



# Career & Technical Education

# CTE

## Career & Technical Education

Career and Technical Education consists of seven different programs that provide academic and occupational skills for workplace success. Students begin their career exploration by participating in Freshman Career Focus rotations. Within these rotations, students will choose those areas that interest them the most to pursue further. By the time students are in their sophomore year, they will begin a sequence within the CTE strand of their interest that is composed of three courses. At the end of this sequence, students will be prepared to take the end of the program state assessment that leads to certification and/or an applied science degree with Northland Pioneer College. Curriculum for each CTE program follows the state standards, which can be located at [www.ade.az.gov](http://www.ade.az.gov).

Students have the opportunity to earn college credit (dual enrollment) for successfully completing specific CTGE programs beginning in grade 11. Each CTE program also provides an opportunity for students to be actively involved in a state student organization—FBLA, Ed Rising, or SkillsUSA. Each organization provides experiences for students centering around leadership, teamwork, citizenship and character development, which builds and reinforces self-confidence, work ethics and communications skills. Members can participate in competitive events with other student members across the state and nation.

Show Low High School Programs	NAVIT/NPC Programs
Animation	Automotive Technologies
Business Management & Administrative Services	Cosmetology
Construction Technologies	Certified Nursing Assistant
Culinary Arts	Fire Science
Digital Photography (Communication Media Technologies)	Medical Assistant
Education	Welding
Film & TV (Communication Media Technologies)	
Robotics	
Sports Medicine and Rehabilitation	

The chart on the next page details the NPC credit that is earned while enrolled in the following CTE courses :

- Construction Technology
- Business (BMAS)
- Film & TV
- Early Childhood
- Graphic Design

Students who are enrolled in the above courses 10-12th grade at Show low High School will also be given the opportunity to earn dual credit at NPC. Students and parents should use this information when planning to earn an Associates degree or AGEC certificate while enrolled in high school. The concept of earning “College credit” while in high school applies to the above courses. Students and parents must understand that when they accept the opportunity to earn dual credit in these courses that they are essentially “college” students. In addition to earning elective credit toward their high school diploma they are also earning credit that will be applied to their college (NPC) transcript. Successfully completing the above courses is essentially a “College Scholarship” to Show Low High School students.

Program	Year 1		Year 2		Year 3
BMA S	BUS100	Introduction to Business (3)	BUS112	Fundamentals of Bookkeeping (3)	
	BUS105	Supervision (3)	BUS220	Principles of Marketing (3)	
	BUS110	Small Business Management (3)	BUS210	E6-Principles of Management (3)	
	BUS240	Entrepreneurship (3)	BUS106	Techniques of Personal Finance(3)	
	BUS202	Professional Customer Service(1)			
Construction Technology	Additional credits not required for Certificate of Proficiency (19) Add ENL101(3), and select math(3) for Certificate of Applied Science (31)				
	CON101	Jobsite Layout (3)*	CON126	Framing Systems (4)*	CON228 Electrical Systems(3)*
	CON102	Introduction to Construction Methods(3)*	CON145	Roofing, Therman and Moisture Protection Systems (3)*	CON229 Plumbing and Mechanical Systems (3)*
	CON111	Plan Reading and Employment (3)*			
	Add CON120(3) for Certificate of Proficiency in Construction Technology (25) *NCCER Certified Course				
Early Childhood Education	ECD100	Providing a Healthy Environment (1)	ECD108	Observation and Assessment in Early Childhood (1)	
	ECD102	Ensuring a Safe Environment (1)	ECD217	Early Childhood Language and Literacy (1)	
	ECD147	Prenatal & Infant Development (1)	ECD186	Effective Interactions for Learning (1)	
	ECD148	Toddler Development (1)	ECD187	Supporting STEM in Early Childhood (1)	
	ECD149	Development of Preschool Child (1)	ECD128	Culture, Language and Community (1)	
	ECD136	Understanding How children Learn (1)	ECD233	Policies and Procedures in Early childhood Programs (2)	
	ECD142	Designing Developmentally Effective Learning Environments (2)	ECD110	Building Relationships with Families (1)	
	ECD105	Understanding Behaviour and Encouraging Self-Discipline (1)	ECD175	Professionalism (1)	
	ECD120	Guidance and Development of social-Emotional Development (1)			
	Certificate of Proficiency (19)				
Film/TV	FDV130	Video Production (3)	FDV210	Screenplay Writing (3)	
	FDV140	Video Editing (3)	FDV220	Film Aesthetics (3)	
	FDV150	Introduction to Film (3)	FDV222	Digital Video Pre-Production Applications (2)	
	FDV160	Digital Audio for Film/TV (3)	FDV232	Digital Video Production Applications (2)	
			FDV242	Digital Video Post-Production Applications (2)	
Commercial Graphics Fundamentals	Certificate of Proficiency (24) Add ENL 101 and select Math for Certificate of Applied Science (30)				
	CIS115	Introduction to Graphic Communication Technology (3)			
	CIS116	Computer Photographic Imaging (3)			
	CIS117	Two-Dimensional Computer Design (3)			
	CIS119	Page Layout and Design (3)			
	Certificate of Proficiency (12)				

