

# C<sup>4</sup> COLUMBUS AREA CAREER CONNECTION

## AGRICULTURAL SCIENCE & BUSINESS CLUSTER

### **T50011 Intro to Agriculture Food & Natural Resources (5056)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$25.09**

**Meets requirements: THD, AHD, Core 40**

This course prepares students who are interested in the study of Agriculture. Students complete projects and learning activities that focus on hands on real life situations in the study of: animals, plants, soil, food, horticultural sciences. There are also activities studying agricultural business management, landscape management, natural resources and careers in agriculture, leadership and supervised agricultural experience. An activity and project-based approach is used along with team-building to enhance the effectiveness of the student learning activities.

### **T50031 Horticultural Science (5132)**

**Open to grades 9, 10, 11, 12**

**1 semester, 1 credit per semester**

**Approximate cost per semester: \$19.44**

**Meets requirements: THD, AHD, Core 40**

**Dual Credit Available**

Students explore the life cycle of plants. They learn how to care for plants, what requirements plants have for survival, the basics of landscape management, and the science behind nutrients found in plants and soil. Students have the opportunity to design an interior space using plants, design bouquets and other arrangements, as well as adopt a plant of their own to care for.

### **T50041 Natural Resources (5180)**

**Open to grades 9, 10, 11, 12**

**1 semester, 1 credit per semester**

**Approximate cost per semester: \$10.00**

**Recommendation(s): Introduction to Agriculture Food and Natural Resources, Horticultural Science**

**Dual Credit Available**

Natural Resources provides students with a foundation in natural resources. Hands-on learning activities in addition to leadership development, supervised agricultural experience and career exploration encourage students to investigate areas of environmental

concern. Students are introduced to the following areas of natural resources: soils, the water cycle, air quality, outdoor recreation, forestry, rangelands, wetlands, animal wildlife, and safety.

### **T50061 Animal Science (5008)**

**Open to grades 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$23.28**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Intro to Agriculture Food & Natural Resources**

**Dual Credit Available**

This course is a year-long program that provides students with an overview of the field of animal science. Students participate in a large variety of activities and laboratory work including real and simulated animal science experiments and projects. All areas that the students study can be applied to both large and small animals. Topics addressed include: anatomy and physiology, genetics, reproduction, nutrition, aqua-culture, careers related to the industry, and management practices for the care and maintenance of animals.

### **T25501 Advanced Life Science: Animals (5070)**

**Open to grades 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$25.77**

**Meets requirements: THD, AHD, Core 40, NCAA**

**Recommendation(s): Two years of Core 40/AHD Science Note: This course counts toward Core 40 Science credits.**

This course is a standards-based, interdisciplinary science course that integrates biology, chemistry, and microbiology in an agricultural context. Students formulate, design, and carry out animal-based laboratory and field investigations as an essential course component. They investigate key concepts that enable them to understand animal growth, development, and physiology as it pertains to agricultural science. This course stresses the unifying themes of both biology and chemistry as students work with concepts associated with animal taxonomy, life at the cellular level, organ systems, genetics, evolution, ecology, and historical and current issues in animal agriculture. Students apply the principles of scientific inquiry to solve problems related to biology and chemistry in highly advanced agricultural applications of animal development.

## **T25502 Advanced Life Science: Foods (5072)**

**Open to grades 11, 12**

**2 semesters, 1 credit per semester (may include travel period)**

**Approximate cost per semester: \$68.38**

**Meets requirements: THD, AHD, Core 40, NCAA**

**Recommendation: Two years of Core 40/AHD Science**

**Note: This course counts toward Core 40 Science credits.**

**Note: Qualifies as a Quantitative Reasoning course for the General, Core 40, AHD and THD diplomas.**

This two-semester course provides students with opportunities to participate in a variety of activities including laboratory work. This is a standards-based, interdisciplinary science course that integrates biology, chemistry and microbiology in the context of foods and the global food industry. Students formulate, design and carry out food-based laboratory and field investigations. Students understand how biology, chemistry and physics principles apply to the composition of foods, the nutrition of foods, food and food product development, food processing, food safety and sanitation, food packaging and food storage. Students will be able to apply the principles of scientific inquiry to solve problems related to biology, physics and chemistry in the context of highly advanced industry applications of food.

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## **BUSINESS CLUSTER**

### **T51111 Digital Applications and Responsibility I (4528)**

**Open to grades 9, 10, 11, 12**

**1 semester, 1 credit per semester**

**Approximate cost per semester: \$58.80**

**Meets requirements: THD, AHD, Core 40**

This course provides the student an opportunity to become proficient in the Microsoft software programs that include: Word, Excel and Powerpoint. Students learn to use these programs efficiently and thoroughly. This is an excellent course for those needing basic computer skills expected by employers and used in college.

### **T51112 Digital Applications and Responsibility II (4528)**

**Open to grades 9, 10, 11, 12**

**1 semester, 1 credit per semester**

**Approximate cost per semester: \$58.80**

**Meets requirements: THD, AHD, Core 40**

This is a comprehensive course designed for advanced users allowing them to become proficient in Microsoft Word, Excel and PowerPoint and Access. This course allows for a greater understanding of the software programs and allows students to learn advanced skills expected by college programs and employers.

### **T51011 Personal Financial Responsibility (4540)**

**Open to grades 10, 11, 12**

**1 semester, 1 credit**

**Approximate cost per semester: \$13.56**

**Meets requirements: THD, AHD, Core 40**

This course is designed to help a person properly manage money in today's environment. This course benefits the college preparatory and non-college preparatory student. Areas of study include personal financial planning, financial statements, services, budgeting, investments, portfolio management, interpreting financial statement, stocks vs. bonds, insurance protections, credit management, consumer purchases, rights and responsibilities, a decision-making skill for all aspects of life as consumers, producers, entrepreneurs and economic citizens. Instructional strategies may include use of projects, cooperative learning, simulations, real world experiences, guest speakers, Internet research and computer/technology applications.

