# 2021-2022

# **Agriculture**

Learn about domestic animals in a fun and exciting way! Subjects such as animal terminology, selection, physiology, nutrition, reproduction, genetics, health and management issues will be studied. FFA and SAE record keeping are also covered. An ideal class for FFA members and those interested.

## **Agricultural Science I**

9 - 12<sup>TH</sup> Grades. Two Trimesters (students must enroll in both)

Science Credit Prerequisite: FFA membership or instructor approval.

An exploration of the Agriculture industry. 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 Agricultural 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

#### **ANIMAL SCIENCE ENTRY**

9 - 12th graders. Two Trimesters (students must enroll in both).

Prerequisite: Agriculture Biology, FFA membership or instructor approval.

**CTE or Elective Science Credit.** 

Learn about domestic animals in a fun and exciting way! Subjects such as animal terminology, selection, physiology, nutrition, reproduction, genetics, health and management issues will be studied. FFA and SAE record keeping are also covered. An ideal class for FFA members and those interested.

#### **ANIMAL SCIENCE II**

10-12 Grades. Prerequisite: Instructor Approval and FFA Membership. CTE or Elective Science Credit.

Develop knowledge and skills in a wide range of animal agriculture principles, including health maintenance, waste disposal, facilities and practices in animal health management. The efficient production and effective management of selected animal enterprises are covered, including beef and dairy cattle, swine, sheep and goats, poultry, and equine. A major part of this class is FFA projects such as award and scholarship, proficiency award applications, CDE/LDE events preparation, SAE record keeping, committee community projects and FFA Officer duties.

BIOLOGY IN AGRICULTURAL SCIENCE (primarily for students interested in agricultural sciences and the National FFA Organization)

9-12<sup>TH</sup> Grades. Two Trimesters (students must enroll in both part A and part B). Science Credit Prerequisite: FFA membership or instructor approval.

Primarily for students in the Agricultural science pathways and FFA members. A fun way to learn biology and earn science credit through labs and activities. The course will explore subjects of cells, genetics, DNA, biotechnology, evolution, animal and plant systems, and ecology. This course meets state requirements for core biology credit.

#### **FLORICULTURE**

9 - 12th graders. One Trimester

CTE or Elective Credit. Maximum of 25 students in the class!

Learn to make floral arrangements and manage floral plants! An exciting, hands-on course that exposes students to operations and management of greenhouse and floral plants. Subjects of floral plant identification, floral design, floral plant care and floral management are addressed. FFA and SAE record keeping are included. Floral arrangements will be made in the class for the students to take home.

### **Landscape Management**

# 9 - 12<sup>th</sup> graders. One Trimester

# **CTE or Elective Credit.**

Students will develop knowledge and skills in landscape management practices. Units will cover subjects such as landscape design, landscape plant identification, landscape equipment care and managing a landscape. FFA and SAE record keeping are included.

#### **Greenhouse Management**

#### 9 - 12<sup>th</sup> graders. One Trimester

### CTE or Elective Credit. Maximum of 25 students in the class!

Learn to operate a greenhouse and produce plants! An exciting, hands-on course that exposes students to operations and management of greenhouse and floral plants. This course helps to prepare students to produce commercial plant species in a controlled environment. Skills needed for future employment in the rapidly growing and changing horticultural industry are taught. Units on FFA and SAE Record books are also covered.

#### **Equine Science (Horse Management)**

# 9 - 12<sup>TH</sup> Grades. Two Trimesters (students must enroll in both)

3rd Year Science Credit, CTE or Elective Credit. Prerequisite: FFA membership or instructor approval.

Designed to provide students an in depth understanding of horses and the equine industry. Units will include horse anatomy and physiology, genetics, nutrition, careers, basic care, disease prevention and treatment and general horse management. Units on the National FFA Organization, Supervised Agricultural Experience and SAE Record books are part of the class. Learning activities will be varied with classroom, laboratory and field experience emphasized.

### **Natural Resource Science 1**

Students will develop knowledge and skills related to production management and conservation of natural resources. Major units will include ecology, range resources, waste management, and land use. Field and laboratory experiences will be emphasized.

#### **Natural Resource Science 2**

Students will develop knowledge and skills related to the biological, environmental, and economic importance of renewable natural resources. Forest and range products and their benefits are included. Field and laboratory experiences will be emphasized.

# Science and Application of Human Nutrition (USU-NDFS 1020)

Role of dietary choices in providing nutrients and their relationship to the social, mental, and physical wellbeing of people. How to evaluate nutritional status with personal data using computer diet analysis program.

#### **Vet Science Science**

11-12<sup>th</sup> Grades. Two Trimesters (students must enroll in both)

Science Credit Prerequisites: Completion of Biology and Animal Science

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 areas of surgical assisting, bandaging, wound care, oral care, and general nursing care.

