

CAREER AND TECHNICAL EDUCATION PROGRAM

The Career and Technical Education Program includes: Business, Drafting, Family Living, and Consumer Science. The courses in this program offer opportunities for career exploration, as well as college-bound course selections.

ACCOUNTING 1 (I)

Length: One Semester

Grades: 10, 11, 12

Prerequisite: None

Qualifies for: Applied Technology Credit

Accounting 1 introduces students to the accounting cycle and its application to the personal computer. Students will enhance the fundamentals of accounting with a computer automated practice set. Students considering careers in business and college course work in the business related fields should consider this course as an introductory experience to the accounting fields.

ACCOUNTING 2 (I)

Length: One Semester

Grades: 10, 11, 12

Prerequisite: Accounting 1

Qualifies for: Applied Technology Credit

In this second course, managerial and financial accounting are the two main concepts studied. Students who have successfully completed Accounting 1 and are interested in expanding their knowledge of accounting should enroll in this course. Emphasis on analyzing accounting data related to management decisions is studied. Additional accounting skills are applied to computer-based applications.

ADULT LIVING (I)

Length: One Semester

Grades: 11, 12

Prerequisite: None

Qualifies for: Applied Technology Credit

This course is subject to a consumable fee.

Students will explore the following topics: living independently, consumer choices, decision-making related to wellness, meal planning, clothing and housing, financial management, personal goals, family formation and relationships, integration of family, community and career responsibilities, and relationship of technology to family and consumer resources.

ADVANCED PLACEMENT COMPUTER SCIENCE A (A)

Length: Two Semesters

Grades: 11, 12

Prerequisite: Computer Programming or Mobile Makers

Qualifies for: Math or Applied Technology Credit

Advanced Placement Computer Science A is a continuation of Computer Programming. It follows the syllabus of the Advanced Placement Computer Science A curriculum. The course is built around the development of computer programs or parts of programs that correctly solve a given problem. Additional lab time may be needed to complete the course requirements.

ARCHITECTURAL CONSTRUCTION (I)

Length: One Semester

Grades: 11, 12

Prerequisite: Architectural Drafting 1 and 2, CAD 1 and/or 2, and/or instructor's consent

Qualifies for: Applied Technology Credit

This course is subject to a consumable fee.

Architectural Construction focuses on the construction aspects of architecture. Basic construction principles including site preparation, construction materials, construction equipment, and materials and labor costs are topics covered in the course.

ARCHITECTURAL DRAFTING 1 (I)

Length: One Semester

Grades: 9, 10, 11, 12

Prerequisite: None

Qualifies for: Fine Arts or Applied Technology Credit

This course is subject to a consumable fee.

Architectural Drafting 1 is an introductory course designed to teach students the fundamental skills of drafting. Students will learn how to create and read a variety of architectural plans such as residential floor plans, front elevations, kitchen design and elevations and perspective drawings. This course is structured to develop the student's

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knowledge of design and understanding of technical plans.

ARCHITECTURAL DRAFTING 2 (I)

Length: One Semester

Grades: 9, 10, 11, 12

Prerequisite: Architectural Drafting 1

Qualifies for: Fine Arts or Applied Technology Credit

This course is subject to a consumable fee.

Architectural Drafting 2 is a continuation of the topics and skills learned in Architectural Drafting 1. Residential remodels and drawings will include presentation floor plans, dimensioned floor plans, electrical plans, site plans, foundation plans, and elevations.

ARCHITECTURE/CAD SEMINAR – DESIGN STUDIO (I)

Length: Multiple Semesters

Grades: 11, 12

Prerequisite: CAD 2

Qualifies for: Fine Arts or Applied Technology Credit

This course is subject to a consumable fee.

Architecture/CAD Seminar is designed for students that plan on pursuing a career in this field after high school. Students will work with the teacher to determine what projects they will be working on throughout the course.