### **T51081 Business Law and Ethics (4560)**

**Open to grades 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$40.86**

**Meets requirements: THD, AHD, Core 40 Dual**

**Credit Available**

Students learn about ethics, criminal law, torts, criminal and civil trial procedure, contracts and wills. Students gain an understanding of these topics through class discussions, creating presentations, research, case studies, mock trials and guest speakers.

### **T51061 Introduction to Accounting (4524)**

**Open to grades 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$66.20**

**Meets requirements: THD, AHD, Core 40**

**Note: Qualifies as a Quantitative Reasoning course for General Diploma only.**

Students learn the introduction to principles and procedures for proprietorships, partnerships and corporations using correct accounting steps. The entire cycle is covered from opening entries to closing entries. Balance Sheets, Income Statements, Distribution

Statements and Owner Equity Statements are prepared. This is an excellent course for anyone considering a career in business.

### **T51062 Advanced Accounting (4522)**

**Open to grades 11, 12**

**2 semesters, 1 credit per semester (2 semesters required)**

**Required Prerequisites:** *Introduction to Accounting*

**Approximate cost per semester: \$66.20**

**Meets requirements of: THD, AHD, Core 40**

**Qualifies as a Quantitative Reasoning course**

*Advanced Accounting* expands on the Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting covered in *Introduction to Accounting*. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision-making. Students are required to take *Introduction to Accounting* prior to enrollment in this course.

### **T51062 Banking and Investment Capstone (5258)**

**Open to grades 11, 12**

**2 semesters, 1 credit per semester (2 semesters required)**

**Approximate cost per semester: \$46.09**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite: Student must attain an average of C or better in Introduction to Accounting**

**Dual Credit Available**

**Note: Qualifies as a Quantitative Reasoning course**

Banking and Investment Capstone addresses the need of schools in areas that have workforce demand in the finance industry. It analyzes and synthesizes high-level skills needed for a multitude of careers in the banking and investment industry. Students learn banking, investments and other finance fundamentals and applications related to financial institutions, business and personal financial services, investment and securities, risk management products and corporate finance. The course provides students with work based learning experiences to acquire and apply knowledge and skills in one or more careers in the industry.

### **T51141 Principles of Marketing (5914)**

**Open to grades 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$43.42**

**Meets requirements: THD, AHD, Core 40**

**Dual Credit Available**

This course provides a basic introduction to the scope and importance of marketing in the global economy. Emphasis is placed on oral and written communications, mathematical applications, problem solving, and critical thinking skills as they relate to advertising/promotion/selling, distribution, financing, marketing-information management, pricing and product/service management.

### **T51091 Principles of Business Management (4562)**

**Open to grades 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$23.02**

**Meets requirements: THD, AHD, Core 40**

**Dual Credit Available**

This course describes the rewards, benefits and privileges managers might expect in their day to day activities. It also investigates the challenges faced by many managers today. Students learn the characteristics of a good leader. Staying ahead of their rivals, managers must be able to manage diversity in the workplace, globalization, information technology advancements, maintain high ethical standards, be aware of personal happiness of employees and life goals. Students learn how managers must plan, organize, lead and control all aspects of a business while maintaining effectiveness and efficiency within the organization.

### **T551131 Sports & Entertainment Marketing (5984)**

**Open to grades 11, 12**

**2 semesters, 1 credits per semester**

**Approximate cost per semester: \$17.38**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Principles of Marketing or Principles of Business Management**

This course is a specialized marketing course that develops student understanding of the sport/event industries, their economic impact, and products; distribution systems and strategies; pricing considerations; product/service management, and promotion. Students acquire an understanding and appreciation for planning. Throughout the course,

students are presented problem-solving situations for which they must apply academic and critical-thinking skills. Participation in cooperative education is an optional instructional method, giving students the opportunity to apply newly acquired marketing skills in the workplace.

### **T51231 Marketing in Hospitality and Tourism (5982)**

**Open to grades 11, 12**

**2 semesters, 1 credits per semester**

**Approximate cost per semester: TBD**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite: Principles of Marketing or Principles of Business Management**

This course is a specialized marketing course that develops student understanding of marketing in the hospitality, travel, and tourism industry. Students gain knowledge and skills in marketing-information management, pricing, product/service management, promotion, and selling in the hospitality, travel, and tourism industry.

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## **COMMUNICATIONS CLUSTER**

### **T52111 Design Fundamentals (4834)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$3.50**

**Meets requirements: THD, AHD, Core 40**

**Dual Credit is Available**

This course introduces students to fundamental design theory. Investigations into design theory and color dynamics will provide experiences in applying design theory, ideas and creative problem solving in the areas of communication technology. Student experiences encompass aspects of art in communication, integration of art in communication and incorporate literacy and presentation skills.

### **T52022 Graphic Design and Layout (5550)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$27.00**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Design Fundamentals, (MM)**

**Introduction to Communication**

**Dual Credit Available**

In this course more emphasis is placed on color and full-color process printing. Larger-sized projects to fit the larger offset presses will also be included. This course also includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and instructional manuals. Instruction also covers advertising theory and preparation of copy, lettering, posters, and artwork in addition to incorporation of photographic images. Communication skills will be emphasized through the study of effective methods used to design commercial products that impart information and ideas. Advanced instruction might also include experiences in various printing processes as well as activities in designing product packaging and commercial displays or exhibits.