#### **OPTIONAL OFFERING**

PLANT AND SOIL SCIENCE I, USU PSC 1800

College Credit Available for students admitted to USU.

10 – 12<sup>TH</sup> GRADES Two Trimesters (students must enroll in both).

Elective Science Credit and Concurrent Enrollment USU PSC 1800.

Prerequisite: Biology, FFA membership or instructor approval.

Learn how to grow and manage plants for ornamental use. Students will learn plant structure, plant growth, reproduction, pest management, and management practices. Students will use the school greenhouse in producing plant crops for market. FFA and SAE record keeping are included. An ideal class for FFA members and those interested.

# ARCHITECTURE AND CONSTRUCTION

# CAD Architectural Design 1 (UBTech Course) Grade 10-12

The first in a sequence of courses that prepare individuals for careers in the Architecture, Engineering, and Construction (AEC) industry. This course includes instruction in 2D or 3D Computer-Aided Design (CAD) software to draw a small residential home with an emphasis on blueprint reading.

# CAD Architectural Design 2 (UBTech Course) Grade 10-12

The second in a sequence of courses that prepare individuals for careers in the Architecture, Engineering, and Construction (AEC) industry. This course includes instruction in 3D Computer-Aided Design (CAD) software to design and model a small residential home with an emphasis on residential methods and materials of construction, codes, and Building Information Modeling The third in a sequence of courses that prepare individuals for careers in the Architecture, Engineering, and Construction (AEC) industry. This course includes instruction in 3D Computer-Aided Design (CAD) software to model a small commercial building with an emphasis on commercial methods and materials of construction, codes, and Building Information Modeling (BIM).

# Carpentry 1 (UBTech Course) Grade 10-12

This is the first in a sequence of courses that prepares individuals to layout, fabricate, erect, install, and repair wooden structures and fixtures using hand and power tools. Includes instruction in common systems of framing, construction materials, blueprint reading, concrete placing, siding, and mechanical systems.

# Carpentry 2 (UBTech Course) Grade 10-12

This is the second in a sequence of courses that prepares individuals as a lead or foreman in laying out, fabricating, erecting, and installing wooden structures and fixtures using hand and power tools. Includes instruction in job site management, framing systems, construction materials, estimating, scheduling, blueprint reading, concrete placing, siding, and mechanical systems.

# **Construction Technology (UBTech Course) Grade 9**

Prerequisites: None. A course that generally prepares individuals in the following areas; basic safety, introduction to blueprint reading, introduction to hand tools, introduction to power tools and introduction to construction math. It also includes an industry overview, what to expect on the job and specific career opportunities. (CTE)

# Interior Design I Grade 9-12

This course enables students to 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. Students will show mastery of concepts through projects, written assignments, final projects and a portfolio. (CTE)

# Interior Design 2 Grade 9-12

This course provides students the opportunity to develop skills in applying the elements and principles of design to interiors. Projects are integrated throughout the course to provide applications as the students' study: architecture, furniture styles and constructions, surface treatments and backgrounds, design and function of space and lighting. This course will strengthen comprehension of concepts and STRANDs outlined in Science, Technology, Engineering and Math (STEM) education. FCCLA may be an integral part of this course.

# Arts, Audio/Visual Technology and Communications

# **3D Graphics**

#### **Grade 9-12**

3D Graphics is a one trimester course. Students will use 3D graphics software to produce 3D models. This course will introduce students to 2D and 3D modeling, the creation and application of textures, mapping, lighting, camera techniques and rendering of 3D models. Students will be using the Cinema 4D software.

#### **3D Animation**

#### **Grade 9-12**

Prerequisites: 3D Graphics. 3D Animation is a one-trimester using 3D graphics software to produce 3D models and animations. This course will introduce students to 2D and 3D, animation planning, storyboard development and the animation process. Students will be using the Cinema 4D software.

# **Augmented/Virtual Reality**

### **Grade 9-12**

Separating hype from reality is hard, especially in the fast-growing and evolving space of augmented and virtual reality (AR/VR). Recent advances in technology has allowed AR/VR systems to become extremely sophisticated and realistic. This course introduces students to the technologies that underpin AR/VR systems. Then the course walks through 5 applications of AR/VR and how they will change and impact numerous aspects of our lives and the economy. Students will also learn about and discuss the risks and side effects of these systems, including health, privacy, and ethical implications.