BAKING AND PASTRY (I)

Length: One Semester

Grades: 10, 11, 12

Prerequisite: Culinary Arts & Nutrition 1 or Instructor's Consent

Qualifies for: Fine Arts Credit

This course is subject to a consumable fee.

Baking and Pastry explores advanced techniques through lab practice with breads, pies, pastries, cakes, cookies, and desserts. Creativity and presentation are stressed through practice with in-house customers. The nutritional value of baked goods and pastries is included as well as an exploration of potential career opportunities in the foodservice industry.

BUSINESS INCUBATOR (A)

Length: Two Semesters

Grades: 11, 12

Qualifies for: Applied Technology Credit

Prerequisite: None

This course is designed to give students real life experiences in developing something new or affecting change where they work and live. Whether students are interested in medicine, sociology, business or any other field, this course helps to build valuable skills that are transferable to any industry or occupation: developing an idea or product, researching the feasibility of the concept, marketing and selling, analyzing cost versus reward, legal ramifications and human resources. This course is for more than potential business majors. Entrepreneurs and business experts from the community will serve as coaches and mentors guiding student teams through the process of ideation, market research, and business plan development. Regular partnering with community mentors and coaches provide opportunities for students to build their networks for potential summer work, internships and future jobs.

BUSINESS LAW (I)

Length: One Semester

Grades: 10, 11, 12

Prerequisite: None

Qualifies for: Applied Technology Credit

Business Law provides an introduction to the fundamentals of the United States legal system as it relates to business rights and responsibilities. Consumer rights, contracts, corporate structures, and the legal obligations required within business organizations are included in the multiple topics.

BUSINESS MANAGEMENT (I)

Length: One Semester

Grades: 10, 11, 12

Prerequisite: None

Qualifies for: Applied Technology Credit

Business Management introduces students to the fundamentals of business organization, corporate structure, business practices, investments, and business operations. Course topics also include leadership, small-business ownership and management, personnel relations, financial

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management, human resource management, promotion policies, and navigating successfully in a business environment.

CAD 1 (I)

Length: One Semester

Grades: 10, 11, 12

Prerequisite: Architectural Drafting 1, Interior Design or Instructor's Consent

Qualifies for: Fine Arts or Applied Technology Credit

This course is subject to a consumable fee.

CAD 1 class is designed to teach students the basic skills necessary to create architectural and engineering drawings through the use of computer assisted drafting methods. All the skills mastered in the prerequisite courses are applied to computer applications. Basic skills include object placement, drawing management, coordinate input, and dimensioning.

CAD 2 (I)

Length: One Semester

Grades: 10, 11, 12

Prerequisite: CAD 1

Qualifies for: Fine Arts or Applied Technology Credit

This course is subject to a consumable fee.

CAD 2 is a continuation of the topics and skills learned in CAD 1. The course provides additional opportunity for specific practice of skills and techniques mastered in the first course. Students apply AutoCAD Tools to draw 3-dimensional objects and work in a solid modeling environment. Students may also use Revit Architecture software to create building renderings and a virtual 3-D house model.

CAREER INTERNSHIP (I)

Length: One Semester

Grades: 11, 12

Prerequisite: Teacher or Counselor recommendation

Qualifies for: Fine Arts or Applied Technology Credit with approval

Career Internship is a one-semester career exploration course designed for students who are interested in gaining field experience in a potential career area. The course design requires

students to work outside the school with local elementary and middle schools, businesses, and organizations while receiving school credit for work and participation. The course is conducted outside of the normal school day and transportation to and from the placement location is the student's.

CHILD DEVELOPMENT & PRESCHOOL LAB 1 (I)

Length: One Semester - Sequential

Grades: 10, 11, 12

Prerequisite: None

Qualifies for: Applied Technology Credit

This course is subject to a consumable fee.

Child Development & Preschool Lab 1 studies child development from birth through five years. Students will study the five areas of development, ages and stages, developmentally appropriate practices and early childhood learning centers – math, science, literacy, social studies, art and motor skills. Students will participate in a preschool setting for ten to twelve weeks. This participation includes teaching, observing and planning.