# CTE & NAVIT

## Course Descriptions

### ANIMATION

CTE

Freshman Academy – 9 th

Animation I (Required prerequisite to Animation II)

Animation II

Industry certification: ACA - visual effects and motion graphics using Adobe.

### ANIMATION I

CTE

Animation I is an introduction to traditional animation. Skills learned in Animation will prepare students for a possible future in the television/movie industry in the areas of animation, character design, special effects, game design and motion graphics. Students will digitally create both 2D animations and 3D computer-generated animations. The basic principles of design and animation will be covered that have been used by professionals from the days of Bugs Bunny and Mickey Mouse up to the modern age of Pixar and DreamWorks. All students will have drawing assignments to help them in building drawing and critical thinking skills. Students should have basic computer skills and be able to manage files and folders. At least 65% of the class will be hands-on. It is helpful to have skills in drawing and geometry prior to taking this course. Material and supply fees may be required. Adobe Certification Exams Available.

**RECOMMENDATION:** Previous Art/Drawing courses (recommended but not mandatory), Basic Computer Skills, Geometry is a plus

**FEE:** None

### ANIMATION II

CTE

Animation II allows students to apply their knowledge of animation to complete fully developed short animations that may be used in their portfolio (demo reel). With the approval of the instructor, students may have a chance to complete major projects in 2D or 3D. All students will have the opportunity to further their progression by learning acting techniques, lip sync, advanced walk/run/jump cycles, forward kinematics, and inverse kinematics. Students may also have an opportunity to explore other related areas including motion graphics, visualizations, interactive applications, and game simulations. At least 65% of the class will be hands-on. In addition to at least one major individual project, students will combine their talents in group projects. Students are expected to create animated shorts that can be used by the community and entered into animation/film festivals.. Material and supply fees may be required. Adobe Certification Exams Available.

**PREREQUISITE:** Successful completion of Animation I (2.33 GPA or higher)

**FEE:** None

## **BUSINESS MANAGEMENT & ADMINISTRATIVE SERVICES**

**CTE**

Freshman Academy – 9<sup>th</sup>

Business I (Required prerequisite to Business II and III)

Business II

Business III

Business Internship

See the chart listed in previous section for detailed information on earning dual credit with NPC

\*Students completing 3 years of Business may use Business III as their 4<sup>th</sup> year of math toward high school graduation. Consult with a school counselor before planning this to be used as a high school math credit.

Industry certification: Microsoft Office Specialist (MOS)

### **BUSINESS I**

**CTE**

This course serves as an introduction to business. It is the basic foundation of any career. Topics taught in this class include: workplace employability skills, teamwork and communication skills, Microsoft Office programs, marketing, office management and basic financial principles. This class is designed to be a fun and interactive way for students to start learning important essential business skills.

**PREREQUISITE:** Freshman Academy, this course is the mandatory prerequisite to Business II and III.

**FEE:** None

### **BUSINESS II**

**CTE**

This fun and challenging course is also a dual-enrollment course through Northland Pioneer College that allows you to earn high school credit and college credits simultaneously! It's the second course in the Business Management series and teaches the following concepts: General Management Practices, Administrative & Communication Functions, Human Resource Management, and General Office Management. Students completing this program will be prepared to participate in teams to solve problems and make decisions about business related issues. This class is designed for any student wanting to learn more about workplace leadership. Completion of Business I, II and III will allow you to earn your Certificate of Proficiency in Entrepreneurship from Northland Pioneer College. An accounting workbook will be required to be purchased either in Business II or Business III when the accounting unit is covered.

The majority of instructional time in this course is provided in a rich laboratory environment to learn and master the technical standards for this program. 80% of the class time is lab with the focus on application of skills in a work environment. Work-based learning activities are also an integral part of the lab experience.

**PREREQUISITE:** BUSINESS I

**FEE:** None

This fun and challenging course is a dual-enrollment course through Northland Pioneer College that allows you to earn high school credit and college credits simultaneously! It's the third course in the Business Management series and teaches the following concepts: Business & Financial Management, Marketing Management, Entrepreneurship, Accounting, Financial Analysis, and Computer Information Systems. This class is designed for any student wanting to fully develop their workplace skills. Completion of Business Management I, II and III will allow you to earn your Certificate of Proficiency in Entrepreneurship from Northland Pioneer College.

