore common injuries that need rehab. *It is recommended to take Anatomy before taking this class.*

BIOTECHNOLOGY

Prerequisite: Biology

Recommended: Chemistry or AP Biology with a grade of at least a B.

1.0 Credit **Grades 10-12** **Oltrogge**

This course will provide an introduction to the biotechnology industry, with an emphasis on current applications in medicine, forensics, tissue engineering, and cloning. Topics will cover the basic principles of DNA and protein structure, function, and analysis. The Labs will provide hands on experience for basic and common biotechnology laboratory techniques such as lab safety, aseptic techniques, preparation of solutions, cell culturing, PCR protocols, DNA sequencing, gene expression technology, etc.

TECHNOLOGY & ENGINEERING

PHYSICS with TECHNOLOGY I

Prerequisite: Secondary Math 1 or higher.

1.0 Credit **Grades 10-12** **Fluckiger/Grimes**

A STEM course that emphasizes a hands-on learning approach to studying the Utah Physics Core Standards at a more gradual pace with a greater focus on conceptual understanding. The Physics Core covers principles of motion, forces, energy, gravity, electrostatics, and waves. Physics with Technology explores several additional topics such as work, efficiency, temperature, heat, and circuits. A significant portion of time is spent

in lab activities that are structured to provide essential skills for students interested in technical and engineering professions, culminating in an industry-recognized certification for highly proficient students. Physics with Technology fills either a core science or a CTE elective credit requirement and is a Regents' Scholarship accepted course.

INFORMATION TECHNOLOGY

EXPLORING COMPUTER SCIENCE

.5 Credit **Grades 10-12** **Page**

Exploring Computer Science (ECS) is a course that provides students with an introduction to the field of computer science in a non-threatening and exploratory way. Accessible to all students, it is a great way to get a general overview of computer science, explore how computers are used in nearly every industry and career today and learn how computers "think". Students will learn how computers can be used to solve problems and they will use the online programming environment of Scratch to create several basic coding projects including a story and a game.

WEB DEVELOPMENT 1A

(Web Page Design)

.5 Credit **Grades 10-12** **Bahr**

Web Development is a course designed to guide students in a project-based environment in the development of up-to-date concepts and skills that are used in the development of today's websites. Students will learn the basic fundamentals of how the Internet works. They will learn and use the basic building blocks of the World Wide Web: XHTML coding, Cascading Style Sheets (CSS), and JavaScript. They learn and follow the steps to create a website by planning, designing, developing, deploying, and maintaining of the website projects. Students will learn and use different scripting technologies to create more dynamic and interactive websites. They will learn what it takes for a career in Web Development as they complete projects and create their own Web portfolio

WEB DEVELOPMENT 1B (ADVANCED)

(Advanced Business Web Page Design)

Prerequisite: Web Development 1

.5 Credit Grades 10-12 Bahr

Web Development II is a course designed to guide students in a project-based environment in the development of up-to-date concepts and skills that are used in the development of today's websites. Students will learn the fundamentals of how the Internet works. They will learn and use the basic building blocks of the World Wide Web: HTML5 coding, Cascading Style Sheets (CSS), and JavaScript. They follow the steps to create a website by planning, designing, developing, deploying, and maintaining of the website projects. Students will learn and use different scripting technologies to create more dynamic and interactive websites. They will learn what it takes for a career in web development as they complete projects and create their own website.

COMPUTER PROGRAMMING I

(UVU name: CS1400 Fundamentals of Programming)

Prerequisite: WHS students should have at least completed Secondary Math 1. For Concurrent Enrollment credit only, students will need to meet a math requirement with either an ACT math score of at least 23, an Accuplacer math score of at least 60, or an Aleks math score of 45-60.

1.0 Credit Grades 10-12 Test

This course helps prepare students to participate in one of the fastest growing and most financially rewarding industries in the state of Utah – computer programming. The course uses the Python programming language, but skills acquired in this course can be easily applied to many other programming languages. This course focuses on fundamental topics such as algorithm design, debugging, elementary data structures, decisions, loops, functions, and Graphical User Interfaces. Students receiving at least 80% on the state CTE exam in computer programming will receive a skill certificate showing that they meet the state standards and competencies required to be successful in the workplace. *Concurrent enrollment credit at Utah Valley University may also be earned for this course.*

COMPUTER PROGRAMMING 2

(UVU name: CS1410 Object Oriented Programming)

Prerequisite: students will need to have taken Computer Programming 1/CS1400

1.0 Credit Grades 11-12 Test

This course helps prepare students to participate in one of the fastest growing and most financially rewarding industries in the state of Utah – computer programming. The course is a follow-up to Computer Programming I, and teaches students the fundamentals of object oriented programming. Topics covered include an introduction to the C++ programming language, class design, inheritance, polymorphism, pointers, dynamic memory allocation, memory management, exceptions, recursion, operator overloading, and an introduction to data structures. Students receiving at least 80% on the state CTE exam in computer programming will receive a skill certificate showing that they meet the state standards and competencies required to be successful in the workplace. *Concurrent enrollment credit at Utah Valley University may also be earned for this course.*

GAME DEVELOPMENT FUNDAMENTALS 1

.5 Credit Grades 10 – 12 Test

This semester-long course covers the process of developing a video game. Emphasis is placed on the application development cycle and how it is applied to game development. After being introduced to gaming history and basic concepts, students will gain experience with storyboarding, graphic design, sprite animation, tile maps, control schemes, and user interfaces while developing a 2D game in Unity.