### **T52032 Graphic Imaging Technology (5572)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$13.50**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): T52022 Graphic Design and Layout  
Dual Credit Available**

This course includes organized learning experiences that focus on theory and laboratory activities in prepress, press and finishing operations. Emphasis is placed on elements of design and layout leading to computerized electronic image generation, plate preparation, pressroom operations and finishing techniques. Instructional activities enhance student's language arts skills through the use of proofreading, spelling and punctuation exercises. The course includes actual production processes in conjunction with classroom assignments embracing the technologies of printing, publishing, packaging, electronic imaging and their allied industries.

### **T52212 3-D Computer Animation & Visualization (5530)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$27.00**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): MM Introduction to Communications or Design Fundamentals  
Dual Credit Available**

This course introduces and explores three-dimensional animation techniques as used by the animation and graphics industry today. It applies the use of 3-D computer animation, digital video output and a variety of

computer technologies to produce digital images. Course assignments stress the use of current strategies to solve two-dimensional layout and three-dimensional modeling problems. Students are responsible for the design, development and production of a graphics and video-based digital animation product.

### **T52222 Interactive Media (5232)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$27.00**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): 3D Computer Illustration and Graphics**

**Dual Credit Available**

This is the second-year offering to follow 3-D Computer Illustration and Graphics. This is a continuation of the first-year program. Animation, modeling, graphics, engineering design, electronic publishing and illustration will be studied in greater detail. Students plan and implement projects approved by the instructor. The projects should demonstrate an advanced level of design competency in computer graphics and be performed in consultation with the teacher and industry advisors.

### **T52412 Radio and Television I (5986)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$38.06**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Design Fundamentals, (MM) Introduction to Communication**

**Dual Credit Available**

Radio and Television I provides instruction to develop and enhance competencies in various communication, marketing, media, production and technical functions and tasks performed by employees, including management personnel in TV broadcasting and telecommunications occupations. Emphasis is placed on production, motion graphics (Adobe Creative Suite), programming, broadcast writing, broadcast reporting and broadcast equipment operation. Instructional strategies include hands-on activities where students create commercials, TV broadcasts, sportscasts, new programs and other production related projects.

### **T52422 Radio and Television II (5992)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$38.06**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Radio and Television 1**

**Dual Credit Available**

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Radio and Television 2 continues the instruction to develop and enhance competencies in TV broadcasting and telecommunications occupations. Emphasis is placed on production, motion graphics (Adobe Creative Suite), programming, broadcast writing, broadcast reporting and broadcast operation. Instructional strategies include hands-on activities where students create commercials, TV broadcasts, sportscasts, new programs and other production related projects.

### **T52612 Radio and Television I: BNN (5986)**

### **T52622 Radio and Television II: BNN (5992)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$38.06**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): (Introduction to Communications, Journalism 1), Application, interview and portfolio required for crew positions.**

**Note: Student crew members are often required to spend several hours before and after-school.**

**Dual Credit Available**

Radio and Television I & II provides instruction to develop and enhance competencies in various communication, marketing, media, production and technical functions and tasks performed by employees, including management personnel in TV broadcasting and telecommunications occupations. Student will participate in the CNHS videos and filmed magazine programs.

### **T52512 Radio & Television I: Olympian Flame (5986)**

### **T52522 Radio & Television II: Olympian Flame (5992)**

**Open to grades 10-12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$TBD**

**Meets requirements of: THD, AHD, Core 40**

**Prerequisite: Instructor Approval**

**Recommendation(s): T46402 Radio and Television I**

**Dual Credit Available**

Radio and Television I & II: Olympian Flame is a course where individuals and student groups will create and present a student/school community morning news program. Students will help to write, graphically design, shoot, organize and use all the telecommunications computer technologies involved with the creation of a

morning newscast. Students will explore related career options through field trips to commercial broadcasting outlets.

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## COMPUTER TECHNOLOGY CLUSTER

### **T53111 Computer Tech Support (5230)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$56.00**

**Meets requirements: THD, AHD, Core 40**

**Recommendation: Digital Applications and Responsibility or Electronics Computer Technology II**

Computer Tech Support allows students to explore how computers work. Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Through hands on activities and labs, students learn how to assemble and configure a computer, install operating systems and software and troubleshoot hardware and software problems. Students may earn an industry-based certification at the end of the course.

### **T53112 Networking 1 (5234)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$27.00**

**Meets requirements: THD, AHD, Core 40**

**Recommendation: Computer Tech Support**

Networking Fundamentals introduces students to concepts of local and wide area networks, home networking, networking standards using the IEEE/OCI Model, network protocols, transmission media and network architecture/topologies. Security and data integrity are introduced and emphasized throughout this course. The purpose of this course is to offer students the critical information needed to successfully move into a role as an IT professional supporting networked computers. Concepts covered include TCP/IP client administration, planning a network topology, configuring the TCP/IP protocol, managing network clients, configuring routers and hubs as well as creating a wireless LAN.

### **T53132 Networking 2:**

#### **Infrastructure (5257)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$TBD**

**Meets requirements: THD, AHD, Core 40**

**Prerequisites: T53112 Networking 1**

This course focuses on the software skills needed to manage a network. Students learn and practice skills necessary to perform in the role of a network administrator. They will be able to accomplish fundamental network management tasks on a server such as setup of computer network services, create users and appropriate login scripts, develop groups, set the server remotely, set up security, backup/restore the server and setup/maintain clients.

### **T53122 Networking 2: Servers (4588)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$TBD**

**Meets requirements of: THD, AHD, Core 40**

**Prerequisites: Networking 1**

Networking 2: Servers focuses on learning the fundamentals of networking, routing, switching and related protocols. In this course, students learn both the practical and conceptual skills that build the foundation for understanding basic networking, routing and switching. Students are introduced to the two major models used to plan and implement networks: OSI and TCP/IP. The OSI and TCP/IP functions and services are examined in detail. Students will learn how a router addresses remote networks and determines the best path to those networks, employing static and dynamic routing techniques.