The majority of instructional time in this course is provided in a rich laboratory environment to learn and master the technical standards for this program. 80% of the class time is lab with the focus on application of skills in a work environment. Work-based learning activities are also an integral part of the lab experience.

**PREREQUISITE:** BUSINESS II

**FEE:** None

## CONSTRUCTION TECHNOLOGY

## CTE

Freshman Academy – 9<sup>th</sup>

Construction I (Required prerequisite to Construction II and III)

Construction II

Construction III

Construction Internship

See the chart listed in previous section for detailed information on earning dual credit with NPC

\*Students completing 3 years of Construction Technology may use Construction III as their 4<sup>th</sup> year of math toward high school graduation. Consult with a school counselor before planning this as a math option.

Students in this program test out as they proceed through the course and are registered through the national database. Program teacher certifies through the database when the student is complete and then they receive a certificate. Industry certifications are obtained through the National Center for Construction Education and Research (NCCER) for Core Curriculum and Construction Technology Certification.

Industry certification: OSHA-10 Construction Industry

## CONSTRUCTION I

## ELECTIVE

This course is focused on the fundamentals of Construction Technology. This course will cover units of instruction in basic construction safety, construction math, hand and power tools, blueprint reading, employability skills, and exploring careers in the construction technologies. An emphasis on NCCER's Core Curriculum will be used in the delivery of instruction for this course. Students will earn the NCCER Certificate after successfully completing this course, Construction I.

The majority of instructional time in this course is provided in a rich laboratory environment to learn and master the technical standards for this program. 80% of the class time is in the lab with the focus on application of skills in a work environment. Work-based learning activities are also an integral part of the lab experience.

**PREREQUISITE:** Freshman Academy

**FEE:** None



## **CONSTRUCTION II**

## **ELECTIVE**

This is a year-long course, blocked for two class periods. The course will emphasize units of instruction in site layout, concrete and masonry, floor systems, wall and ceiling framing, roof framing and applications, and stair layout. electrical safety and services, introduction to HVAC, and plumbing. An emphasis on NCCER's Construction Technology Curriculum will be used in the delivery of instruction of the course, as well as participation in a career technical student organization, such as SkillsUSA. Upon successful completion of the program, the student can earn a national certificate from the National Center for Construction Education and Research, pass the end-of-program state assessment for Construction Technologies and earn up to twenty dual-enrollment credits from Northland Pioneer College.

The majority of instructional time in this course is provided in a rich laboratory environment to learn and master the technical standards for this program. 80% of the class time is in the lab with the focus on application of skills in a work environment. Work-based learning activities are also an integral part of the lab experience.

**PREREQUISITE:** Successful completion of Construction I

**FEE:** None

## **CONSTRUCTION III**

## **ELECTIVE**

This is a year-long course, blocked for two class periods during the school day, will allow for NCCER certificate completion and an opportunity for work-based learning and leadership, including an internship or employment in a construction trade. An emphasis on NCCER's Construction Technology Curriculum will be used in the delivery of instruction of the course, and guide participation in a career-focused technical student organization (e.g. SkillsUSA). Upon successful completion of the program, the student will complete up to twenty dual- enrollment credits from Northland Pioneer College.

The majority of instructional time in this course is provided in a rich laboratory environment to learn and master the technical standards for this program. 80% of the class time is in the lab with the focus on application of skills in a work environment. Work-based learning activities are also an integral part of the lab experience.

**PREREQUISITE:** Successful completion of Construction II

**FEE:** None

## CULINARY ARTS

CTE

Freshman Academy – 9 th

Culinary Arts I (Required prerequisite to Culinary Arts II and III)

Culinary Arts II

Culinary Arts III

Culinary Internship

Students can obtain a Servsafe Certificate which is a manager's food service certificate that is good for 5-years in this industry before it requires renewal. Students must complete and pass this proctored test before they will receive their industry certification.

Industry certification: ServSafe Food Protection Manager

## CULINARY I

ELECTIVE

Course Emphasis: Food, Sanitation, Safety, Equipment, Smallwares, Knife Use, Seasonings, Recipes, Menus, Nutrition, Cooking Methods Overview, Breakfast, and Pasta.

In this fundamental course, a student should demonstrate an interest in becoming a part of the food service industry. Students will focus on the theory of food service, sanitation, and safety. The students will study equipment, smallwares, knives and the 8 primary knife cuts. They will be able to identify the large commercial equipment and select the correct large equipment to cook with. The students will study and be able to select the correct smallwares to prep and cook food items. The students will study and be able to identify seasonings, spices, herbs, aromatics, condiments, oils, vinegars, nuts, and seeds. They will be able to select the correct seasonings for preparing and cooking food. The students will study and understand how a restaurant recipe is designed and used. The students will get an overview of nutrition and how to use this for creating healthy food products. The students will get an overview of cooking methods to prepare for cooking food. The students will study and demonstrate the ability to make all of the required breakfast items. The students will study and demonstrate the ability to make pasta items using dried pasta. The students will get the beginnings of culinary mathematics.

