



## **Program Catalog**

**2009 - 2010**



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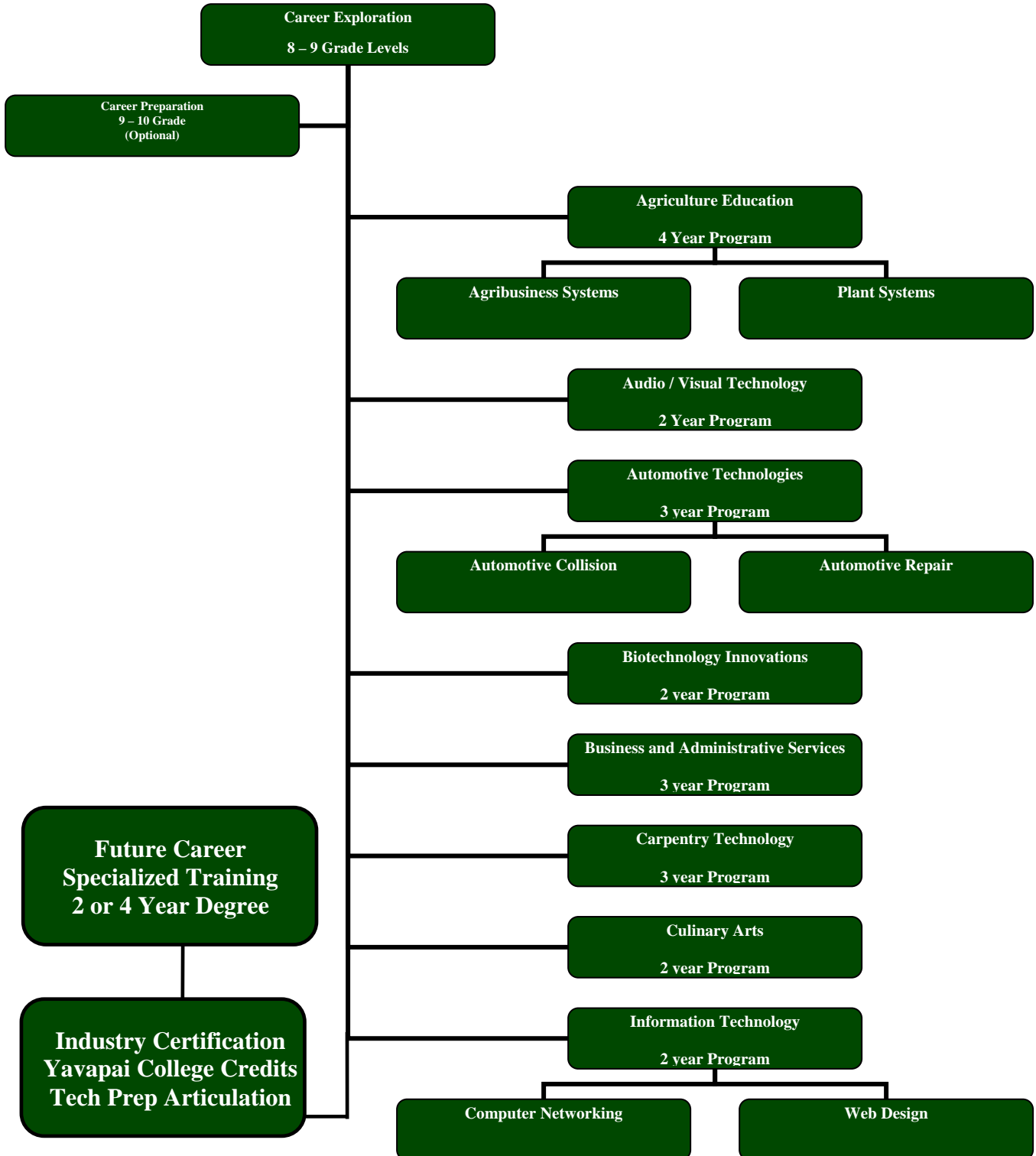


Mountain Institute (JTED) programs will be available starting in August, 2009. Students interested in taking these programs will need to make an appointment with the CTE office at their respective schools and register through their counseling office.

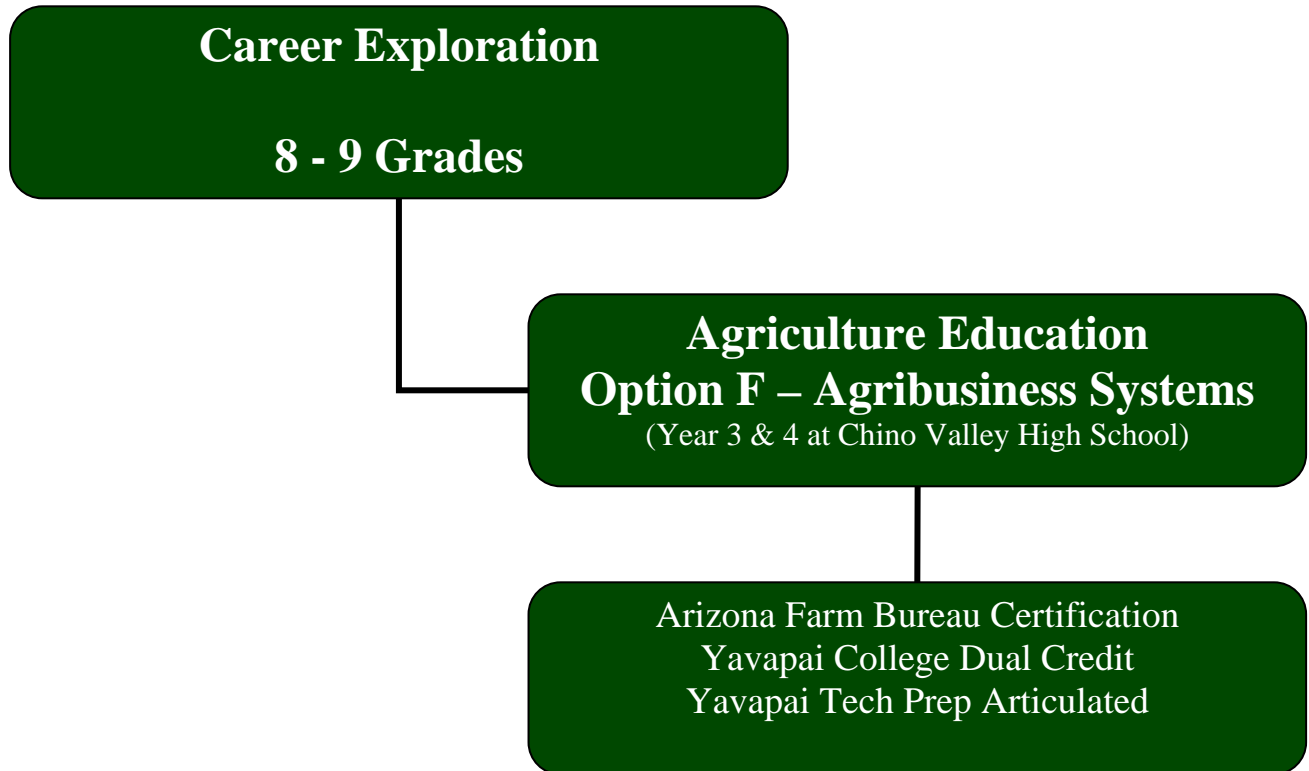
The Program areas shown below have been approved by the Arizona Department of Education. Based partly on the results of parent, student and business surveys, the Mountain Institute Governing Board will select the programs that will be offered.



# Mountain Institute Program Sequence



# MOUNTAIN INSTITUTE PROGRAMS ASH FORK HIGH SCHOOL CAMPUS



## Career Preparation

### **Career Preparation 1 - 2**

**Grades: 9 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee:**

**Prerequisite:**

**Class Size: 28 Students**

This course prepares students for entry into CTE programs including all Mountain Institute programs. Students will explore the foundations experience to support a successful transition to the CTE Program. It introduces students to career clusters as well as provides an opportunity for instruction in a flexible learning environment. Students will use industry current technology as they research each occupational area.