# Clothing and Textiles I

#### **Grade Levels 9-12**

This course introduces students to basic sewing and pressing equipment, textiles and introductory level project construction techniques. Join us in making some fun projects as you learn to sew. (CTE)

# Commercial & Advertising Art 1

#### Grade 10-12

Prerequisites: Graphic Arts Intro (DESIGN). This course is designed for students who want to further enhance their design and page layout knowledge and abilities. It is an application of the skills learned in Digital Graphic Arts Intro. with an emphasis on professional jobs and assignments used in commercial art. A portfolio of your work is expected at the end of the course. (Art or CTE)

# Commercial & Advertising Art 2 (YEARBOOK)

#### **Grade 10-12**

Prerequisites: Graphic Arts Intro (DESIGN). You will be offered assignments that could be published in this year's book. You will need to be self-motivated to work at your own pace and get busy each day in class.

Yearbook is a team effort to record the activities, people, and experience at Uintah High School in a respectful and interesting way. Take pictures, write little articles, interview your peers & design pages. Everyone will adore your work for years and years! (Art or CTE)

# **Commercial Photography**

#### **Grade 10-12**

You will check out a camera, take tons of pictures, learn Adobe Photoshop skills, create an online Portfolio Web Page, and much more. This is a class that can help you find your creative side, learn light science, and have fun. (Art)

# **Commercial Photography 2**

#### **Grade 10-12**

This advanced course is project based and has many performance requirements. Adobe Photoshop and Adobe Lightroom skills are emphasized. Guest photographers share their experience and expertise. Students have access to state-of-the-art studio lighting and have printing capabilities. (Art)

# Digital Graphic Arts Intro (DESIGN) Grade 9-12

Learn how color theory, typography, design principles & elements, and composition come together in your designs. You will do a little drawing and a lot of computer work, mostly Adobe programs. This class will teach you how to streamline your creativity into polished, finished pieces. (Art & CTE)

# **Digital Media 1**

Prerequisite: Keyboarding proficiency and Computer Technology (Computer Literacy) Skills Certification Exam: #810. Multi-media is the process of planning, instructional design and development of interactive computer applications. Multimedia A is the first-trimester interactive media course where students will create and learn using elements of text, graphics, animation, sound, video and digital imaging to create interactive computer applications to be delivered on CD\_ROM, Internet or other media. Students will us digital cameras and scanners. These skills will prepare students for entry-level multimedia positions and will provide fundamental interactive media understandings and skills beneficial for other occupational/educational endeavor.

# **Digital Media 2**

Digital Media 2 is a course designed to teach the process of planning, instructional design, development, and publishing of digital media and interactive media projects. Digital Media II is the second year course within digital media pathway where students will focus on developing advanced skills to plan, design, and create interactive projects using the elements of text, 2-D and 3-D graphics, animation, sound, video, digital imaging, interactive projects, etc. These skills can prepare students for entry-level positions and other occupational/educational goals.

# **Fashion Design Merchandising**

Fashion Merchandising A prepares students with the fundamentals of basic fashion and business concepts such as textile fibers and yarns, garment styles and parts, retail merchandise categories, designing and

producing apparel, retail business fundamentals, and fashion promotion.

# **Graphics Communication/Introduction**

### **Grade 9-12**

This class is an overview of the graphic arts industry and the basic printing processes and techniques. Practical experience is given to the student through the production of personal stationary, T-shirts and other projects. (CTE)

# **Graphics Communications/Digital File Prep Grade 10-12**

Prerequisites: Graphics/Printing Basic or Commercial Art. This class will explore good design in more detail. Students will be taught how to take their ideas those into electronic data. Computer programs using page layout, drawing and image editing will be used to facilitate the process. Students will also do projects using the offset press, screen printing press and other graphics equipment. (CTE)

# **Graphics Communications/Intermediate Grade 10-12**

Prerequisites: Graphics/Printing Basic or Graphics/Digital File Prep. The Digital File Prep course is recommended but not required. This class takes design ideas and flows them through the entire printing process. The class will take the designs and check for possible errors (pre-flighting), learn to perform color separations and finally how to make the plates and screens for printing. Computer programs using page layout, drawing and image editing will be used to facilitate the process. Students will take their final designs and print them on either the offset press or screen printing press. (CTE)

# **Graphics Communications/Advanced Grade 10-12**

Prerequisite: Graphics/Printing Intermediate. The Digital File Prep course is recommended but not required. This class reviews and expands on each of the steps of the printing process. The offset press operation is taught in depth as students get hands-on experience with an offset press. Also, students will learn how to put the finishing touches on the printed piece. The bindery features of stitching, cutting, drilling and folding will be taught throughout the trimester. Quality control measures will be followed extensively. Students will take real jobs and complete them on the offset press and screen printing press.

# **Graphics Communications/Introduction to Screen Printing Grade 10-12**

Prerequisite: Graphics/Digital File Prep or Graphics/Printing Intermediate. This class focuses on the screen printing process. Students will learn how to prepare screens and artwork for printing. Students will also learn how to properly clean and reclaim screens. Actual experience will be gained in the printing of t-shirt and poster designs.