CHILD DEVELOPMENT & PRESCHOOL LAB 2 (I)

Length: One Semester - Sequential

Grades: 10, 11, 12

Prerequisite: Child Development and Preschool Lab 1

Qualifies for: Applied Technology Credit

This course is subject to a consumable fee.

Child Development & Preschool Lab 2 studies preschool unit planning, technology in the classroom, early childhood STEM, assessment, children's literature and early childhood careers. Students will participate in a preschool setting for a ten to twelve week period. This participation includes teaching, observing and planning.

COMPUTER LITERACY (I)

Length: One Semester

Grades: 9, 10, 11, 12

Prerequisite: None

Qualifies for: Applied Technology Credit

Computer Literacy provides students with an introductory opportunity to develop computer, word processing, and business document

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communication skills. Concepts and skills that are developed in this class include, but are not limited to the following: keyboarding techniques, proofreading accuracy, increased productivity, correct document formatting according to business standards, various input technologies, and information retrieval skills.

COMPUTER PROGRAMMING (I)

Length: *One Semester*

Grades: *9, 10, 11, 12*

Prerequisite: *Algebra I*

Qualifies for: *Applied Technology or Math Credit*

Computer Programming consists of an introduction to computer programming in which students learn how to write computer programs in a specified language. The student will learn the fundamentals of computer programming and the structured programming skills that can be used with any language. Additional lab time may be needed to complete the course requirements.

CONSUMER EDUCATION (I)

Length: *One Semester*

Grades: *10, 11, 12*

Prerequisite: *None*

This course meets the Consumer Education requirement as outlined by the State of Illinois.

Consumer Education provides information about our economic system, the nature of capitalism, the consumer's function within free-market economies, and personal finance management. The purpose of the course is to assist students to become informed citizens, equipped with knowledge about their consumer rights. Students learn to make intelligent choices related to money management, credit rights and responsibilities, credit management, and various other aspects of personal finance.

CONTEMPORARY BROADCAST MEDIA 1 (I)

Length: *One Semester*

Grades: *9, 10, 11, 12*

Prerequisite: *None*

Qualifies for: *Fine Arts or Applied Technology Credit*

This course is subject to a consumable fee.

Contemporary Broadcast Media is a course designed to provide a multi-level learning experience in contemporary media from broadcasting to podcasting; television to web streaming. Students will experience both performance and technical aspects of production, learning the fundamentals of working in front of the camera, as well as what goes on behind the scenes. Students will become acquainted with the basics of various media production; pre-production (storyboard/writing script, set-up design, technical support), production (delivery of production/performance, operation of all technical equipment, and post production (editing and publishing). Students will understand the ethical, cultural, and societal issues related to media production. Students will be required to work one extra-curricular event each semester.

CONTEMPORARY BROADCAST MEDIA 2 (I)

Length: *One Semester*

Grades: *9, 10, 11, 12*

Prerequisite: *Contemporary Broadcast Media 1*

Qualifies for: *Fine Arts or Applied Technology Credit*

This course is subject to a consumable fee.

Contemporary Broadcast Media 2 is a course designed to further a multi-level learning experience in contemporary media, allowing them to build on the basic techniques and concepts covered in Level I. Students will continue to develop abilities in project planning and script writing, cinematography, and editing. Advanced equipment such as DSLRs, Steady Cams, and Slider Tracks will be used. Students will create content which may be featured on the Falcon Weekly. Students may repeat Level II, and work on a more independent basis to pursue a specific area or genre of broadcasting or film.

COOKING UP SUCCESS/SENIOR FOODS (I)

Length: *One semester*

Grades: *12*

Prerequisite: *None*

This course is subject to a consumable fee.