 **AGRICULTURAL EDUCATION / FFA**  
 **Option F - Agribusiness Systems**

**APPLIED BIOLOGICAL SYSTEMS 1 - 2**

**Grades: 9 - 12**

**Course Length: Full Year - 1 CTE Credit, 1 Elective Credit, or \*½ Biology Credit**

**Fee: \$15**

**Prerequisite:**

**Class Size: 24 Students**

Applied Biological Science in Agriculture 1-2 provides students with the essential skills necessary to pursue a Career in the Agriculture Sciences. Student will be presented with industry current instruction that includes; FFA and FFA programs, Plant Science, Animal Science, Arc Welding, Irrigation Pipe & Tubing, Parliamentary Procedure, and Leadership Development, Biotechnology, and Fisheries & Wildlife Science. Laboratory procedures are a major component ABS Curriculum. **Students are required to conduct a Supervised Agriculture Experience (SAE) program and maintain an accurate FFA Financial Management (record keeping) system.**

*\*Students who complete the Applied Biological Science 1 - 2 & 3 - 4 classes may receive 1 year of Lab Science Credit (Biology) for High School graduation and may also be used to meet the Arizona University requirements for Lab Science Credit (Biology).*

**APPLIED BIOLOGICAL SYSTEMS 3 - 4**

**Grades: 10 - 12**

**Course Length: Full Year - 1 CTE Credit, 1 Elective Credit, or \*\*½ Biology Credit**

**Fee: \$15**

**Prerequisite: Applied Biological Systems 1- 2 or Career Preparation 1 - 2**

**Class Size: 24 Students**

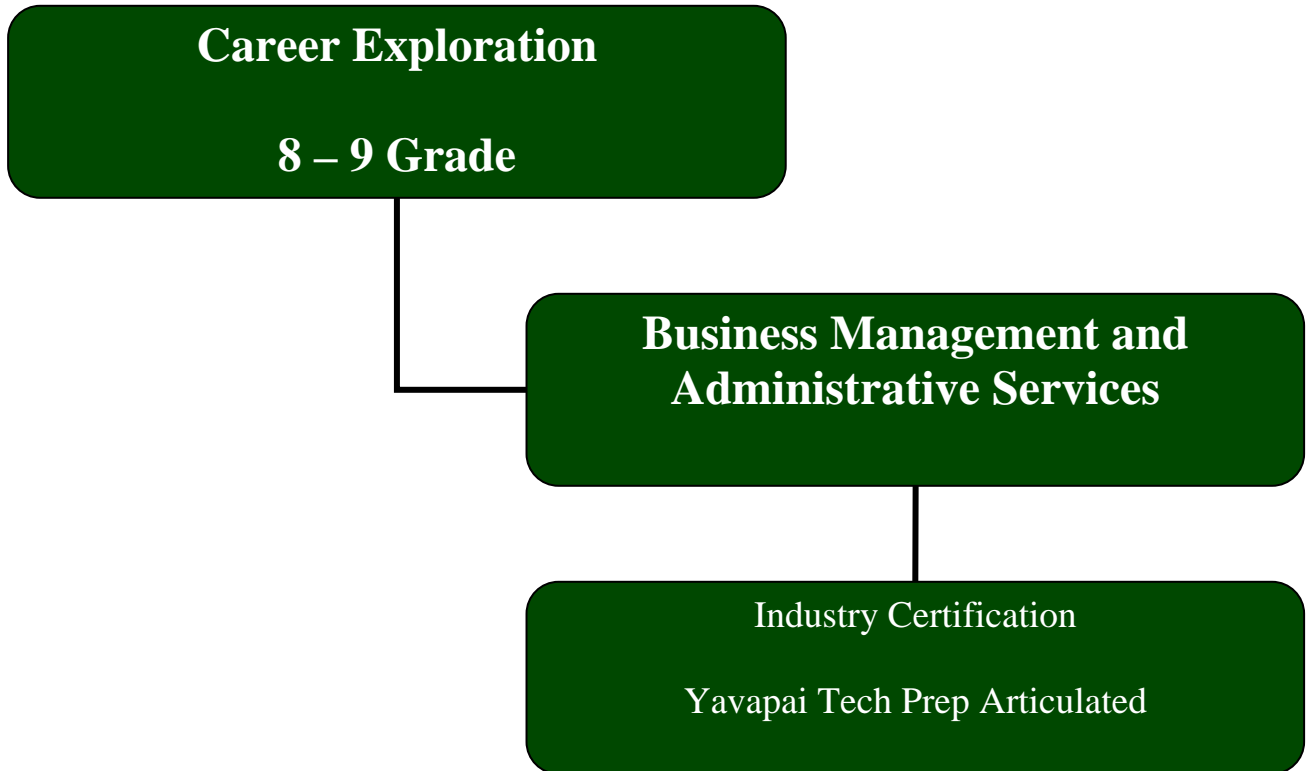
Applied Biological Science in Agriculture 3-4 will continue course work covered in ABS 1-2. This course will cover course work in greater detail and will provide additional instruction in the areas of FFA & FFA Programs, Natural Resource Management, MIG Welding, Electrical Wiring, Public Speaking, Job Interview, and Concrete Construction. A majority of this course work will be completed in the laboratory setting.

**Students are required to conduct a Supervised Agriculture Experience (SAE) program and maintain an accurate FFA Financial Management (record keeping) system.**

*\*\*Students who complete the Applied Biological Science 1 - 2 & 3 - 4 classes will receive 1 year of Lab Science Credit (Biology) for High School graduation and may also be used to meet the Arizona University requirements for Lab Science Credit (Biology).*

***Years 3 & 4 of the Agriculture Education Program will offered at the Chino Valley Campus. Please see the Course Descriptions listed on pages 17 & 18 for a complete description of these courses.***

# MOUNTAIN INSTITUTE PROGRAMS BAGDAD HIGH SCHOOL CAMPUS



## **Business Management and Administrative Services / FBLA**

### **Technological Foundations**

**Grades: 9**

**Course Length: 1 Quarter – 1/4 CTE or 1/4 Elective Credit (Students may choose 4<sup>th</sup> quarter)**

**Fee:**

**Prerequisite: None**

**Class Size:**

This course will allow the students to use the computer to learn how to correctly and efficiently operate the keyboard. Students will be able to enter data accurately and quickly to prepare memos, letters, reports, tables, resumes, and presentations. While learning the preceding foundation skills, the students will also be exploring career interests and the world of work including human relations skills, safety issues, and problem solving.

### **Introduction to Business Management and Administrative Services**

**Grades: 10**

**Course Length: Full Year - 1 CTE or 1 Elective Credit**

**Fee:**

**Prerequisite: Business Management and Administrative Services**

**Class Size:**

Course Description: Students will continue to develop their career plan, explore job search skills, and demonstrate employability and communication skills. The business environment will be introduced including legal and ethical issues, decision-making, economics, finance, and marketing. Students will conduct Future Business Leaders of America (FBLA) meetings and have the opportunity to compete in FBLA competitions.

### **Basic Business Management and Administrative Services**

**Grades: 11**

**Course Length: Full Year - 1 CTE or 1 Elective Credit Fee:**

**Prerequisite:**

**Class Size:**

Course Description: This course is recommended for students who have an interest in developing skills and acquiring knowledge to provide business support services and create and maintain business records. The results of this course are based on a set of competencies designed to: prepare students for employment, perform administrative and communication tasks, perform general office management tasks, participate in work-based learning training, improve oral and written communication skills, and prepare accounting records. Students will use a computer and other business equipment to complete the assigned work, as well as create the Sultan Voice. Students will conduct Future Business Leaders of America (FBLA) meetings and have the opportunity to compete at FBLA competitions.