MOBILE APPLICATIONS DEVELOPMENT

.5 Credit Grades 10 – 12 Test

This semester-long course covers the process of developing a mobile application. Emphasis is placed on the application development cycle and how it is applied to mobile applications. Students will be introduced to basic event-driven programming concepts as well as topics unique to mobile applications such as texting, location sensing, data collection, and games.

SKILLED & TECHNICAL **EDUCATION**

VIDEO PRODUCTION 1

.5 Credit Grades 10-12 Pickett

In a world where social media/online presence is king, video production is a powerful tool for expressing your ideas. This course is designed to provide students with the basic knowledge and skills related to the video production industry. Includes instruction and hands-on assignments in the following areas: camera operation, recording audio, lighting systems, pre-production, production, post production, visual effects, and graphics.

VIDEO PRODUCTION 2

Prerequisite: Video Production 1 OR Teacher Approval

1.0 Credit Grades 11-12 Pickett

So you've taken Video Production 1 and you are ready to take it up a few notches? This class is for you! This class is designed to further your knowledge and skills in the video production industry. Learn advanced principles of cinematic storytelling, improve your skills, and participate in film festivals all over the world! Includes instruction and hands-on assignments in the following areas: camera operation, recording audio, lighting, pre-production, production, post production, visual effects, and graphics.

TELEVISION BROADCASTING 1

.5 Credit Grades 10-12 Pickett

Do you enjoy watching Thundervision every Friday but don't know if you have what it takes to make it? This class is designed to give you a peek into the world of Thundervision. Learn the basics about creating videos, being on camera, and running a TV studio! Recommended to take if you are interested in joining Thundervision or just want to have a fun elective making videos! Includes instruction and hands-on assignments in the following areas: camera operation, audio systems, lighting systems, pre-production, studio operations, control room operations, visual effects, and graphics.

THUNDERVISION (TV BROADCASTING 2)

Prerequisite: TV Broadcasting 1 OR Teacher Approval

1.0 Credit Grades 11-12 Pickett

Do you enjoy watching Thundervision? Come join us in helping every student stay connected to Westlake High School. This class includes creating a weekly show presented to the student body, participating in competition, and traveling to film festivals! Come help document your high school experience in a fun and creative way!

DIGITAL PHOTO I

(Digital Photography)

.5 Credit Grades 10-12

This course is an introduction to the field of commercial photography. This course will cover many basic concepts, including but not limited to purchasing a digital camera, image capture, image editing, and image output. This course will also feature Adobe Photoshop, its features and uses. These concepts will enable the student to be more knowledgeable and prepared to enter the field of commercial photography. If available, students are advised to continue on with the Advanced Commercial Photography course.

ADVANCED COMMERCIAL PHOTOGRAPHY **(also known as Advanced Digital Photography or Digital Photo 2)**

Prerequisite: Digital Photo 1

.5 Credit Grades 10-12

This course is designed for students who want to further enhance their photographic knowledge and abilities. It is an application of the skills learned in Basic Digital Photography with an emphasis on professional jobs and assignments used in commercial photography. A portfolio of each student's work is expected at the end of the course.

DESIGN AND VISUAL COMMUNICATIONS

(Also known as: Intro to Design or Commercial Art 1)

.5 Credit **Grades 10-12** **Purdy, Szabo, Boyles**

A course in the applied visual arts that focuses on the general principles and techniques for effectively communicating ideas and information, and promoting products to business and consumer audiences. This course prepares individuals in any of the applied art media including: drawing, painting, computer graphics, and others.

DESIGN AND VISUAL COMMUNICATIONS

(Also known as Screen Printing)

.5 Credit **Grades 10-12** **Boyles**

A course in the applied visual arts that focuses on the general principles and techniques for effectively communicating ideas and information, and promoting products to business and consumer audiences. This course prepares individuals in the medium and techniques of screen printing.