Students in this course will learn skills and techniques related to food preparation and nutrition that will develop successful independent

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living skills. The purpose of this course is to focus on areas of food safety and sanitation, food preparation, techniques that are targeted for each student's ability level and healthy food selection/alternatives. In addition, students will further their exploration in careers related to food science, sports nutrition, dietetics and hospitality and tourism management.

COOPERATIVE EDUCATION (I)

Length: One or Two Semesters

Grades: 11, 12

Prerequisite: Teacher Approval

Qualifies for: Fine Arts or Applied Technology
Credit with approval

This course is subject to a consumable fee.

Cooperative Education is a program designed to give students the opportunity to explore the world of work in a classroom and job-site setting. The classroom component addresses school-to-work competencies. Students learn to write cover letters, resumes, follow-up letters, and job inquiries. They practice interviewing techniques, career exploration, and learn to identify their interpersonal skills as they relate to job success. Students are required to work a minimum of fifteen hours per week and are encouraged to seek employment in an area of their career interest. Students should be employed prior to the start of the semester.

CULINARY ARTS AND NUTRITION 1 (I)

Length: One Semester

Grades: 9, 10, 11, 12

Prerequisite: None

This course is subject to a consumable fee.

Culinary Arts and Nutrition 1 is a lab-based course designed as an introductory experience to foods and nutrition. This course incorporates the basic study of food preparation, nutrition, kitchen safety, sanitation practices. Students learn the basics of kitchen equipment, tools, and techniques while preparing a variety of recipes in the foods lab.

CULINARY ARTS AND NUTRITION 2 (I)

Length: One Semester

Grades: 9, 10, 11, 12

Prerequisite: Culinary Arts and Nutrition 1

This course is subject to a consumable fee.

Culinary Arts and Nutrition 2 is a lab-based course and expands on the skills acquired in the first culinary arts experience. Students will develop advanced food preparation skills in baking and cooking, while demonstrating safety and sanitation practices. This course challenges students with more complex recipes, while working in a collaborative environment.

DESKTOP PUBLISHING (I)

Length: One Semester

Grades: 9, 10, 11, 12

Prerequisite: None

Qualifies for: Fine Arts or Applied Technology
Credit

Desktop Publishing introduces students to the fundamentals of computer desktop publishing functions. Using basic design concepts, guidelines, and their own creativity, students design and create professional-looking logos, business cards, letterheads, flyers, reports, brochures, newsletters, and other specialty documents. Students develop an understanding of how word processing and page layout can be integrated to create visually appealing documents. Business application skills are integrated throughout this course.

FASHION MERCHANDISING (I)

Length: One Semester

Grades: 11, 12

Prerequisite: None

Qualifies for: Fine Arts or Applied Technology
Credit

This course is subject to a consumable fee.

Fashion Merchandising is designed to prepare students to enter the fashion industry with knowledge of the concepts and practices necessary to succeed in the world of work. Areas of study include principles and elements of design, visual merchandising and display, visual poise, fashion cycles, careers in fashion, fashion design, fashion production, and fashion construction knowledge and the application of computer technology to the fashion industry.

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FOOD SCIENCE (I)

Length: *One Semester*

Grades: *10, 11, 12*

Prerequisite: *Biology, Chemistry, Physics or concurrent Physics*

Qualifies for: *Science or Elective Credit*

This course is subject to a consumable fee.

Food Science includes the science of the production, processing, preparation, evaluation, and utilization of food. Students use scientific methods to conduct laboratory experiments. Emphasis is on laboratory experiments that develop understanding of how basic biology, chemistry, physics, physiology, and technology affect the foods we eat.

GRAPHIC DESIGN 1 (I)

Length: *One Semester*

Grades: *9, 10, 11, 12*

Prerequisite: *None*

Qualifies for: *Fine Arts or Applied Technology Credit*

This course is subject to a consumable fee.

Graphic Design 1 provides the basic skills required to utilize the three main publishing applications: Adobe InDesign, Adobe Illustrator and Adobe Photoshop. Students will learn to create professional print document layouts ranging from simple to complex, and become skilled in using the three applications together effectively.