## **Advanced Business Management Administrative Services**

**Grades: 12**

**Course Length: Full Year - 1 CTE or 1 Elective Credit**

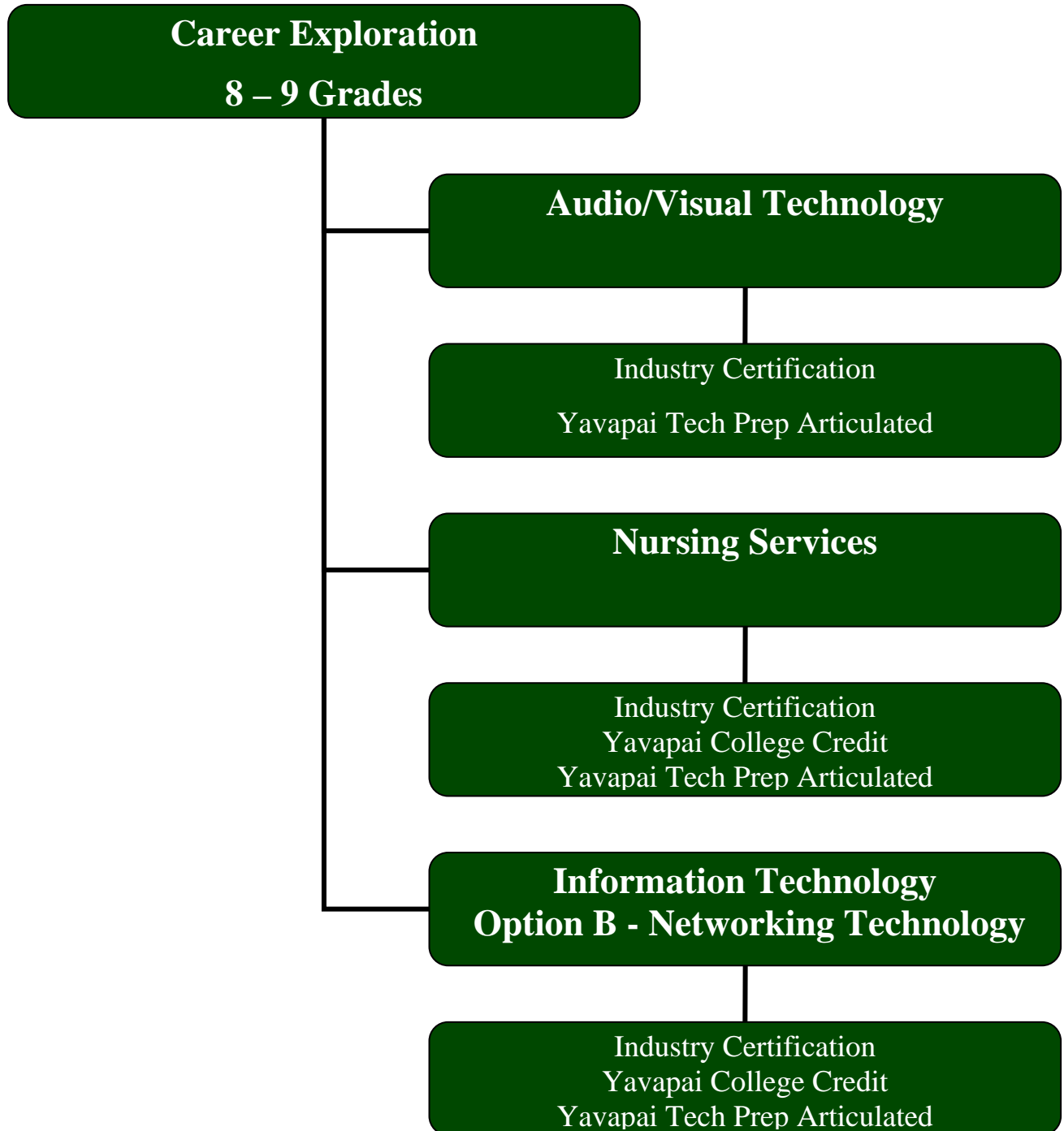
**Fee:**

**Prerequisite: Business Management and Administrative Services**

**Class Size:**

Course Description: This course is recommended for students who have an interest in developing skills and acquiring knowledge to manage a business by publishing the BHS yearbook. Students will create a business organization and then follow through with the actual creation of the yearbook including gathering photographs, organizing the photographs, and meeting deadlines for yearbook publication. Activities will include writing job descriptions, conducting interviews, filing positions, conducting staff meetings, project management, employee evaluations, and marketing the BHS yearbook. Students will conduct Future Business Leaders of America (FBLA) meetings and have the opportunity to compete at FBLA competitions.

# MOUNTAIN INSTITUTE PROGRAMS BRADSHAW MOUNTAIN HIGH SCHOOL CAMPUS



## **Audio/Visual Technology / Skills USA**

### **Audio and Video Production**

**Grades: 10 – 12**

**Course Length: Full Year - 1 CTE or 1 Elective Credit**

**Course Fee: \$15**

**Prerequisite: None**

**Class Size: 26 Students**

This hands-on career and technical class instructs students how to create digital movies and soundtracks. Students develop writing and editing skills, and expand their understanding of media ethics and literacy. Students create mini-documentaries, public service announcements, commercials and short films. Students also participate in the national career and technical organization Skills USA.

### **Production Studio**

**Grades: 11-12**

**Course Length: Full Year - 1 CTE or 1 Elective Credit**

**Fee: \$15**

**Prerequisite: Audio and Video Production**

**Class Size: 26 Students**

Students continue their professional development by performing live daily announcements for the school. Digital video assignments include coverage of school related activities, community events and personal projects. Students are encouraged to compete in state-wide competitions. Upon completion of this class, students will produce a resume reel for professional employment and education beyond high school. Students also participate in the national career and technical organization SkillsUSA.

### **Audio/Video Internship and Work Experience**

**Grades: Seniors Only**

**Course Length: Full Year - 1 CTE or 1 Elective Credit**

**Fee: None**

**Prerequisite: Production Studio**

**Class Size: 26 Students - \*Instructor approval required.**

Seniors can translate their career and technical skills into professional work experience. Local businesses, television and radio stations offer real work experience, skills and the opportunity to earn credit, while students build their resume.

## Nursing Services / HOSA

The Nursing Assistant program at BMHS prepares students to perform technical services involved with planning, organizing, and directing processes related to the provision of nursing assisting services. An integrated approach to teaching and learning is provided as students develop interpersonal relations, career development skills and technical knowledge and skills associated with nursing assisting and the pathway into other health careers. Students will have the opportunity to participate in teams, solve problems, think critically and implement effective solutions. This program is designed and delivered as a coherent sequence of experiences using technical instruction, academic foundations, experiential learning, and a supervised occupational experience. Upon successful course completion, students are eligible for application to the AZ State Board of Nursing for nursing assistant certification and employment. Five (5) credit hours are possible at completion of the CNA program with a “C” or higher through Dual Enrollment at Yavapai College. Career and Technical Student Organization (HOSA) standards will be an integral part of this program.

### **Certified Nursing Assistant - Fundamentals**

**Grades: 11-12**

**Course Length: 1 Semester - 1 Credit (2 Period Block)**

**Fee: \$20**

**Prerequisites: Application to program, Instructor interview/approval  
Current Health Care Provider (professional) CPR Certification  
Current First Aid Certification**

**Class Size:**

CNA Fundamentals prepares students to apply academic, employability and technical knowledge and skills related to common industry standards and practices of nursing assisting within the nursing profession. Students will focus on fundamental knowledge and skills essential to the development of personal, professional, leadership and career success qualities of a patient care provider.

**CNA Fundamentals SKILLS LAB** provides students the opportunity to apply CNA Fundamental knowledge from the classroom setting into the hands-on, skill portion of the program. All students must be in good health with documented physical ability to lift 50 pounds safely. Students must also be able to see and hear well in order to master the skills required to provide safe, quality care as a CNA. *Reasonable accommodations for persons with documented (IEP/504) disabilities will be made.* Skills lab is a **MANDATORY** after school class, one day a week (per student), 2:30 pm – 5:00 pm Monday thru Thursday. Student’s day will be assigned at beginning of program in August. This class is Pass/Fail and is required for the student to advance into the clinical portion of the program.

### **Certified Nursing Assistant – Advanced Applications**

**Grades: 11-12**

**Course Length: 1 Semester - 1 Credit (2 Period Block)**

**Fee: \$85 for CNA State Board Exam *at completion of program (optional)***

**Prerequisite: Certified Nursing Assistant – Fundamentals (Grade “C” or better)  
Certified Nursing Assistant – Fundamentals SKILLS LAB (Pass)**

**Class Size:**

**CNA Advanced Applications** is a continuation of the CNA Fundamentals class and prepares students to apply advanced academic and technical knowledge and skills related to nursing assisting in a variety of settings within the nursing profession. This course builds on previous learned program content and focuses on essential nursing assistant knowledge, skills and work-based learning to develop students as safe and competent patient care providers.

**CNA Advanced Applications CLINICAL** allows the student to demonstrate their knowledge and skill level by performing safe, basic nursing care and is required by the Arizona State Board of Nursing. All students must be in good health with documented physical ability to lift 50 pounds safely. Students must also be able to see and hear well in order to master the skills required to provide safe, quality care as a CNA. *Reasonable accommodations for persons with documented (IEP/504) disabilities will be made.* Clinical is a **MANDATORY** after school class, one day a week (per student), 3:00 pm – 8:00 pm Monday thru Thursday. Student's day will be assigned at beginning of program in August. This class is held off-site within the Tri-City Area (specific locations TBD), transportation is not provided. This class is Pass/Fail and is required for the student to be eligible for application to the AZ State Board of Nursing for nursing assistant certification and employment.

 **Information Technology / FBLA**  
 **Option B Networking Technology**

### **Computers and Networking I**

**Grades: 11-12**

**Course Length: Full Year - 1 CTE or 1 Elective Credit**

**Fee:**

**Prerequisite: Concurrent enrollment or completion of Algebra II**

**Class Size:**

Students learn the skills necessary to install, manage, and support a computer network. With hands-on exercises, students learn to install network cables and configure both wired and wireless networks. Topics include network cabling, security, network protocols, and operating systems. This is a dual enrollment course with Yavapai College, earning students 7 college credits. Equivalent college courses are CNT-100: Introduction to Networking Technologies and CNT-115: Network+ Networking Technologies Certification.