# Sewing Construction Textiles 1

**Grade Levels 9-12** 

This course introduces students to basic apparel design and construction skills. These skills prepare students for the exciting global apparel industry, entrepreneurial opportunities, as well as project management in any field. Students will sew apparel and accessory projects. Student leadership and competitive events (FCCLA) may be integrated into this course.

# **Sewing Construction Textiles 2**

**Grade Levels 9-12** 

Students will strengthen and broaden apparel design, production, and project management techniques. In this course students will design and construct intermediate level projects using various construction techniques. Preparing students for industry and entrepreneurial opportunities. Student leadership and competitive events (FCCLA) may be integrated into this course.

# **Sewing Construction Textiles 3**

**Grade Levels 9-12** 

This course will provide students with apparel or interior design opportunities using soft goods/textiles and construction/production skills which will focus on entrepreneurial opportunities and careers in design fields. Experiences may include pattern design, apparel design and construction, fitting and alteration, and interior design projects. (Students can repeat the course for credit as they work towards certification.) Student leadership and competitive events (FCCLA) may be an integral part of the course. Skills Test #354 (Standards 1-

## 4 Tested)

# **TV Broadcasting**

This course is designed for a very select group of students with a sincere interest in broadcast journalism; television, studio production and audio/video equipment utilization. There will be ample opportunities for creative design and editing for school announcements. Production time lines and deadlines will be crucial and consistent attendance is imperative. (Art, Elective)

# **BUSINESS, FINANCE AND MARKETING**

# Accounting I (grades 11-12)

Pathways Elective Course: Business Administrative & Technical Support, Entrepreneurship & Management, Marketing

Students will develop an understanding of the basic elements and concepts of double-entry accounting systems related to service businesses organized as a sole proprietorship. Skills include understanding the accounting equation, analyzing business transactions, entering transactions in journals, posting to ledgers, compiling end-of-period financial statements, preparing closing entries, and managing cash.

# **Accounting II** (grades 11-12)

Pathways Elective Course: Marketing

Students will develop advanced skills that build upon those acquired in Accounting I. Students continue applying concepts of double-entry accounting systems related to merchandising businesses. Additional accounting skills will be developed, including preparing and journalizing payroll records, calculating and recording adjusting entries, and interpreting financial information.

### **Business Communication I**

This class can be used as an English credit to fulfill the 4th year English requirement. Business communication impacts all aspects of our lives. This introductory course will teach students to communicate in a clear, courteous, concise, and correct manner on both personal and professional levels. Competency will be developed in oral, written, social, technological, employment, and organizational communication. Listening skills will be incorporated throughout the semester. The overriding goal is to provide students with a solid communication base so they are able to function effectively in any course of study and in our global society. Credit can be used towards a UBATC certificate.

### **Business Communication II**

This class can be used as an English credit to fulfill the 4<sup>th</sup> year English requirement. This class is highly recommended for students interested in any phase of business. This course is independent of Business Communication I. Students will focus on methods of constructive communication skills. Competency will be developed in oral, written, social technological, employment, and organizational communication with listening skills incorporate throughout the semester. The goal is to provide students with a practical, proficient portfolio consisting of a resume, job application, and an oral presentation. Students will also complete an in-depth business report. Credit can be used towards a UBATC certificate.

# **Business Management** (grades 11-12)

Pathways Foundation Course: Entrepreneurship & Management

Pathways Elective Course: Business Administrative & Technical Support, Marketing

This Business Management course seeks to develop sound management concepts within students. Effective management requires decision-making abilities, long-range planning knowledge, human relations expertise, and motivational skills. Students learn the four basic functions of management: planning, organizing, directing, and controlling.

# **Business Office Specialist**

Fills digital literacy graduation requirement.

Pathways Foundation Course: Business Administrative & Technical Support

This course applies advanced concepts and principles using Microsoft Word, Excel, and PowerPoint. Students will have the opportunity to become Microsoft Office Specialist (MOS) certified.

## **Digital Marketing**

The Digital Marketing course is designed to give students a general background in digital marketing and an introduction to the rapidly growing and evolving career field. Students will be exposed to the fundamental concepts and principles of the digital experience, focus on the learning tools and skills necessary for solving business problems, and developing marketing opportunities. This course will provide practical experience in, but not limited to: eCommerce, media planning, branding, online advertising, display advertising, digital campaigns, social

#### **Economics**

This course is an exciting introduction to basic economics and the American Enterprise system. Through a variety of games, simulations and learning activities, the students will understand economic concepts and be able to apply them in their lives. Games and learning activities will cover the areas of supply and demand, national debt, international trade, supply of money and business ownership. This course is based on the Junior Achievement program and will involve a local business consultant.