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## CONSTRUCTION ENGINEERING TECHNOLOGY CLUSTER

### **T54011 Civil Engineering & Architecture (5650)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$20.00**

**Meets requirements: THD, AHD, Core 40**

**Note: Qualifies as a Quantitative Reasoning course for the General, Core 40, AHD and THD diplomas**

Civil Engineering and Architecture (Drafting) introduces students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles are used in conjunction with mathematical and scientific knowledge. Computer software programs should allow students opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis should be placed on related transportation, water resource, and environmental issues. Activities include the preparation of cost estimates as well as a review of regulatory procedures that would affect project design.

### **T54012 Architectural Drafting and Design 1 (5640)**

**Open to grades 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$20.00**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Civil Engineering & Architecture, Computers in Design and Production  
Dual Credit Available**

This course provides students with a basic understanding of the detailing skills commonly used by a drafting technician. Areas of study include: lettering, sketching, proper use of equipment, geometric constructions with emphasis on orthographic (multiview) drawings that are dimensioned and noted to ANSI standards. This course includes the creation and interpretation of construction documents. Methods of geometric construction, three dimensional drawing techniques, and sketching will be presented as well as elementary aspects of residential design and site work. Areas of emphasis include print reading and drawing. Another purpose of this course is to provide students with a basic understanding of the features and considerations associated with the operation of a computer-aided design (CAD) system. Students gain valuable hands-on experience with AutoCAD.

### **T54022 Architectural Drafting and Design 2 (5652)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$20.00**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Architectural Drafting & Design 1  
Dual Credit Available**

**Note: Qualifies as a Quantitative Reasoning course for the General, Core 40, AHD and THD diplomas.**

This course presents a history and survey of architecture and focuses on creative design of buildings in a studio

environment. Covers problems of site analysis, facilities programming, space planning, conceptual design, proper use of materials, selection of structure and construction techniques. Develops presentation drawings, and requires oral presentations and critiques. Generation of form and space is addressed through basic architectural theory, related architectural styles, design strategies, and a visual representation of the student's design process. Advanced CAD enables students to make the transition from 2D drafting to 3D modeling. Various architectural software packages and application may be used.

### **T54111 Introduction to Construction (4792)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$10.00**

**Meets requirements: THD, AHD, Core 40**

This course offers hands-on activities and real world experiences related to the skills essential in residential, commercial and civil building construction. During the course students are introduced to the history and traditions of construction trades. Students also learn and apply knowledge of the care and safe use of hand and power tools as related to each trade. In addition, students are introduced to blueprint reading, applied math, basic tools and equipment, and safety. Students will demonstrate building construction techniques, including concrete and masonry, framing, electrical, plumbing, dry walling, HVAC, and painting as developed locally in accordance with available space and technologies. They also investigate topics related to the purchasing and maintenance of structures, special purpose facilities, green construction and construction careers.

### **T54112 Construction Trades 1 (5580)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$56.70**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Introduction to Construction  
Dual Credit Available**

This course includes classroom and laboratory experiences covering the formation, installation, maintenance, and repair of buildings, homes, and other structures. This course also covers the use of working drawings and applications from the print to the work. Students explore the relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, geometric construction, three dimensional drawing techniques, and sketching. Elementary aspects of residential design and site work will also be covered.

Areas of emphasis will include print reading and drawing, room schedules and plot plans. Students will develop an understanding and interpretation of the Indiana Residential Code for one and two-family dwellings and safety practices including Occupational Safety and Health Administration's Safety & Health Standards for the construction industry.

**T54122 Construction Trades 2 (2 hour)  
(5578)**

**T54123 Construction Trades 2 (3 hour)  
(5578)**

**Open to grades 11, 12**

**2 semesters, 2/3 credits per semester**

**Approximate cost per semester: \$56.70**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Construction Trades 1**

**Dual Credit Available**

This course builds on the topics covered in Construction Trades 1 and includes: formation, installation, maintenance, and repair of buildings, homes, and other structures including recent trends in the residential construction industry. Information is presented concerning materials, occupations, and professional organizations within the industry. Students will develop basic knowledge, skills, and awareness of interior trim. It provides training in installation of drywall, moldings, interior doors, kitchen cabinets, and baseboard moldings. Students also develop skills in the finishing of building exteriors. They also explore skills in the installation of cornices, windows, doors and various types of sidings used in today's marketplace. Additionally, the course covers design and construction of roof systems and using framing squares for traditional rafter and truss roofing.

**T54212 Construction Trades: Electrical 1 (2 hour) (4830)**

**T54213 Construction Trades: Electrical 1 (3 hour) (4830)**

**Open to grades 11, 12**

**2 semesters, 2/3 credits per semester**

**Approximate cost per semester: \$51.70**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Construction Trades 2**

**Dual Credit Available**

This course includes classroom and laboratory experiences emphasizing the operation, maintenance and safe use of various tools including the builder's level and transit. It also covers the history of building construction to present-day applications emphasizing future trends and construction as a career. It provides instruction and

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practice in the use of working drawings and applications from blueprint to worksite. Students examine relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, room schedules and plot plans. It covers both AC and DC circuits. Students will use mathematical principles to solve electrical problems and to troubleshoot electrical circuits.