Culinary I students will be required to participate in outside of class activities for operating a school-based business. The time requirement is 5 hours. The students will have the opportunity to participate in FCCLA (Family, Career, and Community Leaders of America). This is paid for by the school. The syllabus must be signed before working in the kitchen.

***This course is the mandatory prerequisite to Culinary Arts II and Culinary Arts III.***

FEE: None

## **CULINARY II**

## **ELECTIVE**

Course Emphasis: Cooking Methods, Meats, Poultry, Seafood, Menus, Nutrition, Stocks, Sauces, Soups, Garde Manger, Scratch Pasta, and an Introduction to Baking and Pastry.

This is a year-long course, blocked for two class periods. In this course students should have a real desire to work in the restaurant industry. The students will develop and apply cooking methods for making different meat, poultry and seafood products. The students will learn and demonstrate the ability to make the basic stocks, 5 mother sauces and then create food products using these stocks and sauces. The students will learn and demonstrate the ability to make different kinds of soups. The students will get an in depth study of recipes, menus, and nutrition. The students will demonstrate the ability to create a menu using recipes and nutrition to complete the menu. The students will learn and demonstrate the ability to understand and actually implement the skills of the Garde Manger. The students will get a more in depth study of pasta and then demonstrate the ability to make made from scratch pasta products. The students will receive additional culinary mathematics instruction. The students will finish with an overview of baking and pastry products getting them ready for Culinary III.

Culinary II students will be required to participate in outside of class activities for operating a school based business. The time requirement is 12 hours per semester. Culinary II students will be required to participate in tailgating, Feaste of Carols, and other opportunities as they arise. Some of these activities can last until after 10:30 P.M. and are considered outside of class activities.

Culinary II will be required to participate in FCCLA (Family, Career, and Community Leaders of America). This is paid for by the school. Culinary II students that are Seniors will be taking the TSA test and the industry certification test which is Servsafe. Both paid for by the school. The syllabus must be signed before working in the kitchen.

**PREREQUISITE:** Culinary Arts I

**FEE:** None

## **CULINARY III**

## **ELECTIVE**

Course Emphasis: Review all of the previous courses, Baking: Pastry & Desserts.

This is a year-long course, blocked for two class periods. In this course the students should have a Life plan to become a chef and want to be in the internship program. The students should also want to be a teacher aid for a Culinary I class. The students will demonstrate a full knowledge of both Culinary I and II. The students will learn about the basics of bakery and pastry production. The students will demonstrate the chemical processes involved in leavening and fermentation. This will allow them to make basic and advanced bread items. The students will learn about the methods of making cookies, cakes, pies, tarts, and other desserts. The students will learn about and demonstrate the ability to make quick breads and muffins. The students will learn and demonstrate the ability to make different kinds of frostings, chocolates, candies and other decorating items. The students will receive training in cake decorating and demonstrate the ability to perform basic decorating features. The students will have to be able to demonstrate a full understanding of culinary mathematics. Culinary III students will be team leaders of culinary II students and must want to focus on being leaders and professionalism.

Culinary III students will be required to participate in outside of class activities for operating a school based business. The time requirement is 12 hours. Culinary III students will be required to participate in tailgating, Feaste of Carols, and other activities as they arise. Some of these activities can last until after 10:30 P.M. and are considered outside of class activities.

Culinary III will be required to participate in FCCLA (Family, Career, and Community Leaders of America). This is paid for by the school. Culinary III students will be taking the TSA test and the industry certification test which is Servsafe. Both paid for by the school. The syllabus must be signed before working in the kitchen.

**PREREQUISITE:** Culinary Arts II

**FEE:** None

## EDUCATION

## CTE

Freshman Academy– 9 th  
Early Childhood Education I (Required prerequisite to Early Childhood Education II and III)  
Early Childhood Education II  
Early Childhood Education III  
Early Childhood Education Internship  
Education Professions I  
Education Professions II

See the chart listed in previous section for detailed information on earning dual credit with NPC

### EARLY CHILDHOOD I

### ELECTIVE

In this course, the student will describe career opportunities, types of programs available and personal characteristics needed to be a successful teacher. Students will learn about stages and expectations of children from conception to age eight. They will learn about the five areas of development; physical, cognitive, social, emotional, and moral growth. The students will learn about the policies and procedures that it takes to run a preschool as well as practice communication skills applicable to students at different levels. At the end of this course, the student will continue in the Early Childhood Education program at SLHS.