# **Entrepreneurship**

No prerequisites. Students 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. Students will become aware of the traits and characteristics of successful entrepreneurs. Students will gain an awareness of knowledge needed in research, planning and regulations affecting the small business and the means of financing 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 who have an interest in developing the skills, attitudes, and knowledge necessary for successful entrepreneurs.

# Marketing 1

An introductory course designed to teach concepts of common marketing practices and entry-level management in business. Many concepts are taught through activities and group work. Subjects include: competing in today's business world; developing business ethics; launching and managing a successful business; developing target markets, advertising, and marketing strategy. The psychological aspects of selling and pricing will also be covered. Students will develop an advertising campaign for a product of their choice, sales presentation and develop a new product concept.

# **Sports & Entertainment Marketing**

This is an introductory course which will help students develop a thorough understanding of the marketing concept 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. (CTE)

# **Web Development –** Fulfills Digital Literacy requirement

This course is 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 to use the basic building blocks of the World Wide Web, HTML5, and CSS. Students will create a website by planning, developing, deploying, and maintaining of the website project. They will learn 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.

(CTE)

# COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

# **AP Computer Science Principles**

AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. It is important to note that the AP Computer Science Principles course does not have a designated programming language. Teachers have the flexibility to choose a programming language(s) that is most appropriate for their students to use in the classroom.

# Computer Programming 1A (must have a B average to take as a 9<sup>th</sup> grader)

This class can be used as a Math credit to fulfill the necessary math graduation requirements.

This is a beginning class in computer programming and applications. Have you ever wanted to try to make a computer game or see how computer software is made? Then this is class for you. This class introduces students to the fundamentals of computer programming, simple control and data structures, operating system commands and the use of text files. Students will create and test basic applications and game programs using Visual Basic, Fusion and Alice 3-D.

# **Computer Programming 1B (Java)**

This class can be used as a Math credit to fulfill the necessary math graduation requirements.

An intermediate class in computer programming using the Java programming language. Reviews and on builds on the concepts introduced in Computer Programming 1A. This class introduces students to more complex data structures, sequential files, arrays, graphical user interface, classes, and recursive processes. Students will learn to create more powerful programs.

# **Computer Programming 2**

Computer programming II is an advanced class in computer programming and application development. Reviews and builds on the concepts introduced in Computer Programming 1B. This class introduces students to dynamic allocation of data, creation and utilization of classes, advanced GUI techniques, and to advanced applications of recursion.

## **Computer Science Principles**

Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical.

## **Computer Systems 1**

Students will learn necessary competencies for an entry-level IT professional including installing, building, upgrading, repairing, configuring, troubleshooting, optimizing, diagnosing, and performing preventive maintenance of basic personal computer hardware.

#### **Exploring Computer Science**

Fills digital literacy graduation requirement.

This course is designed to introduce students to the of the field of computer science through an exploration of engaging and accessible topics. The goal of this course is to develop in students the computational thinking practices of algorithm development, problem solving, and programming within the context of problems that are relevant to the lives of today's students.

### Gaming Development Fundamentals 1

This course is designed to provide students with knowledge and project-based experience of fundamental gaming development concepts relating to STEM. These concepts include game design, scripting, creation of digital assets, graphic resources, animations, understanding hardware, problem solving, critical thinking, collaboration, and project management.

# Gaming Development Fundamentals 2

This course is designed to provide students with knowledge and project-based experience of fundamental gaming development concepts relating to STEM. These concepts include game design, scripting, creation of digital assets, graphic resources, animations, understanding hardware, problem solving, critical thinking, collaboration, and project management.

# **Geographical Information Systems Remote Sensing**

This course is designed to introduce remote sensing of the environment through digital image processing (photography, multispectral scanning and microwave imagery) from airplane, satellite (Landsat), and manned-spacecraft data. The goal is to develop an understanding of inventorying, mapping, and monitoring earth resources through the measurement, analysis and interpretation of electromagnetic energy emanating from features of interest. Image interpretation, practical applications in earth science, and use of remotely sensed data in geographic information systems (GIS).

# Geographical Systems, Intro

This course introduces fundamental concepts of geographical information systems (GIS) and the major functionality contained within professional GIS software. In course exercises, you will follow the GIS analytical process and work with a variety of tools to solve realistic problems. This course emphasizes practical GIS software skills.