GRAPHIC DESIGN 2 (I)

Length: *One Semester*

Grades: *9, 10, 11, 12*

Prerequisite: *Graphic Design 1*

Qualifies for: *Fine Arts or Applied Technology Credit*

This course is subject to a consumable fee.

Building on skills learned in Graphics 1, Graphic Design 2 will explore more advanced topics in graphics, utilizing the three main publishing applications: Adobe InDesign, Adobe Illustrator and Adobe Photoshop. This course is recommended for, but not limited to, students interested in pursuing a career in graphic design or a related design field. Emphasis on the Design Elements and Principles will be included, in addition to further instruction in each of the applications. Students will produce original

designs for printed pieces that include (but are not limited to) logos, posters and typography design. Real-world projects will be created when possible.

GRAPHIC DESIGN STUDIO (I)

Length: *Single or Multiple Semesters*

Grades: *10, 11, 12*

Prerequisite: *Graphic Design 2 and/or Consent of Instructor*

Qualifies for: *Fine Arts or Applied Technology Credit*

This course is subject to a consumable fee.

Graphic Design Studio provides students interested in pursuing a career in a design field with the opportunity to develop advanced design skills and techniques utilizing the three main publishing applications: Adobe InDesign, Adobe Illustrator, and Adobe Photoshop. Real-world projects will be created when possible. The course will include an emphasis on portfolio development, and may be taken multiple semesters.

INFORMATION TECHNOLOGY 1 (I)

Length: *One Semester*

Grades: *9, 10, 11, 12*

Prerequisite: *None*

Qualifies for: *Applied Technology Credit*

Information Technology 1 is a course designed to give students the opportunity to learn a variety of 21st Century technology skills that are necessary to complete tasks in all curricular areas throughout their high school careers and beyond. Students will gain a solid understanding of Microsoft Office, including Word, Excel, PowerPoint, and Access. Emphasis is placed on business application skills as well as problem-solving and critical thinking skills.

INFORMATION TECHNOLOGY 2 (I)

Length: *One Semester*

Grades: *9, 10, 11, 12*

Prerequisite: *Information Technology 1*

Qualifies for: *Applied Technology Credit*

In Information Technology 2, students will learn the more advanced features of Microsoft Word, Excel, Access, and PowerPoint. Students will have the opportunity to collaborate and share documents through "Cloud" computing resources such as Google Drive. Business application skills, as well as

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Microsoft integrated projects, are incorporated throughout this course.

INTERIOR DESIGN (I)

Length: One Semester

Grades: 9, 10, 11, 12

Prerequisite: None

Qualifies for: Fine Arts or Applied Technology Credit

Interior Design is for students who enjoy creating interior spaces. Students learn how professionals design by studying basic floor plan drawings, color, design principles, and room and furniture arrangement. Furniture styles and housing selections are also explored. Computer technology is applied to various aspects of interior design including floor plans and material research.

INTERNATIONAL CUISINE (I)

Length: One Semester

Grades: 10, 11, 12

Prerequisite: Culinary Arts and Nutrition 1 or Instructor's Consent

Qualifies for: Fine Arts Credit

This course is subject to a consumable fee.

International Cuisine explores the foods, culture, and dietary considerations of nations and cultures. Students will experience differences in foods, seasonings, and cooking techniques from different regions of the United States as well as from Europe, Asia, the Middle East, and Africa. Students will incorporate music, regional etiquette, customs, and table settings to complete the experience. Vegetarian menus and foods are also explored as part of the world experience.

INTRODUCTION TO BUSINESS (I)

Length: One Semester

Grades: 9, 10, 11, 12

Prerequisite: None

Qualifies for: Applied Technology Credit

Introduction to Business provides a foundation for advanced study in all areas of business. Topics included in this course of study are the economy, fundamental accounting principles, marketing, management, and leadership skills required to become successful in the business world. Business practices, business writing, and business etiquette are included as units of study. Contemporary issues facing American markets in a world business

environment are also studied. After completing this course, students will understand how the different components of the business world operate and interact with each other, and will gain exposure to the skills necessary to function well in today's business environment.