**PREREQUISITE:** Course is open only to sophomores, juniors, and seniors.

***This course is the mandatory prerequisite to Early Childhood Education II and III.***

**FEE:** None

## EARLY CHILDHOOD II

## ELECTIVE

This course will cover the physical, social and mental development of a child from conception through 8 years of age. The student will learn about state regulations required for a licensed childcare center. Students will plan and present lessons to an on-site preschool or kindergarten. Students will learn and practice observation techniques and will learn how to prepare the center for learning. Students will also learn about providing a safe and healthy environment for children in an early childhood program. Students will study nutrition, music, creative movement and creative media. The curriculum is aligned and articulated with Northland Pioneer College to deliver the standards for this program. Refer to [www.npc.edu](http://www.npc.edu) to view the course catalog for “ECD” course descriptions.

The majority of instructional time in this course is provided in a rich laboratory environment to learn and master the technical standards for this program. Our child study laboratory, The Cubbie Hole, is a licensed facility through the Department of Arizona Child Care Licensing Division. Enrolled students, under the direction of a certified preschool lead teacher, serve as student-teachers and are given an increasing role in leading the education of community-enrolled preschool children, ages 3 to 5 years. Student-teachers must comply with all statutory requirements. Student-teachers are provided a handbook of student-teacher job expectations. 51% of the class time is in the lab with the focus on application of skills in a work environment. Work-based learning activities, based on the AZ Department of Education Career and Technical professional skills standards, are also an integral part of the lab experience. Student participation in FCCLA, a student organization, is an integral part of this program and program outcomes are partially based on FCCLA standards.

**REQUIREMENT:** Students must have a negative TB test to work with children. TB testing will be scheduled at the beginning of the semester (State of Arizona Department of Health Services Child Care licensing requirement). Additional AZ Department of Health Services Child Care Licensing standards require students to have First Aid and CPR certification during this course and they will be required to be fingerprinted if they are 18. If they do not meet the fingerprinting standards for work with children, they must be disenrolled from the program.

**PREREQUISITE:** ECE II students must have earned a minimum of a “C” grade in ECE I and course enrollment must be approved by the ECE Program Director.

**FEE:** None

## EARLY CHILDHOOD III

## ELECTIVE

An ECE student-teacher will complete the program sequence by successfully completing Early Childhood Education III. This course will emphasize planning and creating an environment for young children. By participating in our on-site Cubbie Hole Preschool, students will learn proper discipline techniques, practical theories and curriculum with emphasis on responsive relationships, language development, developmental stages, and providing developmentally appropriate learning materials that are safe and interesting for exploration. Students will also learn how to foster trust, enhance social competence, autonomy and self-concept while learning to develop and utilize observation skills of the children. Students will also study record keeping for a quality child care program. The curriculum is aligned and articulated with the national industry credential, the CDA. Refer to [www.cdacouncil.org](http://www.cdacouncil.org) for more information. Work-based learning activities, based on the AZ Department of Education Career and Technical professional skills standards, are also an integral part of the lab experience. ECE III conforms to AZ Department of Health Services Child Care Licensing standards learned in ECE II. Student participation in FCCLA, a student organization, is an integral part of this program and program outcomes are partially based on FCCLA standards.

The majority of instructional time in this course is provided in a rich laboratory environment (The Cubbie Hole) to learn and master the technical standards for this program. 51% of the class time is in the lab with the focus on application of skills in a work environment. Work-based learning activities are also an integral part of the lab experience.

**REQUIREMENT:** Students must have a negative TB test to work with children. TB testing will be scheduled at the beginning of the semester (State of Arizona Department of Health Services Child Care licensing requirement). Additional AZ Department of Health Services Child Care Licensing standards require students to have First Aid and CPR certification during this course and they will be required to be fingerprinted if they are 18. If they do not meet the fingerprinting standards for work with children, they must be disenrolled from the program.

**PREREQUISITE:** Early Childhood Education II, earning a minimum of a “C” grade in ECE II and course enrollment must be approved by the ECE Program Director.

**FEE:** None

Students who successfully pass levels I-III will be able to take the national certification exam to earn the CDA credential (Child Development Associate). In this program, students also earn their CPR/First Aid certification.

Industry certification: CDA National Credential

## **EDUCATION PROFESSIONS I**

**CTE**

So you want to be a teacher? This course allows motivated students to explore education as a career option. Throughout the year, students will focus on three major areas of education: the learner (including human growth and development); the school (including the organization and practices of American public schools), and the teacher (including classroom field observation experience). The curriculum is aligned with the Arizona Academic Standards. Students choose a grade level or subject area (special education, math, science, CTE, etc.) for their field observation experience at one of the Show Low Unified District campuses. Aspire to make a difference!