# **EDUCATION AND TRAINING**

## **Child Development**

This course is for any student, (male and female), who plans to be a parent someday (or has younger brothers and sisters or nieces or nephews). It provides students with an understanding of the aspects of human growth and development; beginning with conception, prenatal development, and birth. It moves on through the developmental stages to the preschool stage. Parenting skills are developed as positive guidance techniques and child related issues are studied. The *Empathy Belly* (pregnancy simulator) and mechanical *Real Care Baby 3* infants are used as teaching tools. Child development is the study of children and their growth and development as they move through various stages of life. Students will receive practical, usable skills to assist them in becoming better educated and better prepared caregivers, siblings, parents, and citizens. (CTE)

# **Early Childhood Education**

Prerequisite: Child Development

This course prepares students for occupations in child related careers and roles. Instruction is given in child growth and development; child care programs, management, and policies; health and safety concerns; developmentally appropriate learning activities; and writing lesson plans. (CTE)

# HDFS 1500 - (SS) Human Development.

Overview of human development across the life-span from conception to death.

# Teaching as a Profession (TAP) 1, 2, and 3

Teaching is a noble and rewarding profession. One where the character and caliber of an individual can be shaped. TAP is a course designed to help students learn about the role and characteristics of an effective educator. Major topics include: exploring current teaching methods and instructional strategies, assessments, and instructional strategies to help all learners.

# **ENGINEERING AND TECHNOLOGY**

# **Engineering Technology (9-12)**

In this foundational course, students are introduced to basic problem-solving and documentation skills. Various aspects of engineering will be explored along with technology's environmental, societal, political, and economic impacts on our world. By utilizing problem-solving skills, students will develop essential abilities and attitudes that will in turn expand their occupational opportunities in the world of engineering. (CTE)

## **Digital Electronics A & B**

Digital Electronics is an introduction to applied digital logic, a key element of careers in engineering and engineering technology. This course explores the smart circuits found in watches, calculators, video games, and computers. Students use industry-standards computer software in testing and analyzing digital circuitry. They design circuits to solve problems, export their designs to a printed circuit auto-routing program that generates printed circuit boards, and use appropriate components to build their designs. Students use mathematics and science in solving real-world engineering problems.

# **Engineering Principles 1 & 2**

Principles of Engineering is an introduction to of some of the major concepts that students will encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and high tech careers. Principles of Engineering gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based learning. Used in combination with a teaming approach, learning challenges students to continually hone their interpersonal skills, creative abilities, and problem solving skills based upon engineering concepts. *RECOMMENDED SEQUENCE is to take "Introduction to Engineering Design" first.* 

# Robotics 1 Grade 10-12

The first in a sequence of courses that prepares individuals with a lab-based, hands-on curriculum combining electrical, mechanical and engineering principles. Students will learn to design, build, program, and control robotic devices. A rigorous study and application of electrical concepts will include: sources of energy, electrical safety, use and identification of basic electronic components, sensors and actuators. Engineering concepts will include: mechanical design, prototype development, design testing, programming, and proper engineer documentation.

# Robotics 2 Grade 10-12

The second in a sequence of courses that prepares individuals with a lab-based, hands-on curriculum combining electrical, mechanical and engineering principles. Students will learn to design, build, program, and control robotic devices. A rigorous study and application of electrical concepts will include: sources of energy, electrical safety, use and identification of basic electronic components, sensors and actuators. Engineering concepts will include: mechanical design, prototype development, design testing, programming, and proper engineering documentation.

# **HEALTH SCIENCE**

# **Emergency Medical Services, Introduction to (UBTech)**

Learn how to correctly handle and respond to everyday emergency situations. This course includes training in respiratory and cardiac emergencies such as heart attack, chest pain, cardiac arrest, asthma attacks, breathing problems, choking, and anaphylaxis. Treating injuries to bones and muscles, injuries that cause bleeding, head and spinal injuries, general injuries and sickness, poisoning situations, patients in shock, and emergency child birth are all areas covered in the course. Taking a patient's vital signs and learning how to splint, control bleeding, and care for wounds and burns are all skills taught. Hands-on skills and training are a vital part of the curriculum. Interaction with local ambulance crew members and medical professionals is an integral part of the class. American Heart Association CPR certification is included which is valid for two years.

# **Exercise Science/Sports Medicine (UBTech)**

If you are interested in Sports Medicine or Athletic Training this class is for you. We cover legal issues, ethics, basic anatomy and physiology (muscles, bones, cardiac and respiratory systems), nutrition, first aid (how to treat sprains, strains, muscle injuries, wounds, heart and lung conditions), basic taping techniques (wrist, elbow, shoulder, knee, ankle), treatment modalities (ultrasound, TENS shock therapy, heat and cold), rehabilitation issues (physical therapy), pharmacology (drugs associated with athletics), basic physical conditioning, how our bodies respond to injury and how the healing processes work. Sports Medicine and Athletic Training are exciting fields to pursue a career in. If you are considering a career in either of these fields or athletics is in your future, this class will provide a valuable foundation for future college courses. (CTE)

# **Health Science, Intro (UBTech)**

This semester course is designed to create an awareness of career possibilities in health care and inform students of the educational options available for health science and health technology programs. Instruction includes beginning anatomy and physiology, medical terminology, medical ethics, diseases, and disorders. The course prepares students for the Medical Anatomy/Physiology course and/or for a variety of health technology programs.