### **Computers and Networking II**

**Grades: 11-12**

**Course Length: Full Year - 1 CTE or 1 Elective Credit**

**Fee:**

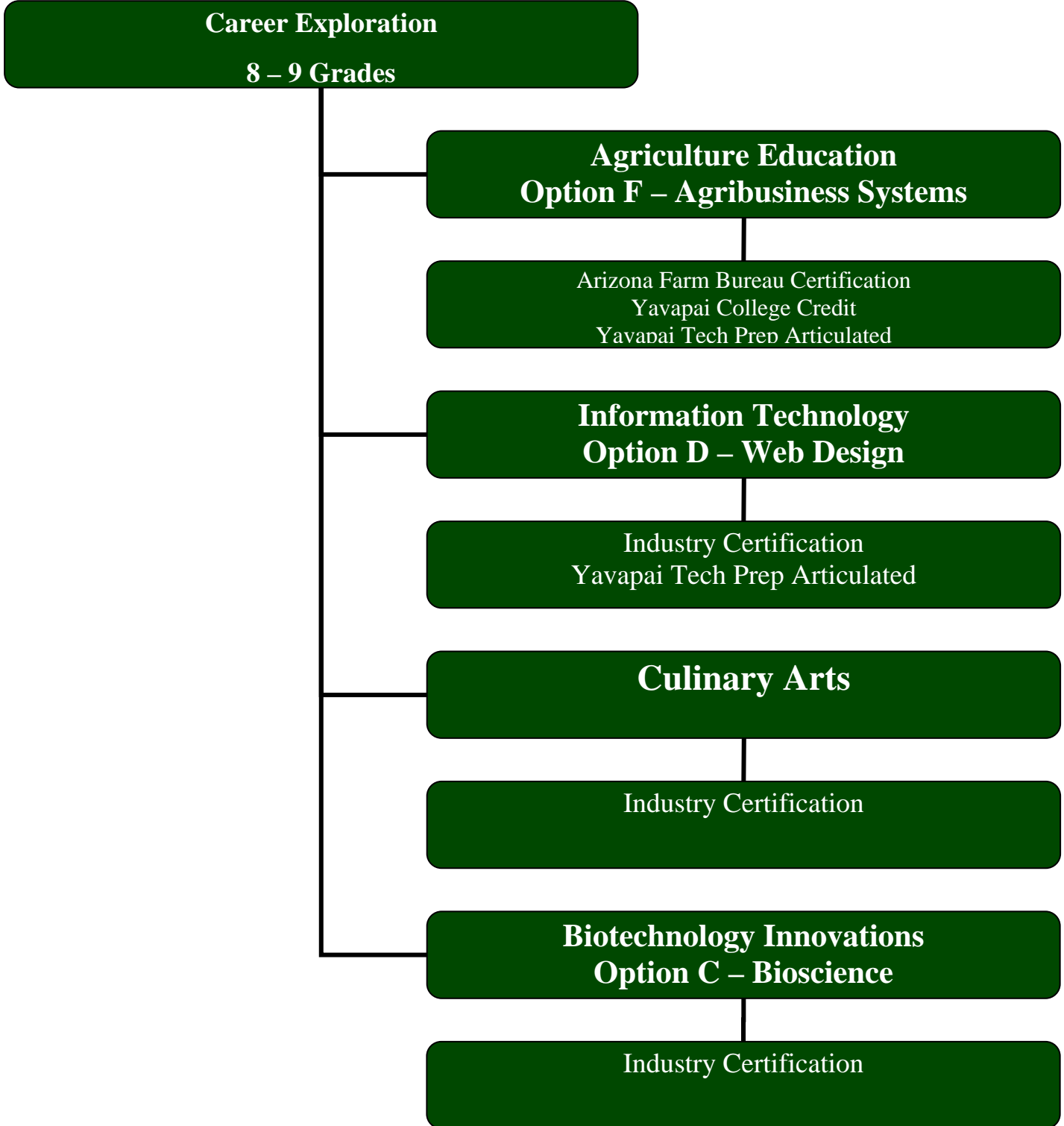
**Prerequisite: Concurrent enrollment or completion of Algebra II**

**Class Size:**

Prerequisite: Computers and Networking I or teacher recommendation.

Students learn how to install, manage and support personal computers and network services. Hands-on activities provide students with the skills to build, upgrade, and repair personal computers and install and configure desktop and server operating systems. Students become “administrators” of the classroom network while learning the concepts and procedures involved with computer and network management. This is a dual enrollment course with Yavapai College, earning students 7 college credits. Equivalent college courses are CNT-110: A+ Computer Technician Certification and CNT-120: Exploring Network Operating Environment.

# MOUNTAIN INSTITUTE PROGRAMS CHINO VALLEY HIGH SCHOOL CAMPUS



## Career Preparation

### **Career Preparation 1 - 2**

**Grades: 9 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee:**

**Prerequisite:**

**Class Size: 28 Students**

This course prepares students for entry into CTE programs including all Mountain Institute programs. Students will explore the foundations experience to support a successful transition to the CTE Program. It introduces students to career clusters as well as provides an opportunity for instruction in a flexible learning environment. Students will use industry current technology as they research each occupational area.

## **AGRICULTURAL EDUCATION / FFA** **Option F - Agribusiness Systems**

### **APPLIED BIOLOGICAL SYSTEMS 1 - 2**

**Grades: 9 - 12**

**Course Length: Full Year - 1 CTE Credit, 1 Elective Credit, or \*1/2 Biology Credit**

**Fee: \$15**

**Prerequisite:**

**Class Size: 24 Students**

Applied Biological Science in Agriculture 1-2 provides students with the essential skills necessary to pursue a Career in the Agriculture Sciences. Student will be presented with industry current instruction that includes; FFA and FFA programs, Plant Science, Animal Science, Arc Welding, Irrigation Pipe & Tubing, Parliamentary Procedure, and Leadership Development, Biotechnology, and Fisheries & Wildlife Science. Laboratory procedures are a major component ABS Curriculum. **Students are required to conduct a Supervised Agriculture Experience (SAE) program and maintain an accurate FFA Financial Management (record keeping) system.**

***\*Students who complete the Applied Biological Science 1 - 2 & 3 - 4 classes may receive 1 year of Lab Science Credit (Biology) for High School graduation and may also be used to meet the Arizona University requirements for Lab Science Credit (Biology).***

### **APPLIED BIOLOGICAL SYSTEMS 3 - 4**

**Grades: 10 - 12**

**Course Length: Full Year - 1 CTE Credit, 1 Elective Credit, or \*\*1/2 Biology Credit**

**Fee: \$15**

**Prerequisite: Applied Biological Systems 1- 2 or Career Preparation 1 - 2**

**Class Size: 24 Students**

Applied Biological Science in Agriculture 3-4 will continue course work covered in ABS 1-2. This course will cover course work in greater detail and will provide additional instruction in the areas of FFA & FFA Programs, Natural Resource Management, MIG Welding, Electrical Wiring, Public Speaking, Job Interview, and Concrete Construction. A majority of this course work will be completed in the laboratory setting. **Students are required to conduct a Supervised Agriculture Experience (SAE) program and maintain an accurate FFA Financial Management (record keeping) system.**

## **AGRISCIENCE I**

**Grades: 11 - 12**

**Course Length: Full Year - 1 CTE Credit, 1 Elective Credit, or \*\*1 Lab Science Credit**

**Fee: \$15**

**Prerequisite: Applied Biological Systems 3 - 4**

**Class Size: 24 Students**

Agriscience I is a course designed to increase student knowledge in Agriculture Sciences. The course is designed to acquaint students with FFA and FFA Programs, Scientific Instrumentation, Aquaculture Production, Biotechnology / Electrophoresis, Hydroponics, Leadership Development, and Agriculture Business Management. Students will learn to develop and operate successful Agriculture Businesses in the Aquaculture, Greenhouse, and Biotechnology Industries. The Agriscience I course is a 90% hands on laboratory-based class providing students with hands on management experience in the agricultural field. **Students are required to conduct a Supervised Agriculture Experience (SAE) program and maintain an accurate FFA Financial Management (record keeping) system.**

***\*\*Students who complete the Agriscience I will receive 1 year of Laboratory Based Integrated Science Credit for High School graduation and may also be used to meet the Arizona University requirements for Lab Science Credit.***

The following is a list of Agriculture Courses which may be offered through the CVHS dual enrollment agreement with Yavapai College. For a full and current course description, please visit the Yavapai College website at [www2.yc.edu/webtools/catalogs/pdf/course-descriptions.pdf](http://www2.yc.edu/webtools/catalogs/pdf/course-descriptions.pdf)