Completion of Aspire to Teach I and II will provide the student with the academic coursework needed to take the ParaPro Assessment (see <https://www.ets.org/parapro>). Additionally, student participation in EdRising, a student organization, is an integral part of this course.

**PREREQUISITE:** This course is only open to sophomores, juniors, and seniors.

**CO-REQUISITE:** Students may be enrolled in Early Childhood I, II, or III and Aspire to Teach I.

**FEE:** None

**INDUSTRY CERTIFICATION:** ParaPro Credential

## **EDUCATION PROFESSIONS II**

**CTE**

Teacher's Academy – Ready to lead a classroom? This course continues the study of education. Students will focus on multicultural education; students will examine the role of stereotyping and prejudice as it impacts learning; students will explore areas of classroom management, lesson plan development, technology in education, and the role of paraprofessionals. The curriculum is aligned with the Arizona Academic Standards. As a part of the Teacher's Academy, students will rotate through various Show Low Unified District campuses, serving as "student teachers" – providing direct instruction under the supervision of a certified, classroom instructor. Aspire to be an educational leader!

Completion of Aspire to Teach I and II will provide the student with the academic coursework needed to take the ParaPro Assessment (see <https://www.ets.org/parapro>). Additionally, student participation in EdRising, a student organization, is an integral part of this course.

**PREREQUISITE:** This course is only open to juniors and seniors.

**CO-REQUISITE:** Students may be enrolled in Early Childhood I, II, or III and Aspire to Teach II.

**FEE:** None

**INDUSTRY CERTIFICATION:** ParaPro Credential



## FILM & TV

CTE

Freshman Academy – 9 th

Film and TV I (Required prerequisite to Film and TV II and III)

Film and TV II

Film and TV III

Film & TV Internship

See the chart listed in previous section for detailed information on earning dual credit with NPC

Students can obtain an Adobe Certified Associate in Adobe Premiere Pro. Students must pass an industry exam that shows their knowledge and skill using Adobe Premiere Pro to create multimedia content.

Industry certification: Adobe Certified Associate (ACA) - Adobe Premiere Pro

## FILM & TV I

ELECTIVE

This fundamentals course for the Film and TV program will prepare students to identify various roles and technologies in the Multimedia and Audio/Visual industry. Students in this course will begin learning about basic studio production and the production cycle. Students will begin working in various capacities on the high school's TV channel as well as the sports and news programs that air on local cable TV and the web. Student participation in FBLA, a student organization, is an integral part of this program.

The majority of instructional time in this course is provided in a rich laboratory environment to learn and master the technical standards for this program. 80% of the class time is in the lab with the focus on application of skills in a work environment. Work-based learning activities are also an integral part of the lab experience.

**PREREQUISITE:** Freshman Academy

***This course is the mandatory prerequisite to Film and TV II and III.***

**FEE:** None

## **FILM & TV II**

## **ELECTIVE**

In this course, the students will learn about the legal and ethical environment in the Multimedia and Audio/Visual industry. They will work in the broadcast and production setting while contributing directly to news, sports, and entertainment segments for the high school's TV channel and local cable TV and web programs. Students will begin working in field production environments with documentary basics. Students will work to improve and master their production skills while taking responsibility for any and all aspects of daily production and management. Learners will have the opportunity to participate in job shadowing opportunities. Control room and studio operation, as well as writing for broadcast, will be reinforced and refined. Students will learn about and begin formatting A/V productions for other media outlets including DVD distribution and the web. Student participation in FBLA, a student organization, is an integral part of this program.

The majority of instructional time in this course is provided in a rich laboratory environment to learn and master the technical standards for this program. 80% of the class time is in the lab with the focus on application of skills in a work environment. Work-based learning activities are also an integral part of the lab experience.

\*This course requires a substantial out-of-class time commitment. Please plan accordingly.

\*Dual-enrollment credits are provided through Northland Pioneer College (NPC).

**PREREQUISITE:** Film and TV I

**FEE:** None

## **FILM & TV III**

## **ELECTIVE**

This course focuses primarily on production in the studio and in live production environments. Students will participate in work-based-learning that includes live sports production, studio production, and short film and documentary projects. Special emphasis will be placed on job shadowing and internship work with local television and radio stations (City4 TV and iTalk 106.7). Program completers are well prepared for entry-level employment upon graduation and are able to successfully attend the post-secondary programs at EAC and the Walter Cronkite School of Journalism and Mass Communication at ASU. After successfully completing the coherent sequence for Film and TV, students will prepare and pass the online certification test for Adobe Premiere Pro.