# Human Development (UBTech)

Human Development introduces the developmental stages of individuals across the lifespan. Students will study biological, cognitive, and social/emotional developmental changes of the individual in the context of the family and society. It emphasizes and demonstrates the vital connections between theory, research, and application. This can be offered as a concurrent enrollment course. Student leadership and competitive events (FCCLA) may be integrated into this course.

# Medical Anatomy & Physiology (UBTech)

This class gives a strong knowledge base of the human body and the diseases and disorders that affect it. This course covers the structure and functions of the different human body systems and the diseases that afflict them. If you are curious about how different diseases affect the human body, this class covers it. If you enjoy learning how your body works, this class will be beneficial. Many dissection labs are involved in the curriculum for in-depth study of the human body. (CTE)

# Medical Math (UBTech)

An instructional program that prepares students with skills to compute mathematical equations related to healthcare. The course integrates medical-physiological concepts and mathematics. Students will engage in math activities including problem solving, reasoning and proof, communication, connections, and representations.

# **Medical Terminology (UBTech)**

This is an excellent course for anyone interested in the medical field. Medical Terminology is a vital part of every aspect of medical care. The curriculum covers every body system and the medical language corresponding to them. This is a beneficial course for students interested in working in a medical office or hospital setting. This is a non-lecture course. The curriculum involves work on the computer along with Medical Term worksheets. A student can move as fast as they want to through the class. (CTE)

# **Nurse Assistant (UBTech)**

#### Ages 16 and older

This course will prepare students to take the State of Utah Nursing Assistant Exam and Certification Test. Upon successful completion of this course a student is able to seek employment with various local agencies including home health agencies, doctors' offices, local hospitals, and long term care facilities. This class is a prerequisite for LPN and RN nursing programs. If you are interested in the nursing or medical fields this course is a must. Basic human anatomy and physiology along with nursing care procedures are taught both in the classroom and real world clinical settings. Hands-on skills are an integral part of the curriculum. Time will be spent in the classroom and at local health care facilities. This course provides an employable skill that is recognized within the community. American Heart Association CPR certification is taught which is valid for two years. You must be 16 years of age to take this class. (CTE) Fee varies: textbook, scrubs, state testing fee.

# **Surgical Technician (UBTech)**

The primary function of a Surgical Technologist is to fulfill the first scrub role and help with the preparation of the operation room by setting up sterile surgical equipment, checking equipment for proper functionality, and assisting the surgeon with instruments and supplies while maintaining the sterile field. Students in the Surgical Technologist Program will learn the skills necessary to be a valued member of the allied health team of professionals who work in the surgical suite delivering direct patient care. Careers in surgical technology are fast-paced and interesting, and students will be qualified to seek employment in this high-demand industry.

# **HOSPITALITY AND TOURISM**

# **Culinary 1**

This course is the second step in the Culinary Arts Pathway. Experiences will highlight food safety and sanitation, careers, introduce knife skills and cooking techniques, and basic culinary skills related to stocks, sauces, and yeast breads. There will be a focus on career readiness. Student leadership and competitive events (FCCLA) may be integrated into this course.

#### **Foods & Nutrition I**

Students will be trained for career opportunities in the food service/culinary arts industry. Students will have the opportunity to learn and practice safety and sanitation procedures, and use and maintain commercial food service equipment. They will perform quantity food preparation as it relates to catering, bakery, restaurant, hospitality, and fast food business operations. (CTE)

### **Foods & Nutrition II**

This course includes short units on basic nutrition, myplate, meal planning, knife skills, casseroles, soups, salads, and yeast breads. Each student is required to do home cooking experiences along with sampling new and different foods. (CTE)

## **Hospitality & Tourism**

This course provides the student with an understanding of the career opportunities in the "leisure-time" industry. Specific application includes the industries of travel, lodging, resort management, food/beverage, and those products and services related to entertainment, sports, hobbies, and cultural activities. To successfully compete in these fields requires competency in human relations, communications, advertising and promotion, selling management, and business operations. (CTE)

# **HUMAN SERVICES**

## **Behavioral Health, Intro**

This course is an introduction to the Behavioral Health industry. Topics that will be introduced in this foundational level course include understanding self-concept, effective communication, healthy relationships, addictive behaviors, mental health disorders, and protective laws and rights of patients and practitioners.