### **AGS 115 - AGRISCIENCE-MECHANICS I (Dual Enrollment – Yavapai College)**

**Grades: 11 - 12**

**Course Length: 1 Semester - 3 Credit Hours**

**Fee: \$30**

**Prerequisite: AGRISCIENCE I and ALGEBRA I (C or Better)**

**Class Size: 18 Students**

### **AGS 215 - AGRISCIENCE-MECHANICS II (Dual Enrollment – Yavapai College)**

**Grades: 11 - 12**

**Course Length: 1 Semester - 3 Credit Hours**

**Fee: \$30**

**Prerequisite: AGRISCIENCE I and ALGEBRA I (C or Better)**

**Class Size: 18 Students**

### **AGRIBUSINESS MANAGEMENT (Dual Enrollment – Yavapai College)**

**Grades: 11 - 12**

**Course Length: 1 Semester - 3 Credit Hours**

**Fee:**

**Prerequisite: AGRISCIENCE I and ALGEBRA I (C or Better)**

**Class Size: 24 Students**

### **INTRODUCTION TO THE ANIMAL INDUSTRY (Dual Enrollment – Yavapai College)**

**Grades: 11 - 12**

**Course Length: 1 Semester - 3 Credit Hours**

**Fee: \$30**

**Prerequisite: AGRISCIENCE I and ALGEBRA I (C or Better)**

**Class Size: 24 Students**

## **INFORMATION TECHNOLOGY / FBLA** **Option D Web Design**

The Web Design program is designed to prepare students for employment in the Web Design industry. Instruction provides an integrated approach for teaching skills in Web Page Design. This program uses a delivery system made up of four integral parts: classroom instruction experiential learning, supervised occupational experience and the Career and Technical Student Organization FBLA.

### **WEB DESIGN 3 - 4 (Fundamentals of Information Technology)**

**Grades: 10 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee: \$15**

**Prerequisite: Career Preparation 1 – 2 (C or Better Required)**

**Class Size: 28 Students**

Students will learn to setup and operate computer system and server security systems. Students will be introduced to basic networking logic, the HTML language and Dream weaver web design program. Students will learn to operate and maintain web based servers, and troubleshoot data integrity issues.

### **WEB DESIGN 5 - 6**

**Grades: 11 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee: \$15**

**Prerequisite: Web Design 3 – 4 and Algebra I (C or Better)**

**Class Size: 28 Students**

This course will introduce students to advanced training on web based server systems, advanced data base construction, web page design, graphing, and hosting. Students will learn entry-level skills in the area of computer maintenance, firewall construction and support, and utilizing multi media programs. FBLA participation is required.

### **CNT120 / CNT149 (Dual Enrollment – Yavapai College)**

**Grades: 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee: \$15**

**Prerequisite: Web Design 5 – 6 (C or Better)**

**Class Size: 20 Students**

CNT 120 / 149 will provide students with the opportunity to Design, Host, and maintain an actual web site. Students will be actively engaged in the development and operation of the Chino Valley High School Web Site. Students will have the opportunity to conduct an internship with local businesses to gain professional experience. Students will be engaged in basic problem solving, organizing, and repair situations.

## **CULINARY ARTS - FCCLA**

The affiliated nonprofit national vocational student organization is FCCLA –Family, Career, and Community Leaders of America. This organization provides local, state and national level programs for competition and recognition for students to promote personal growth and leadership through Family and Consumer Sciences Education.

### **CULINARY ARTS 3 - 4 (Culinary Arts Principles)**

**Grades: 10 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee: \$15**

**Prerequisite: Career Preparation 1 – 2 (C or Better Required)**

**Class Size: 24 Students**

This course is an advanced study of culinary arts application and hospitality using professional cooking and baking methods. Students will become proficient in menu planning, use of equipment and time management practices for meal service. Students will continue to develop employability skills and business knowledge through food service projects, food business projects and group projects. Topics included are: leadership, safety, sanitation and first aid procedures; emphasis on food preparation, interpreting recipes and use of commercial equipment. Students will be expected to participate in FCCLA projects to develop their personal and professional goals.

### **Culinary Arts 5 - 6 (Culinary Arts Applications)**

**Grades: 11 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee: \$30**

**Prerequisite: Culinary Arts 3 – 4 (C or Better Required)**

**Class Size: 20 Students**

This course is for juniors and seniors who want a full three year program. Skills in this course will provide an opportunity for students to master skills that were introduced in the Culinary Arts 3 - 4 classes. Students will be expected to hold an office in the FCCLA organization. Internships may also be arranged as a portion of this course.

### **Culinary Arts 7 - 8 (Potential Dual Enrollment)**

**Grades: 11 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee: \$30**

**Prerequisite: Culinary Arts 5 – 6 (C or Better Required)**

**Class Size: 20 Students**

This course is for juniors and seniors who want a full three year program. Skills in this course will provide an opportunity for students to master skills that were introduced in the Culinary Arts 5 - 6 classes. Students will be expected to hold an office in the FCCLA organization. Internships may also be arranged as a portion of this course.

 **Biotechnology Innovations / HOSA**  
 **Bioscience – Option C**

**BIOTECHNOLOGY INNOVATIONS**

**Grades: 10 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee: \$15**

**Prerequisite: Career Preparation 1 – 2, Applied Biological Systems 1- 2 and 3 – 4 or Biology (C or Better)**

**Class Size: 18 Students**

This course will introduce students to the theoretical aspects of Biotechnology (Cell Biology, Microbiology, Molecular Biology, and Immunology) as well as societal issues arising from this area of science. Hands on laboratory activities will reinforce theoretical information and teach lab safety, data analysis, the scientific method, and related computer skills. This course will include topical speakers from biotechnology industry and research and field trips to visit nearby biotech industry sites and labs.

**PLANT BIOTECHNOLOGY**

**Grades: 10 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee: \$15**

**Prerequisite: Applied Biological Systems 1- 2 and 3 – 4 or Biology (C or Better)**

**Class Size: 18 Students**

This is will introduce the students to careers in the field of applied plant research, plant biotechnology, and molecular breeding. Classroom instruction will focus in learning basic skills needed to be successful in the laboratory setting. Students will be introduced to the basics of Aseptic Technique, DNA, Plant Tissue Culture, and Gel Electrophoresis.