**T54222 Construction Trades: Electrical 2 (2 hour) (4832)**

**T54223 Construction Trades: Electrical 2 (3 hour) (4832)**

**Open to grades 12**

**2 semesters, 2/3 credits per semester**

**Approximate cost per semester: \$51.70**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Construction Trades: Electrical 1**

**Dual Credit Available**

**Note: Qualifies as a Quantitative Reasoning course for the General diploma only.**

This course includes classroom and laboratory experiences concerned with the practice of residential wiring, including electrical service, metering equipment, lighting, switches, outlets and other common components, and methods of installation and maintenance of the residential wiring system in accordance with the current National Electrical Code. Studies include mechanical installation of hardware as well as electrical design and layout. This course also focuses on tool use, material selection, and installation of machines in the industrial setting.

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## **ENGINEERING**

## **MANUFACTURING**

## **TECHNOLOGY CLUSTER**

**Project Lead The Way: A Pre-Engineering Program**

PLTW's Pathway to Engineering (PTE) is designed to encompass all four years of high school. Courses are centered on activities that are hands-on and project-based. Students develop critical thinking and problem solving skills while using the same industry-leading 3D design software used by companies like Intel, Lockheed Martin and Pixar.

They explore aerodynamics, manufacturing and alternative energy; and apply biological and engineering concepts related to biomechanics – think robotics.



Students design, test and actually construct circuits and devices such as smart phones and tablets and work collaboratively on a culminating capstone project.

Project Lead The Way courses have dual credit options with several universities across the country. See a PLTW instructor or go to: [www.pltw.org](http://www.pltw.org) for complete information.

### **T55071 PLTW: Introduction to Engineering Design (4812)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$23.44**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Algebra**

**Dual Credit Available**

This is an introductory course which develops student problem solving skills using the design process. Students document their progress of solutions as they move through the design process. Students develop solutions using elements of design and manufacturability concepts. They develop hand sketches using 2D and 3D drawing techniques as well as create designs using Computer Aided Design (CAD).

### **T55081 PLTW: Principles of Engineering (4814)**

**Open to grades 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$23.44**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Introduction to Engineering Design or Instructor Approval**

**Dual Credit Available**

**Note: Qualifies as a Quantitative Reasoning course for the General, Core 40, AHD and THD diplomas.**

This course focuses on the process of applying engineering, technological, scientific and mathematical principles in the design, production, and operation of products, structures, and systems. It is designed to provide students interested in engineering careers to explore experiences related to specialized fields such as civil, mechanical, and materials engineering. Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems.

### **T55061 PLTW: Digital Electronics (4826)**

**Open to grades 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$23.44**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Introduction to Engineering Design, Principles of Engineering**

**Dual Credit Available**

**Note: Qualifies as a Quantitative Reasoning course for the General, Core 40, AHD and THD diplomas.**

This is a course of study in applied digital logic that encompasses the design and application of electronic circuits and devices found in video games, watches, calculators, digital cameras, and thousands of other devices. Instruction includes the application of engineering and scientific principles as well as the use of Boolean algebra to solve design problems. Using computer software that reflects current industry standards, activities should provide opportunities for students to design, construct, test, and analyze simple and complex digital circuitry software will be used to develop and evaluate the product design. This course engages students in critical thinking and problem-solving skills, time management and teamwork skills.

### **T55051 PLTW: Computer Integrated Manufacturing (4810)**

**Open to grades 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$23.44**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Introduction to Engineering Design, Principles of Engineering**

**Dual Credit Available**

**Note: Qualifies as a Quantitative Reasoning course for the General, Core 40, AHD and THD diplomas.**

This course applies principles of rapid prototyping, robotics, and automation. This course builds upon the computer solid modeling skills developed in Introduction of Engineering Design. Students will use computer controlled rapid prototyping and CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students will evaluate their design solutions using various techniques of analysis and make appropriate modifications before producing their prototypes.

## **T55091 PLTW: Engineering Design & Development (4828)**

**Open to grade 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$23.44**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Introduction to Engineering Design, Principles of Engineering and one specialty course.**

**Note: Qualifies as a Quantitative Reasoning course for the General, Core 40, AHD and THD diplomas.**

**Note: With approval, qualified PLTW student may use this project for their Senior Project at CEHS and CNHS.**

This is an engineering research course in which students work in teams to research, design, test, and construct a solution to an open-ended engineering problem. The product development life cycle and a design process are used to guide the team to reach a solution to the problem. The team presents and defends their solution to a panel of outside reviewers at the conclusion of the course. The EDD course allows students to apply all the skills and knowledge learned in previous pre-engineering courses. The use of 3D design software helps students design solutions to the problem their team has chosen. This course also engages students in critical thinking and problem-solving skills, time management and teamwork skills, a valuable set for students' future careers.

## **T55501 Computers in Design and Production (4800)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$10.00**

**Meets requirements of: THD, AHD, Core 40**

This course specializes in using modern technological processes, computers, design, and production systems in the production of products and structures through the use of automated production systems. Emphasis is placed on using modern technologies and on developing career related skills for electronics, manufacturing, precision machining, welding, and architecture career pathways. Students apply ingenuity using tools, materials, processes, and resources to create solutions as it applies in the electronics, manufacturing, precision machining, welding, and architecture. Course content should address major technological content related to topics such as: Architectural drawing and print design, design documentation using CAD systems; assignments involving the interface of CAD, CNC, CAM, and CIM technologies; computer simulation of products and systems; publishing of various media; animation and

related multimedia applications; 3-D modeling of products or structures; digital creation and editing of graphics and audio files; control technologies; and automation in the modern workplace.

## **T55511 Introduction to Manufacturing (4784)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$10.00**

**Meets requirements of: THD, AHD, Core 40**

This course specializes in how people use modern manufacturing systems with an introduction to manufacturing technology and its relationship to society, individuals, and the environment. An understanding of manufacturing provides a background toward developing engineering & technological literacy, developed through the study of the two major technologies, material processing and management technology, used by all manufacturing enterprises. Students will apply the skills and knowledge of using modern manufacturing processes to obtain resources and change them into industrial materials, industrial products and consumer products. Students will investigate the properties of engineered materials such as: metallics; polymers; ceramics; and composites. After gaining a working knowledge of these materials, students will study six major types of material processes: casting and molding; forming; separating; conditioning; finishing; and assembling.