INTRODUCTION TO MULTIMEDIA DESIGN (I)

Length: One Semester

Grades: 9, 10, 11, 12

Prerequisite: None

Qualifies for: Fine Arts or Applied Technology Credit

Students will be exposed to concepts in digital photo editing and manipulation, desktop publishing, computer graphic design, animation, commercial art, and various Web-based graphic and automation resources, digital photography manipulation to product business-oriented and personal projects. This basic course provides a foundation for further study in graphics, Web page design, desktop publishing, photography, or commercial art.

KEYBOARDING (I)

Length: One Semester

Grades: 9, 10, 11, 12

Prerequisite: Enrollment based on recommendation of counselors, ESL, bilingual, or Special Education Staff

Qualifies for: Applied Technology Credit

Keyboarding is the basic introduction to correct fingering methods for entering information through the computer keyboard. After mastering the keyboard, students will learn the correct formatting for standard business letters, reports, reference pages, cover pages, tables, and outlines. Proofreading and accuracy are emphasized.

MEDIA AND COMMUNICATIONS PRACTICUM (I)

Length: One Semester

Grades: 11, 12

Prerequisite: None

Qualifies for: Applied Technology Credit

Media and Communications Practicum is a semester-long course designed for students who are interested in gaining field experience in the areas of media and/or communications. The course will involve student research, in-depth

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analysis, and interviews to explore school culture. It requires student-to-student collaboration and partnership with school and district leadership team members, as well as interaction with community representatives. Students will design and implement projects that foster positive and inclusive school and community cultures, be it through social media, educational programs, community organizing, community outreach, or other similar experiences.

MOBILE MAKERS (I)

Length: Two Semesters

Grades: 9, 10, 11, 12

Prerequisite: None

Qualifies for: Fine Arts or Applied Technology Credit

Using Swift programming language, students will work in a collaborative, hands-on environment to develop a real-world, working app. No previous experience in programming is needed to be successful in this course. This is an exciting opportunity to develop a custom Apple iOS app limited only by the creativity of the student. This course would be an option for students to take in preparation for or in follow-up to AP Computer Science.

SPORTS AND ENTERTAINMENT MARKETING (I)

Length: One Semester

Grades: 11, 12

Prerequisite: None

Qualifies for: Applied Technology Credit

Sports and Entertainment Marketing provides an introduction to such fields as sales, marketing research, management, pricing, promotion, and advertising with the emphasis placed on high-profile sports and entertainment products, teams, individuals, and organizations. Highlights include survey development and analysis, contract analysis, media management and interaction, and advertising strategies. Students interested in careers in business, accounting, sales, and management can use this course as an appropriate pre-college/career foundation.

WEB DESIGN 1 (I)

Length: One Semester

Grades: 9, 10, 11, 12

Prerequisite: None

Qualifies for: Fine Arts or Applied Technology Credit

Web Design 1 students create and design a variety of web pages for personal, school, or business applications. Students will learn basic Hypertext Markup Language (HTML), as well as basic text and page formatting with CSS. Students will also learn to use Dreamweaver, a software program widely used in the web development field. Students will learn the basics of graphic creation and photo editing software as they relate to web page design. Students will become skilled at evaluating web pages for design, relevance, and accessibility through guided practice. W3C Web development standards and business application skills are integrated throughout this course.

WEB DESIGN 2 (I)

Length: One Semester

Grades: 10, 11, 12

Prerequisite: Web Design 1

Qualifies for: Fine Arts or Applied Technology Credit

Web Design 2 builds on the design and development skills learned in Web Design 1. Students will expand their knowledge of HTML, as well as learning how to incorporate CSS into the web development process. Students may also participate in a web design simulation, creating websites for three different companies. Business application skills and W3C standards are integrated throughout this course.