**FORENSIC SCIENCE (Potential Dual Enrollment)**

**Grades: 11 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

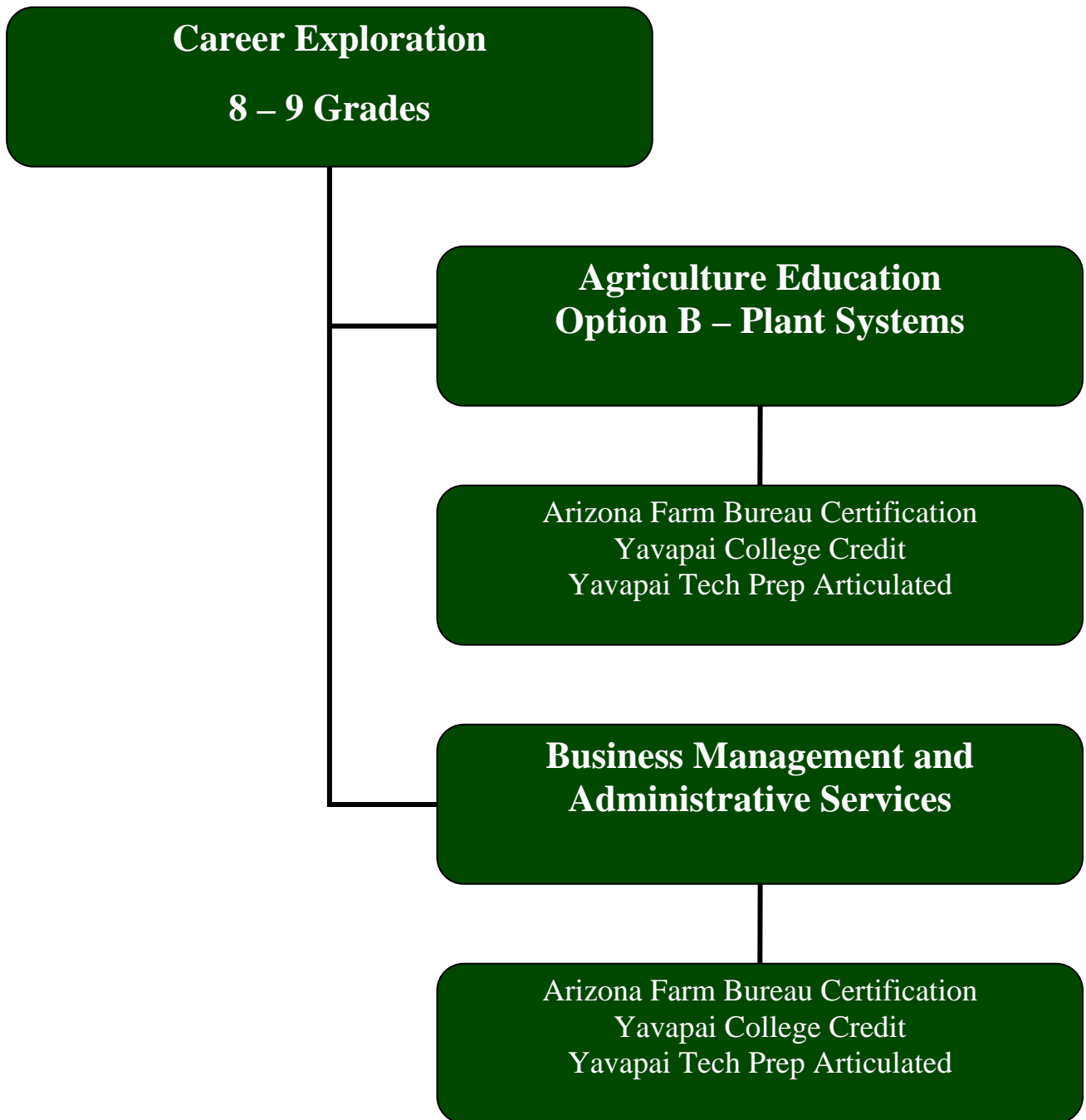
**Fee: \$15**

**Prerequisite: Biotechnology Innovations or Plant Biotechnology, and Algebra I (C or Better)**

**Class Size: 18 Students**

This course will introduce students to the immerging field of Forensic Sciences. This course will look at landmark cases involving different techniques of Forensic Science as well as the history of Forensic Science. It will include hands-on labs, which will be using the same biotechnological techniques that are used in Forensic laboratories.

# MOUNTAIN INSTITUTE PROGRAMS MAYER HIGH SCHOOL CAMPUS



## **Agriculture Education / FFA** **Option B – Plant Systems**

### **Agriculture 9 - 10**

**Grades: 9 - 10**

**Course Length: 2 Years – 2 CTE or 2 Elective Credits**

**Prerequisite: None**

**Class Size:**

This course is an introduction to Agriculture and all the opportunities this broad industry provides. The students will be introduced to careers in agriculture, plant science, greenhouse environments, landscaping, animal science, soils, water quality, aquaculture, shop practices, and FFA leadership. This course is to spark students' interest in the agricultural industry and help provide them with skills that could be used in later classes as well as in everyday life. Students will begin competing in FFA events in which they can utilize their technical and/or leadership skills.

### **Agriculture 11 - 12**

**Grades: 9 - 10**

**Course Length: 2 Years – 2 CTE or 2 Elective Credits**

**Prerequisite: Agriculture 9 - 10**

**Class Size:**

This course picks up where AG 9/10 leaves off and is designed to go into more detail of each avenue in Agriculture. The main focus being Plant Systems will be the guide for this course. This course will also provide the students the opportunity to become FFA members and showcase their leadership and/or technical skills at career development events. Those skills being the ones in which they will continue developing and mastering in this by learning more about; plants, animals, soils, wildlife, aquaculture, shop practices, business, economics, and leadership. This course is also a dual enrollment course at Yavapai College (Greenhouse Environment), providing the components of greenhouses including structure types, construction, locating a greenhouse, layout of a greenhouse range, and greenhouse temperature control mechanisms. This course is designed to provide each student with a larger scope of opportunity to continue their education or enter the work force within the agricultural industry.

### **Agriculture Mechanics – Welding 11 - 12**

**Grades: 11 - 12**

**Course Length: 1 Year – 1 CTE or 1 Elective Credit**

**Prerequisite: Agriculture 9 - 10**

**Class Size:**

This course in the fall is the welding portion and the students gain skills in oxyacetylene welding, including safety, welding techniques, basic metallurgy and welding gases. An understanding in electric arc welding, welding equipment, and gas shielded arc welds. Students will gain instruction in welding safety, flame cutting, brazing fundamentals, and plasma cutting. Addition skills emphasis will cover selection of electrode, gas, cups and filler rod for tungsten-inert-gas- arc (TIG) welding. Techniques and practice in welding butt-joint, t-joint, lap, and corner joints in various positions. Metal used in manufacturing fabrication and welding techniques, project planning, layout and blueprint reading. In the fall portion the students will also gain the skills of operation, use, and care of shop tools and equipment. The spring portion is the mechanics emphasis where students gain the principles of engine operation, tune-up, and maintenance; repair and overhaul of small engines.

## **Business Management & Administrative Services**

### **Business Management I – Introduction to Business**

**Grades: 10 – 11**

**Course Length: Full Year – 1 CTE or 1 Elective Credit**

**Prerequisite: None**

**Class Size:**

This course will be an introductory course to the Business World and the principles needed and required to be successful. A look at different economic systems used around the world. Students will take an in-depth look at the basics of operating a business and will finish the year creating their own company and submitting a business plan for their business. THIS IS CURRENTLY A DUAL ENROLLMENT COURSE AT YAVAPAI COLLEGE EARNING 3 COLLEGE CREDITS. IT IS ALSO OFFERED AS A TECH PREP COURSE EARNING ARTICULATED CREDIT WITH A “B” GRADE.

### **Business Applications I & II – Microsoft Office & Business Financial Applications**

**Grades: 11 - 12**

**Course Length: Full Year – 1 CTE or 1 Elective Credit**

**Prerequisite: Algebra 1 / 2 & Geometry or Business Management I**

**Class Size:**

We look further into the world of business information and technology. Students will follow a company through the business administrative services that are required to support an operating business. They will use Word Processing, Excel Spreadsheets, Access Databases and PowerPoint to make their presentations. Financial applications relating to business will be discussed and include such areas as banking, taxes, payroll, insurance and financial statements. THIS IS A DUAL ENROLLMENT COURSE AT YAVAPAI EARNING 6 COLLEGE CREDITS. IT IS ALSO OFFERED AS A TECH PREP COURSE EARNING ARTICULATED CREDIT WITH A “B” GRADE.

### **Business Management II**

**Grades: 11 - 12**

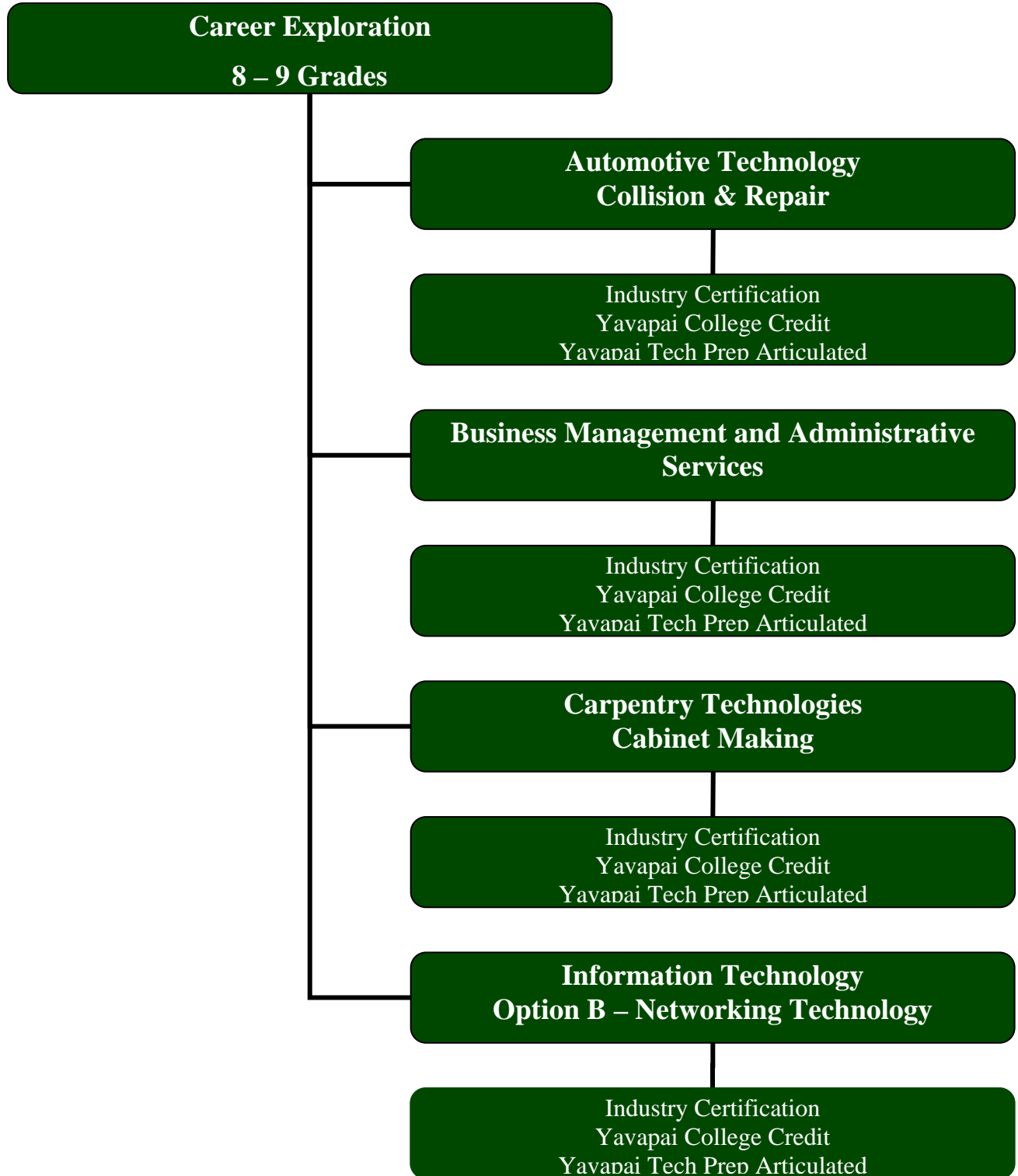
**Course Length: Full Year – 1 CTE or 1 Elective Credit**