## **T55612 Industrial Automation & Robotics I (5610)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credit per semester**

**Approximate cost per semester: \$TBD**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Introduction to Manufacturing, Computers in Design and Production, PLTW Introduction to Engineering Design**

**Dual Credit available**

Industrial Automation & Robotics 1 will be a two-hour course that introduces students to curriculum covering the multi-craft skills needed by Industrial technicians to complete the complex and varied tasks for the career. The year one curriculum will include OSHA 10 safety certification; basic electricity including electrical laws and principles of DC and AC currents; the basic theory, operation and programming of automated manufacturing systems; the basic principles and practices of mechanical technology; the common types of electrical wiring circuits used for power and control of electrical devices and motors used in manufacturing; and the common types

of electrical wiring circuits used for power and control of electrical devices and motors used in advanced manufacturing. The year one curriculum will include General Industry: OSHA 10 safety certification.

## **T55622 Industrial Automation and Robotics II (5612)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$TBD**

**Meets requirements of: THD, AHD, Core 40**

**Recommendation(s): Introduction to Manufacturing,**

**Computers in Design and Production, PLTW**

**Introduction to Engineering Design**

**Prerequisite: Industrial Automation and Robotics I**

**Dual Credit available**

Industrial Automation and Robotics 2 includes the study of industrial robots, programming PLC's, automating cells, advanced programming and designing/building task oriented robots. Students will engage in active learning, critical thinking and problem solving through advanced robotic procedures and processes. Students will learn industrial robotic programming languages, strategies for automating to improve efficiencies and be introduced to advanced programming language that is common in global industry. Students will study basic computer numerical controlled (CNC) machining and will combine automation and CNC machining. They will apply information in real world situations to create working solutions and will complete projects, including building robots to perform tasks in autonomous mode and analyze their own career pathway in this sector.

## **T55212 Electronics and Computer Technology I (5684)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: TBD**

**Meets requirements of: THD, AHD, Core 40**

**Recommendation(s): (IT) Information**

**Communications and Technology, Computers in**

**Design and Production, PLTW Introduction to**

**Engineering Design**

**Dual Credit Available**

This course introduces students to the fundamental electronic concepts necessary for entry into an electronic and computer systems career pathway, which will culminate with industry certifications or additional post-secondary education. Classroom and laboratory experiences will allow students begin their career preparation in the fundamental electronics concepts of Jobsite Skills, DC Basics, AC Basics, and Personal

Computer Design, and will incorporate safety, technical writing, mathematical concepts, and customer service.

## **T55222 Electronics and Computer Technology II (5694)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$48.12**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Electronics & Computer Technology 1**

**Dual Credit Available**

**Note: Qualifies as a Quantitative Reasoning course for the General, Core 40, AHD and THD diplomas.**

This course provides the opportunity for students to continue with foundational electronic concepts including circuit analysis and digital electronics modules. After completing the two additional foundational modules, student may choose to focus on one of the optional modules that can include more intense instruction, research, specialized projects, and internships. The optional modules include industrial technology, emerging electronic technologies, residential and commercial electronic communication, and automation. Classroom, laboratory, and work-based experiences in the fundamental electronics concepts of circuit analysis and digital electronics as well as one of the optional modules will incorporate safety, technical writing, mathematics, and customer service.

## **T55232 Electronics and Computer Technology III (5694)**

**Open to grades 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$20.00**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Electronics & Computer Technology II with a C or better**

Upon successful completion of the first two years of Electronics Technology students may be eligible to participate in a course where the student is involved in laboratory activities in advanced digital circuitry, microprocessors, personal computer troubleshooting and repair and programmable controller applications. Emphasis is on the design, circuit analysis, and troubleshooting of these circuits. Opportunities for leadership skills, exposure to working in a team based work system, and applications of technology will provided through participation in SkillsUSA. Qualified students may be eligible to participate in a School-To-Work placement.

### **T55312 Precision Machining I (5782)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$57.24**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Computers in Design and Production, Introduction to Manufacturing**

**Dual Credit Available**

**Note: Qualifies as a Quantitative Reasoning course for the General diploma only.**

This course is designed to provide students with a basic understanding of the precision machining processes used in industry, manufacturing, maintenance, and repair. The course instructs the student in industrial safety, terminology, tools and machine tools, measurement and layout. Students will become familiar with the setup and operation of power saws, drill presses, lathes, milling machines, grinders and an introduction to CNC (computer controlled) machines.

### **T55322 Precision Machining II (5784)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$57.24**

**Meets requirements: THD, AHD, Core 40**

**Prerequisites: Precision Machining I**

**Note: Qualifies as a Quantitative Reasoning course for the General, Core 40, AHD and THD diplomas.**

This course is a more in-depth study of skills learned in Precision Machining 1 with a stronger focus in CNC setup/operation/programming. Classroom activities concentrate on precision set-up and inspection work as well as machine shop calculations. Students develop skills in advanced machining and measuring parts involving tighter tolerances and more complex geometry. A continued focus on safety is also included.

### **T55332 Precision Machining III (5784)**

**Open to grade 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$57.24**

**Meets requirements: THD, AHD, Core 40**

**Prerequisites: Precision Machining II with a C or better**

Upon successful completion of the first two years of Precision Machining, students may be eligible to participate in a course where the student studies advanced lathe work, milling operations, surface grinding, and computerized numerical control milling. Precision measurement, advanced blueprint reading, and industrial math are also taught. CNC programming and operating are taught first, second, and third year. Job opportunities in machine trades are tremendous. Qualified students are

eligible for a school-to-work placement in the community.