COMMERCIAL AND ADVERTISING ART

(also known as Advertising/Commercial Art or Commercial Art 2)

Prerequisite: Design and Visual Communications

.5 Credit **Grades 10-12**

Do you love poster design, book covers, packaging, and advertisements? This is a course in the applied visual arts that prepares individuals to use artistic techniques to effectively communicate ideas and information to business and consumer audiences via illustrations and other forms of digital or printed media. Instruction includes training in concept design, layout, and computer graphics. We will do projects in Photoshop, Illustrator, and InDesign.

CAD MECHANICAL DESIGN I

.5 Credit **Grades 10-12** **M. Taylor**

The first in a sequence of courses that prepares individuals to develop technical knowledge and skills required to plan and prepare scale pictorial interpretations and technical documentation of

engineering and design concepts. This includes instruction in the use of 2D Computer-Aided Design (CAD) software, sketching, drawing layout, geometric construction, orthographic projection, and dimensioning. **Available as a Concurrent Enrollment class.**

ROBOTICS 1

.5 Credit **Grades 10-12** **M. Taylor**

This course is a lab based, hands-on curriculum combining electrical, mechanical and engineering design principles. Students will learn to control and program robotic devices by applying science, math and technology principles. Rigorous study and application of electrical concepts include, but are not limited to: sources of energy, electrical safety, use and identification of basic electronic parts, sensors and actuators. Mechanical concepts will include, but are not limited to: mechanical design, three dimensional modeling, prototype development, design testing, model assembly and proper engineer documentation. Industrial automation, robotic applications and career opportunities will also be discussed.

WOODWORKING 1

.5 Credit **Grades 10-12** **Burdett**

This is a single semester course that prepares students to apply technical skills to lay out, shape stock, and assemble projects. This class stresses the safe use of hand tools, power tools and machinery. Students will have an opportunity to make some or all of the following projects: small cabinet, cutting board, longboard, pen. ***The class fee is \$35.00***

WOODWORKING – UVU CAW 1140 - CE

1.0 Credit **Grades 10-12** **Burdett**

This full year course that prepares students to apply technical skills to lay out, shape stock, and assemble projects. This class stresses the safe use of hand tools, power tools and machinery. ***Students will follow the UVU Millworking I curriculum and receive UVU credit. The class fee is \$75.***

FURNITURE DESIGN

(Woodworking 2)

Prerequisite: Woodworking 1

1.0 Credit Grades 10-12 Burdett

This full year advanced course prepares individuals to apply knowledge and skills to creatively design and build furniture projects; assemble and finish furniture articles; and stresses the safe use of hand and power tools and machinery. Potential projects include a dresser, or coffee table, or bookshelf.

The class fee is \$75.

GUITARMAKING/CABINETMAKING

Prerequisite: High School Woodworking

1.0 Credit Grades 10-12 Burdett

This full year class is an advanced course in a sequence of courses that prepares individuals to apply skills to safely set up and use woodworking machinery, and to use such machinery to design and fabricate cabinets and guitars. Projects included in this course include a guitar, a guitar case, and cabinets made for the district house.

The class fee is \$100.

CARPENTRY (BUILDING CONSTRUCTION)

**** This class is NOT taught at Westlake. Students meet at the construction site. Teacher is Guy Burdett.****

4.0 Credit Grades 11-12

Students build a residential home on-site from start to finish in one school year. Up to ten semester credits are available through concurrent enrollment at USC.

Licensed General Contractors and members of the Utah Valley Home Builders Association provide class instruction. Skills learned can be used to pay for college, build a home or start a construction business. Students must be willing to physically work hard and to work in inclement weather conditions.

LAW ENFORCEMENT

.5 Credit Grades 10-12 T. Taylor

This course is designed to teach about Law Enforcement as a vocation. The class will include a wide variety of topics such as: What is Law Enforcement, Public Opinion, Use of Force, History of Law Enforcement, Specialized Units (K9, SWAT, SVU, etc.), Narcotics, Corrections, Investigations, Death Penalty and other relevant subjects. The course includes speakers from the Law Enforcement community and other agencies. Also taught will be a module on Hemorrhage Control. This will include the concepts of Wound Compression, Wound Packing and Tourniquets; this will include the MARCH algorithm as well. There is a State Final Exam in this course.

ENVIRONMENTAL SCIENCE CE

(UVU name: Intro to Environmental Management)

For CE credit, Sophomores need a 3.5 GPA and Juniors and Seniors need a 3.0 GPA.

1.0 Credit Grades 10-12 Carling

This introductory Environmental Science college course engages students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, chemistry, and geography.

WORK PLACE SKILLS

(also known as Internship or Work Based Learning)

Prerequisite: Teacher approval and must take a related CTE course at the high school. Must have a 2.5 GPA.

.5 – 1.0 Credit Grades 11-12 McAfee

Program offers on-the-job training and experience that is directly related to student career goals. It is designed to bridge the gap between school and work. Students will have a training plan, adequate supervision by a school coordinator and will be paid according to labor laws.