**Prerequisite: Business Management I (or teacher approval)**

**Class Size:**

This course will continue where Business Management I left off and will take a closer look at managing a business, including business law, entrepreneurship, marketing, dealing with a global business work environment. Students in this class will all be members of FBLA – a student organization that will be responsible for running the school store, competing in organized competitions and work alongside the FFA student organization in joint community service projects. Students will also get a chance to examine and experience virtual businesses that gives them the opportunity to use the knowledge they have attained from this program and perform particular job duties assigned to them. THIS IS A DUAL ENROLLMENT COURSE AT YAVAPAI EARNING 6 COLLEGE CREDITS. IT IS ALSO OFFERED AS A TECH PREP COURSE EARNING ARTICULATED CREDIT WITH A “B” GRADE.

# MOUNTAIN INSTITUTE PROGRAMS PRESCOTT HIGH SCHOOL CAMPUS



## Automotive Technology / Skills USA

### **Introduction to Auto Body Repair and Painting**

**Grades: 11 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee: \$50**

**Prerequisite:**

**Class Size: 28**

This is the first year course in automotive collision repair. This course will introduce the student to auto body repair including basic fabrication and painting. Emphasis on nonstructural body repair, filling, sanding, primers, and spraying techniques.

### **Auto Shop 1 - 2 (#0521)**

**Grades: 10 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee: \$30**

**Prerequisite:**

**Class Size: 28**

This is the first course in the Automotive Technology Sequence. It may be awarded Tech Prep and Dual Enrollment credit at Yavapai College. This course will prepare the student to apply the basic auto skills with a deeper instruction into the areas of: brake systems, electric/electronic systems, steering and suspension systems and engine performance diagnosis and repair.

### **Auto Shop 3 - 4 (#0523)**

**Grades: 11 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee: \$35**

**Prerequisite: Auto Shop 1 – 2 and Instructor Approval**

**Class Size: 28**

This is the second course in the Automotive Technology Sequence. It may be awarded Tech Prep and Dual Enrollment credit at Yavapai College. This course will prepare students to apply higher levels of technical knowledge and skills to maintain, diagnose and repair automobiles and light trucks. Students will gain in-depth knowledge needed to troubleshoot and identify malfunctioning components and sensors; and correct these problems in four areas: brake systems, electrical/electronic systems, steering and suspension systems, and engine performance analysis.

### **Auto Shop 5 - 6 (#0524)**

**Grades: 11 - 12**

**Course Length: Full Year - 1 - 2 Elective Credit**

**Fee: \$35**

**Prerequisite: Auto Shop 3 – 4 and Instructor Approval**

**Class Size: 28**

This course is an alternative to the Co-op Sequence. It may be awarded Tech Prep and Dual Enrollment credit at Yavapai College. This course will expand on knowledge and skills learned in previous auto classes related to the competencies of brake systems, electrical/electronic systems, steer and suspension systems, and engine performance analysis. It is for students wishing to continue automotive training **without cooperative education**.

**Co-op – Automotive (#0509)****Grades: 12****Course Length: Full Year - 3 Elective Credits****Fee: \$35****Prerequisite: Auto Shop 3 – 4 and Instructor Recommendation****Class Size: 28**

This course is designed for students that have completed a series of CTE courses in Auto Shop. After being interviewed and accepted into the program, students will have job placement assistance with emphasis on skills development and career Preparation. Students will enroll in a daily Co-op class as well as work in an automotive related job. Arizona State Standards include completing independent study assignments, conducting a job search, applying for and securing employment in an approved job, and succeeding on the job. A shortened senior schedule allows time to complete at least 15 hours a week on the job.

## **Business Management and Administrative Services / FBLA**

### **Computer Applications (#0011)**

**Grades: 9 - 12**

**Course Length: 1 Semester – 1/2 CTE Credit or 1/2 Elective Credit**

**Fee: \$7.50**

**Prerequisite:**

**Class Size: 30**

In this course, students will review the basics of Microsoft Word, and then advance into higher-level applications. Introductory level, hands-on projects will give students the opportunity to acquire basic skills using Excel spreadsheets and PowerPoint presentations. Class activities will incorporate marketing concepts into business-related documents, such as advertisements, newsletters, fliers, memos, letters and more. This course may be awarded Tech Prep Credit at Yavapai College.

### **Advanced Computer Applications / WEB DESIGN (#0015)**

**Grades: 9 - 12**

**Course Length: 1 Semester – 1/2 CTE Credit or 1/2 Elective Credit**

**Fee: \$7.50**

**Prerequisite: Computer Applications**

**Class Size: 30**

“Surfed” the Internet lately? Did you find what you were looking for easily? Can you create useful, great looking documents? This world is turning into a computer world...you better jump on or be left behind! Have fun designing web pages in this hands-on course. Learn the do's and don'ts of web page design by evaluating existing web pages and reviewing major design principles. Let your creative sideshow using Dreamweaver and Photoshop software to create professional, up-to-date web sites that are pleasing to the eye and easy to use. This course will also allow the opportunity for students to advance beyond the basics and get a head start on mastering the most popular business software suite Microsoft Office: Excel, Access, Outlook, PowerPoint, and Word.

### **Business Ownership (#0022)**

**Grades: 9 - 12**

**Course Length: 1 Semester – 1/2 CTE Credit or 1/2 Elective Credit**

**Fee: \$7.50**

**Prerequisite:**

**Class Size: 30**

Do you want to start your own business? Continue to grow your business? And be a business success? Then, hold on....because this course is for you! Starting a new business is a risky proposition and there is no guarantee, which is why it is so important to do some element of forward planning. When this forward planning is put on paper, it is called a “Business Plan”. The Business Plan is your best educated guess as to how to go about getting your business started and where you expect to be in a year, two years, or three years. This course will allow the opportunity for students to learn from community business professionals and engage in “real-life” business, computer simulations. The final project will include writing an actual business plan.

### **Introduction to Business (#0012)**

**Grades: 9 - 12**

**Course Length: Full Year – 1 CTE Credit or 1 Elective Credit**

**Fee: \$7.50**

**Prerequisite:**

**Class Size: 30**

This class is for students who have a genuine interest in acquiring basic, practical business and financial skills they will use regularly during the rest of their lives. In this course, you will learn all about the workforce in the United States. You'll find out what kinds of jobs will be in demand in the future, and how much money you'll need to make in order to have the lifestyle you hope to achieve. We'll discover how to run and operate a business, how other successful entrepreneurs have achieved huge success, and how to make your money work for you. We'll also talk about the problem of fraud/identity theft and other business crimes. Career development and life beyond graduation are emphasized. Practical, hands-on activities are a regular part of this class. This course can be used to qualify for enrollment in the Cooperative Education program during their senior year. Through the Cooperative Education program, seniors can earn 3 credits and work in a part time job related to business. Students that earn a B or better may be awarded Tech Prep credit at Yavapai College.

### **Business Management #0021**

**Grades: 11 - 12**

**Course Length: Full Year – 1 CTE Credit or 1 Elective Credit**

**Fee: \$7.50**

**Prerequisite: Any Business or Information Technology Course**

**Class Size: 24**

This course is for students interested in Business Management techniques. This class is hands-on using office simulations. Skills developed in this course will give the student a competitive edge in the job market. Units covered include careers, financial management practices for businesses, leadership styles, business ethics, economic systems, legal concepts that apply to businesses, marketing concepts, management practices, and accounting principles. This course can be used to qualify for enrollment in the Cooperative Education program during their senior year. Through the Cooperative Education program, seniors can earn 3 credits and work in a part-time job related to business.