\*This course is not designed for the student to diagnose themselves, friends, or family. It is an introduction to the behavioral health career field only.

# **INTERNSHIP**

# **CTE Internship**

Prerequisites: Application required with a minimum GPA of 2.0 and good attendance in previous Trimester. (Juniors and Seniors only). The Internship Program gives high school juniors and seniors the chance to test their career interests before they invest time and money into college and other training. Students must have taken or be currently enrolled in related course work and will attend a Critical Workplace Skills class one day a week and go to the worksite the other days of the week. This class is a great opportunity for students to see first-hand what is involved in their proposed career choices. Work-site must be related to student's SEOP career goal. Transportation is the responsibility of the parent/guardian and students are not allowed to transport one another. Some participating employers do require a background check and drug screen prior to participation.

# **MANUFACTURING**

# CAD Mechanical Design 1 (UBTech)

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.

# **CAD Mechanical Design 2 (UBTech)**

The second in a sequence of courses that prepares individuals with an emphasis in developing technical knowledge and skills to develop 3D models in support of mechanical and industrial engineers, and related professionals. This includes instruction in the use of 3D Computer-Aided Design (CAD) software, model creation, and technical communication.

# **Manufacturing Principles 1**

#### **Grades 10-11**

A course offering hands on experience producing small useable items from wood, plastic, and composite material rough stock that meet a given set of design specifications. Emphasis is placed on selecting and using processes optimizing strength, cost, and overall quality. *PREREQUISITE: Manufacturing Technology or Principles of Engineering* should be completed before taking Manufacturing Principles.

# Welding Technician, Entry Level

This class is for students with little or no welding experience. Students will be instructed in safety, Basic Arc Welding (SMAW), Oxy/fuel process, and Gas Metal Arc Welding (GMAW). If students finish the required work, a welding project can be fabricated or they may work on the 300 hour competency based certification. (CTE)

# **Welding Technician Intermediate Level**

# (Can be taken for multiple trimesters and multiple periods)

Prerequisite: Successful completion of Intro to Welding. All students are encouraged to enroll in two-hour blocks. This individualized program will prepare students for many American Welding Society (AWS) certifications and for the many high-paying jobs available in the welding industry. Students will learn technical information and skills training in welding all positions on both plate and pipe material. Students who complete the Intro to Welding first semester can sign up for second semester advanced. (CTE)

# **Welding Advanced Level**

## (Can be taken for multiple trimesters and multiple periods)

Prerequisite: Advanced Level Welding Technician. Students will learn more advanced skills in the welding processes that will prepare them to apply technical knowledge and skill in the workplace and in project construction. Students will learn and practice knowledge, attitude, skills, and habits required to perform tasks autonomously, including the selection and use of appropriate techniques and equipment with minimum supervision. (CTE)

# Woods 1 (UBTech)

You will be given an opportunity to learn about building furniture using a variety of industrial equipment, basic construction techniques, and a little bit about finishing materials. You will have fun creating a beautiful piece of furniture when you are finished. Freshmen through seniors are welcome. No experience with woodworking skills is required. (CTE)

# Woods 2 (UBTech)

The second in a sequence of courses that prepares individuals to apply technical knowledge and skills to lay-out, shape, assemble, and finish projects. Value is placed on developing craftsmanship, a production sense, and in design principles. This course emphasizes the development of production principles in a manufacturing environment.

# TRANSPORTATION, DISTRIBUTION AND LOGISTICS

# **Introduction to Automotive (UBTech)**

No prerequisites but physics and Into to Engineering A & B are recommended. This is an entry level course in automotive service. Through demonstrations, lectures, research and practical experiences is designed to introduce the student to a broad experience in the use of: equipment, tools, materials, processes and techniques of automotive service.

(CTE)

# ASE Chassis MLR/Engine MLR (UBTech)

Prerequisites: Intro to Automotive. This is an advanced level course in automotive service that deals with the overall chassis of a vehicle. Through demonstrations, lectures, research and practical experiences dealing with chassis, this course is designed to assist students in broadening their experience, through the use of equipment, tools, materials, processes and techniques in inspecting, diagnosing, and servicing of automobiles. The class also deals with engine and related components through demonstrations, lectures, research and practical experiences dealing with engines. This course is designed to assist students in broadening their experience through the use of equipment, tools, materials, processes and techniques in inspecting, diagnosing, and servicing automobiles. (CTE)

# Diesel 1 (UBTech)

Prerequisites: Intro Automotive & Instructor Permission. This course that prepares individuals to apply technical knowledge and skills in the field of maintenance and overhaul of diesel equipment. The course includes instruction in inspection, maintenance, and repair of trucks, wheels, brakes, operating controls, pneumatic and hydraulic systems, electrical/electronic circuitry, and engines. (CTE)