### **T55412 Welding Technology I (5776)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$51.24**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Computers in Design and Production, Introduction to Manufacturing**

**Dual Credit Available**

This course includes classroom and laboratory experiences that develop a variety of skills in Oxy-fuel Cutting and Shielded Metal Arc Welding (SMAW). This course is designed for individuals who intend to make a career as a Welder, Technician, Sales, Designer, Researcher or Engineer. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing.

### **T55422 Welding Technology II (5778)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$51.24**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Welding Technology I**

**Dual Credit Available**

**Note: Qualifies as a Quantitative Reasoning course for the General, Core 40, AHD and THD diplomas.**

Welding Technology 2 builds on the Gas Metal Arc Welding, Flux Cored Arc Welding, Gas Tungsten Arc Welding, Plasma Cutting and Carbon Arc skills covered in Welding Technology I. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success.

### **T55432 Welding Technology III (5778)**

**Open to grade 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$51.24**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Welding Technology II with a C or better**

Upon successful completion of the first two years of Welding, students may be eligible to participate in a

course where the student will be prepared for Advanced Placement and/or advanced welding techniques. Lab activities are patterned after a project-oriented job-shop and students will be graded on the quality of projects that they get done and/or their Advanced Placement Evaluations. As advanced students they will be overseeing younger students and learning management skills and team building efforts. At the end of a student's senior year or third year of welding, an AWS welding certification is offered at the student's expense. This certificate can be used to fulfill requirements for a Technical Honors Diploma.

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## HEALTH SCIENCES CLUSTER

### **Project Lead the Way (PLTW): Biomedical Sciences**

The Project Lead the Way Biomedical Sciences program is a dynamic high school program which uses real-world problems to engage and challenge students. Students interested in math, science and the human body will find the PLTW Biomedical Sciences program a great introduction to numerous medical fields. It also teaches how the skills they learn are used in the biomedical sciences.

#### **T56101 PLTW Principles of the Biomedical Sciences (5218)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$52.44**

**Meets requirements: THD, AHD, Core 40**

**Prerequisites: Enrolled in Biology, college prep math and science**

**Note: This course counts towards Core 40 science credits.**

Students explore the concepts of human medicine and are introduced to research processes, using applied math and science to solve problems. Hands-on, interactive projects enable students to investigate human body systems and various health conditions, including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. Key biological concepts include homeostasis, metabolism, inheritance of traits, feedback systems and defense against disease. Engineering principles such as the design process, feedback loops, fluid dynamics and the relationship of structure to function will be included where appropriate.

#### **T56201 PLTW Human Body Systems (5216)**

**Open to grades 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$52.44**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Prerequisites: PLTW**

**Principles of the Biomedical Sciences and College prep math and science**

**Note: This course counts towards Core 40 science credits.**

Students learn anatomy and physiology of the human body through a hands-on approach. Using real-world cases, students take the role of a biomedical professional to work together to solve medical mysteries. Hands-on, interactive projects include designing experiments, investigating the function and structures of the human body through dissections, clay modeling, laboratory analysis and using data acquisition software to monitor body functions such as reflex, muscle movement and lung capacities. Students learn to assess and monitor body systems and how they work together.

#### **T56301 PLTW Medical Interventions (5217)**

**Open to grades 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$52.44**

**Meets requirements: THD, AHD, Core 40**

**Prerequisites: Principles of the Biomedical Sciences, Human Body Systems**

**Note: This course counts towards Core 40 science credits.**

Students investigate various medical interventions that extend and improve the quality of life including gene therapy, pharmacology, surgery, prosthetics, rehabilitation and supportive care. The course explores the design and development of various medical interventions such as vascular stents, cochlear implants and prosthetic limbs. In addition, students review the history of organ transplants and gene therapy and stay updated on cutting-edge developments via current scientific literature. Using 3D imaging, data acquisition software and current scientific research, students design a product that can be used as a medical intervention.

## **T56401 PLTW Biomedical Innovation (5219)**

**Open to grades 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$52.44**

**Meets requirements: THD, AHD, Core 40**

**Prerequisites: Principles of the Biomedical Sciences, Human Body Systems, and Medical Interventions**

**Dual Credit Available if student has successfully completed the four courses, including this one that are in the pathway.**

**Note: This course counts towards Core 40 science credits.**

**Note: With approval, qualified PLTW student may use this project for their Senior Project at CEHS and CNHS.**

Biomedical Innovation is the fourth and final Project Lead the Way Biomedical Science course. It is intended to follow the third course, Medical Interventions. In this capstone course students will design and conduct experiments related to the diagnosis, treatment and prevention of disease or illness. They will apply their knowledge and skills to answer questions or to solve problems related to the biomedical sciences. They will work to design an effective emergency room, explore human physiology and design a medical innovation. They will investigate public health issues and forensic autopsy. They may work with a mentor or advisor from a university, hospital, physician's office, or industry.

## **T56211 Medical Terminology (5274)**

**Open to grades 11, 12**

**1 semester, 1 credit per semester**

**Approximate cost per semester: \$99.94**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Biology**

**Dual Credit Available**

Learn a new language in this one semester elective. Students will learn to define and use medical terminology correctly and will become proficient in pronouncing and spelling medical terms. Students will utilize videos, presentations and hands-on experiences to enhance learning. This course will provide a solid foundation in medical terminology for any student considering a career in health science.