The majority of instructional time in this course is provided in a rich laboratory environment to learn and master the technical standards for this program. 80% of the class time is lab with a focus on application of skills in a work environment. Work-based learning activities are also an integral part of the lab experience.

\*This course requires a substantial out-of-class time commitment to apply. Please plan accordingly.

\*Dual-enrollment credits are provided through Northland Pioneer College (NPC).

**PREREQUISITE:** Film & TV I & II

**FEE:** None

## **GRAPHIC/WEB DESIGN**

**CTE**

Freshman Academy – 9 th

Graphic/Web Design I (Required prerequisite to Graphic/Web Design II and III)

Graphic/Web Design II

Graphic/Web Design III

Graphic Design Internship

See the chart listed in previous section for detailed information on earning dual credit with NPC

Students in this program can obtain an Adobe Certified Associate in Adobe Illustrator. Students must pass an industry exam that shows their knowledge and skill using Adobe Illustrator to create commercial graphic content.

## **GRAPHIC/WEB DESIGN I**

**ELECTIVE**

This fundamentals course for the Graphic/Web Design program will cover basic design and illustration skills for conventional as well as digital design. Students will develop their design skills while creating 2D media products that will be used by other programs around the campus. Basic design and graphic software use will be introduced. Students will be encouraged to participate in job shadowing. Student participation in SkillsUSA, a student organization, is an integral part of this program.

The majority of instructional time in this course is provided in a rich laboratory environment to learn and master the technical standards for this program. 80% of the class time is lab with the focus on application of skills in a work environment. Work-based learning activities are also an integral part of the lab experience

**PREREQUISITE:** Art I (recommended)

**FEE:** None

**GRAPHIC/WEB DESIGN II****ELECTIVE**

In this course, students will continue developing their design skills. This course allows students to work with industry standard design software (such as Photoshop, Illustrator, After Effects, etc.). More advanced products will be created and emphasis will be placed on quality and attention to detail. Students will begin to learn 3D modeling and design. Emphasis on interpreting customer specifications and quality control will be enforced. Students will continue to focus on design skills and plan and create even more complex digital imaging projects that will be used in promotions, advertisements and broadcast. Workplace skills necessary for the Graphics industry will also be introduced and practiced. Students will be encouraged to participate in job shadowing. Student participation in SkillsUSA, a student organization, is an integral part of this program.

The majority of instructional time in this course is provided in a rich laboratory environment to learn and master the technical standards for this program. 80% of the class time is lab with the focus on application of skills in a work environment. Work-based learning activities are also an integral part of the lab experience.

\*Dual-enrollment credits are provided through Northland Pioneer College (NPC).

**PREREQUISITE:** Graphic/Web Design I

**FEE:** None

**GRAPHIC/WEB DESIGN III****ELECTIVE**

This course will be the final course in the program sequence where students will take the lead on various graphic projects. Job planning, customer specifications, layout design, job tracking will be the key points taught and reinforced. Students in the class will be preparing to apprentice, work in, or pursue further training in the Graphic Design field. Students will be encouraged to participate in job shadowing. Student participation in SkillsUSA, a student organization, is an integral part of this program. After successfully completing the coherent sequence for Graphic/Web Design, students will prepare and pass the online certification test for Adobe Illustrator.

The majority of instructional time in this course is provided in a rich laboratory environment to learn and master the technical standards for this program. 80% of the class time is lab with the focus on application of skills in a work environment. Work-based learning activities are also an integral part of the lab experience.

\*Dual-enrollment credits are provided through Northland Pioneer College (NPC)

**PREREQUISITE:** Graphic/Web Design II     **FEE:** None

## **ROBOTICS**

**CTE**

Freshman Academy – 9 th

Robotics I (Required prerequisite to Robotics II)

Robotics II (Required prerequisite to Robotics III)

Robotics III

Students in this program can obtain an industry certification in Solidworks Professional Mechanical Design (CSWP). End of year two students will take an assessment to become certified.

Industry certification: Certified SolidWorks Associate (CSWA)

## **ROBOTICS I**

**CTE**

This course prepares students to apply basic engineering principles and technical skills. This includes instruction in the principles of robotics, design and operational testing, system maintenance and repair procedures, robot computer systems and control language, specific system types, hydraulics, mechanics, pneumatic, troubleshooting, program, install, modify, or repair robotic systems and machines. Students in this program will demonstrate leadership, social, civic, and career skills through participation in the state-recognized Career and Technical Student Organizations, SkillsUSA. Additionally, students will compete in local Vex Robotics competitions as well as the Arizona AIA VRC High School State Championship. Additional time spent beyond the school day for practice and competitions will be required as part of the class.