### **Co-op – Administrative Information Services (Business Education) (#0514)**

**Grades: 12**

**Course Length: 3 Elective Credits**

**Fee:**

**Prerequisite: Any Business CTE Course**

**Class Size: 24**

This course is designed for students that have completed a series of CTE courses and are interested in careers in that area. In order to complete the required sequence, students should begin planning schedules as early as their freshman year. After being interviewed and accepted into the program, students will be assisted in job placement with emphasis on skill development and career Preparation. Students will enroll in a daily Co-op class, as well as work in a job related to their CTE course sequence. Students must work approximately 15 hours per week. Because students receive three credits for their participation in this program, they may have a shortened daily schedule that allows them to work in the afternoons.

## **Carpentry Technology / Skills USA**

### **Tech Woods (#0501)**

**Grades: 9 - 12**

**Course Length: 1 Semester – 1/2 CTE Credit or 1/2 Elective Credit**

**Fee: \$7.50**

**Prerequisite:**

**Class Size: 26**

This general woodworking class is geared toward employment and the development of positive work habits. Students construct a project using basic safety, problem solving, design, production, and finishing techniques, which quickly develop skills and experience needed for placement into advanced woodworking/cabinetmaking. The first required project is included in the shop fee, which also covers moderate use of consumable items. For subsequent projects, students pay extra for lumber or provide their own. This course qualifies for Tech Prep credit through Yavapai College.

### **Advanced Woodworking I (#0503)**

**Grades: 10 - 12**

**Course Length: Full Year – 1 CTE Credit or 1 Elective Credit**

**Fee: \$20.00**

**Prerequisite: Tech Woods**

**Class Size: 26**

This course enhances the experiences started in Tech Woods. Students will be exposed to the principles of design, production, and construction as it relates to furniture and cabinets. Students will use special jigs, fixtures, cutting schedules, and problem solving to produce quality products. Students will have the opportunity to earn money from a variety of customers. The shop fee covers moderate use of consumable items. Students will pay for lumber or provide their own. This course qualifies for Tech Prep credit through Yavapai College.

### **Advanced Woodworking II (#0503)**

**Grades: 11 - 12**

**Course Length: Full Year – 1 CTE Credit or 1 Elective Credit**

**Fee: \$20.00**

**Prerequisite: Advanced Woodworking I**

**Class Size: 26**

This course enhances the experiences from Advanced Woodworking I. Students will design and construct cabinets. Students will produce and use special jigs, fixtures, and cutting schedules. Students have the opportunity to earn money from a variety of customers. The shop fee covers moderate use of consumable items. Students will pay extra for lumber or provide their own. Completion of this course qualifies the student for entry-level woodworking employment available through Co-op. This course qualifies for Tech Prep credit through Yavapai College.

**Co-op – Cabinetmaking (#0504)**

**Grades: 12**

**Course Length: Full Year – 3 Elective Credits**

**Fee:**

**Prerequisite:** Career and Technical Class Sequence for Cabinetmaking: 1 semester Tech Woods; **at least** 4 semesters of Advanced Woods.

**Class Size: 26**

Students may apply and enroll after CTE teacher recommendation and upon completing a sequence of classes in Woodworking (see above prerequisites). Students must be 18 years of age and will have job placement assistance with emphasis on skills development, not wages.

Arizona State Standards include completing independent study assignments, conducting a job search, applying for and securing employment in an approved job, and succeeding on the job. A shortened senior schedule allows time to complete at least 15 hours on the job weekly.

 **Information Technology / FBLA**  
 **Option B – Networking Technology**

**CNT 100 - Introduction to Networking Technologies  
(Dual Enrollment – Yavapai College)**

**Grades:**

**Course Length:**

**Fee:**

**Prerequisite:**

**Class Size: 30**

This course will provide students an introduction to network technology, terminology, and skills that are utilized in the world of data networking. Emphasis on practical applications of networking and computer technology as applied to real-world problems, including home and small-business network setup.

**CNT 110 - A+ Computer Technician Certification  
(Dual Enrollment – Yavapai College)**

**Grades:**

**Course Length:**

**Fee:**

**Prerequisite:**

**Class Size: 30**

Install, configure, support, and troubleshoot personal computers. Course emphasis on PC hardware and installation, operation, and upgrade procedures. Focus on practical networking in a PC environment along with server hardware maintenance and troubleshooting. Students will be prepared to complete the Comp TIA A+ Certification Exam. This course along with CNT 120, prepares the learner for the Comp TIA Server+ Certification Exam. Preparedness Recommendations: Experience using a computer keyboard and accessing the Internet with a web browser.

**CNT 115 - Network+  
(Dual Enrollment – Yavapai College)**

**Grades:**

**Course Length:**

**Fee:**

**Prerequisite:**

**Class Size: 30**

A broad range of networking technologies is examined. Topics include network media, topologies, protocols, operating systems, network management, and security. Preparation for the Comp TIA Network+ Certification Exam. Prerequisite: CNT 110 or Instructor Consent

## **CNT 120 - Exploring Network Operating Environments (Dual Enrollment – Yavapai College)**

**Grades:**

**Course Length:**

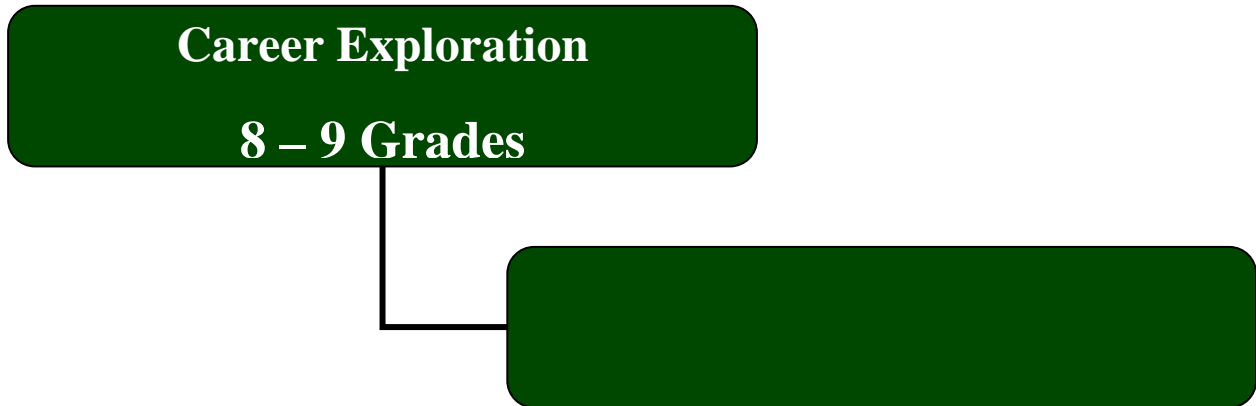
**Fee:**

**Prerequisite: Basic experience using Microsoft Windows operating systems.**

**Class Size: 30**

This course is an intensive introduction to multi-user, multi-tasking network operating environments. Characteristics of the Linux, Windows 2000, 2003, and XP network operating systems will be discussed. Course content includes networking concepts, network services, installation procedures, security issues, backup procedures and remote access.

# MOUNTAIN INSTITUTE PROGRAMS SELIGMAN HIGH SCHOOL CAMPUS



## Career Preparation - All CTE Programs

### **Career Preparation 1 - 2**

**Grades: 9 - 12**

**Course Length: Full Year - 1 CTE Credit or 1 Elective Credit**

**Fee:**

**Prerequisite:**

**Class Size: 28 Students**

This course prepares students for entry into CTE programs including all Mountain Institute programs. Students will explore the foundations experience to support a successful transition to the CTE Program. It introduces students to career clusters as well as provides an opportunity for instruction in a flexible learning environment. Students will use industry current technology as they research each occupational area.

***Additional Programs may be offered in cooperation with Ash Fork High School. Please see the Course Descriptions listed on pages 6 & 7 for a complete description of these Programs.***

# MOUNTAIN INSTITUTE PROGRAMS

## Yavapai Community College

The Mountain Institute may choose to offer the following courses in conjunction with an approved Mountain Institute Program. The list of Courses below is eligible to receive dual enrollment credit with Yavapai College.

For a full and current course description, please visit the Yavapai College website at [www2.yc.edu/webtools/catalogs/pdf/course-descriptions.pdf](http://www2.yc.edu/webtools/catalogs/pdf/course-descriptions.pdf)

AGE 100- Introduction to Equine Science

AGS 120-Introduction to the Animal Industry

AGS 105 Soils-Online

AGS 107 Entomology-Online

AGS 102 Agribusiness Management-Online

AGS 150-The Greenhouse Environment

AGS 261- Aquaculture Science

AGS 115-Agricultural Mechanics I

AGS 215-Agricultural Mechanics II

WLD 130-Oxyacetylene

WLD 140-Arc I

WLD 250-Welded Metal Fabrication