**PREREQUISITE:** None    **FEE:** None

## **ROBOTICS II**

**CTE**

This course prepares students for more advanced engineering principles and technical skills. Emphasis is placed on SolidWorks and preparing to pass the SolidWork Professional Mechanical Design certification (CSWP). Participation in Skills USA and Vex robotics is a requirement of the course.

**PREREQUISITE:** Robotics I or teacher approval.    **FEE:** None

## **ROBOTICS III**

**CTE**

This course prepares students for additional advanced engineering principles and technical skills. Emphasis is placed on continued learning of SolidWorks and additional preparation to pass the SolidWork Professional Mechanical Design certification (CSWP). Participation in Skills USA and Vex robotics is a requirement of the course.

**PREREQUISITE:** Robotics II or teacher approval.    **FEE:** None

## **SPORTS MEDICINE AND REHABILITATION**

**CTE**

Freshman Academy – 9 th

Sports Medicine & Rehabilitation I

*\*Required prerequisite to Sports & Medicine Rehabilitation II*

Sports Medicine & Rehabilitation II\*\*

*\*\*Required prerequisite to Sports & Medicine Rehabilitation III*

Sports Medicine & Rehabilitation III

## **SPORTS MEDICINE AND REHABILITATION I**

**CTE**

This course introduces students to the roles of various disciplines within sports medicine and rehabilitation sciences as well as other allied health professions. Students will be introduced to the analysis of human movement based on anatomical and mechanical principles. Emphasis is placed on the anatomy and physiology of the muscular, skeletal, and nervous systems and their interaction in human movement and athletic performance. They will also learn signs and symptoms of injuries, illnesses, and disorders commonly seen in the physically active population. Students will develop skills in injury prevention, injury and illness assessment, and using appropriate terminology and medical documentation to record injury and illness.

The Sports Medicine and Rehabilitation program is designed and delivered as a coherent sequence of school-based and work-based supervised learning. The Professional Skills developed by business and industry leaders across Arizona are integrated throughout the program. The Sports Medicine and Rehabilitation students develop leadership, social, civic, and career skills through participation in the Career and Technical Student Organization HOSA (Future Health Professionals).

**PREREQUISITE:** None

**FEE:** None

## **SPORTS MEDICINE AND REHABILITATION II**

**CTE**

Sports Medicine II is designed for students continuing in the student athletic trainer program. This course will provide the students with actual hands-on psychomotor skills development in the specified areas of the curriculum. Sports Medicine II compliments a student's science course education in high school and prepares students for college health care profession courses. Sports Medicine II acknowledges the student's interest in sports related medical fields of study. This course is designed to provide an advanced study and application of the components of sports medicine including Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) certification, rehabilitative techniques; therapeutic modalities; prevention, recognition, and care of injuries to the head and face, spine, upper extremity, lower extremity; taping and bandaging; injuries to the young athlete; substance abuse in sports; and general health concerns in sports medicine. This course will involve outside-of-class time homework and time required working with athletes and athletic teams.

**PREREQUISITE:** Sports Medicine and Rehabilitation I or teacher approval.

**FEE:** None

## **SPORTS MEDICINE AND REHABILITATION III**

**CTE**

Sports Medicine III is designed for students continuing in the student athletic trainer program. This course will continue to provide the students with actual hands-on psychomotor skills development in the specified areas of the curriculum. Sports Medicine III complements a student's science course education in high school and prepares students for college health care profession courses. Sports Medicine III continues to acknowledge the student's interest in sports related medical fields of study. This course is designed to provide an advanced study and application of the components of sports medicine including legal and ethical concepts, sports nutrition, fitness, and physiological adaptations to conditioning, advanced types of injuries, and environmental illness. This course will involve outside-of-class time homework and time required working with athletes and athletic teams.

**PREREQUISITE:** Sports Medicine and Rehabilitation II or teacher approval.

**FEE:** None



## **INTERNSHIPS**

## **CTE**

Students who have successfully completed the first 2 courses in a CTE sequence and are enrolled in the 3rd course of a sequence and desire more time to continue their learning and earn elective credit can seek out internships within their desired CTE strand. Upon approval from the instructor and placement from counseling, students may elect to take an internship course in any of the following for a grade of Pass/Fail:

Business Internship with a Co Requisite of Business III

Construction with a Co Requisite of Construction III

Culinary with a Co Requisite of Culinary III

Early Childhood with a Co Requisite of ECE III

Graphics/TV/Film with a Co Requisite of Graphics/TV/Film III

Photography with a Co Requisite of Photography III

Robotics with a Co Requisite of Robotics III

Sports Medicine & Rehabilitation with a Co Requisite of Sports Medicine & Rehabilitation III