## **T56612 Dental Careers I (5203)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$182.33**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): PLTW Principles of the Biomedical Sciences, PLTW Human Body Systems**

### **Dual Credit Available**

Dental Careers 1 prepares the student for an entry level dental assisting position. Emphasis is placed on the clinical environment, chair-side assisting, equipment/instrument identification, tray set-ups, sterilization, and characteristics of microorganisms and disease control. In addition, oral, head and neck anatomy, basic embryology, histology, tooth morphology, charting dental surfaces, and illness are all introduced. Simulated in-school laboratories are included to provide opportunities for students to further develop clinical skills and the appropriate ethical behavior.

## **T56622 Dental Careers II (5204)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$68.70**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): T56612 Dental Careers I**

**Dual Credit Available**

This course provides the student with more extensive training as a Dental Assistant. There is excellent opportunity for employment/experience toward college/technical training. The student will perform procedures in our simulated lab such as placing orthodontic wires and preparing tray set-ups for periodontal, endodontic and surgical procedures. The first nine weeks is spent in classroom and simulated laboratory training. Clinical (on-the-job) training at specialty dental offices (i.e. periodontics, orthodontics, etc.) is provided during school hours the 2nd, 3rd and 4th nine weeks.

## **T56712 Health Science Education I : Nursing (5282)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$78.48**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): PLTW Principles of the Biomedical Sciences, PLTW Human Body Systems**  
**Dual Credit Available**

This course provides entry level training in nursing assisting and other allied health careers. At the completion of this course, students may receive certification as a Certified Nursing Assistant (C.N.A.) through the Indiana State Department of Health. Student will receive certification in CPR/First Aid/AED for the Professional Rescuer. During the first semester, students learn hands-on skills in the classroom and simulated laboratory. These skills include: infection control measures, patient hygiene, nutrition, vital signs, patient movement, etc. Second semester, students receive clinical (on-the-job) experience in nursing or other allied health

careers of the student's choice such as physical therapy, pharmacy, special education, etc. Health Sciences Training – Nursing/Allied Health Year One provides a wide range of entry level healthcare skills that gives students a solid foundation for employment and college/technical education.

### **T56722 Health Science Education II: Nursing (5284)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$44.86**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite: Health Science Education II : Nursing**

This course curriculum offers medical office training with an emphasis on employability skills, teamwork, and communication. Students also have an opportunity to advance learning in their chosen field and/or explore a variety of nursing and allied health careers. Students receive clinical (on-the-job) experience closely related to the area of their interest(s). Clinical placement begins early in the school year and continues through the fourth nine weeks. Health Sciences Training Nursing/ Allied Health Year Two offers a wonderful opportunity for students to gain in-depth exposure to their potential health career area as well as providing a solid foundation for employment and college/technical education. Student will receive certification in CPR/First Aid/AED for the Professional Rescuer.

### **T56512 Veterinary Careers I (5211)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$85.82**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Animal Science, Adv. Life**

**Science: Animals, PLTW Principles of the**

**Biomedical Sciences, PLTW Human Body Systems**

This course provides entry level training as a Veterinary Assistant for students pursuing careers as Veterinarians, Veterinary Technicians, Veterinary Assistants, or other careers involving animals. The focus of the first semester is classroom and laboratory training. The student will have the opportunity to practice assisting with the physical exam, veterinary nursing care, animal restraint and assisting with surgical procedures. Second semester students have the opportunity to receive clinical (on-the-job) training within the professional community. Placements include veterinary offices, animal shelters, humane societies, groomers, and animal behavior and training facilities. Students receive certification in CPR/First Aid/AED for the Professional Rescuer.

### **T56522 Veterinary Careers II (5212)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$46.96**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Veterinary Careers I**

This course provides advanced learning in the veterinary field through a four day per week extended lab experience in a veterinary field. Students can focus on specific career interests such as small or large animal vet medicine, exotic vet medicine, wildlife rehabilitation, shelter animals, or obedience training. This opportunity provides the students with a solid foundation for employment and college or further technical education.

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## **HUMAN SERVICES CLUSTER**

### **T57321 Interpersonal Relationships (5364)**

**Open to grades 9, 10, 11, 12**

**1 semester, 1 credit per semester**

**Approximate cost per semester: \$16.21**

**Meets requirements: THD, AHD, Core 40**

This course addresses essential knowledge and skills needed for positive and productive relationships in all career areas, community, and family settings. Designed for teens that would like a better understanding of human behavior through knowing themselves as individuals, topics include communication skills, career goals, self-esteem, relationships, values clarification, and conflict resolution. This is one of three (3) classes that may be taken as a group in lieu of Health & Safety.

### **T57351 Adult Roles and Responsibilities (5330)**

**Open to grades 11, 12**

**1 semester 1 credit per semester**

**Approximate cost per semester: \$60.00**

**Meets requirements: THD, AHD, Core 40**

Adult Roles and Responsibilities is recommended for all students as a career sequence course for students with interest in family and community services, personal and family finance, and similar areas. This course is designed to equip students with knowledge and skills needed to successfully handle the daily living challenges of adult life. Students develop skills to build more meaningful, lasting relationships. They will explore many of the issues that challenge the individual and family in today's society. Students complete projects and class activities that involve consumer decision-making about housing,

clothing, nutrition and wellness, transportation and financial management.

### **T57361 Intro. to Housing & Interior Design (5350)**

**Open to grades 9, 10, 11, 12**

**1 semester, 1 credit per semester**

**Approximate cost per semester: \$31.50**

**Meets requirements: THD, AHD, Core 40**

Introduction to Housing and Interior Design is a one semester hands-on course designed for students interested in exploring and learning about interiors and housing styles. Topics include choosing a place to live, study of color, elements of design, furniture arrangement, floor plans, choosing backgrounds-walls, floors, windows, decorating and housing careers. This course is filled with many design and craft type projects.

### **T57371 Nutrition and Wellness (5342)**

**Open to grades 9, 10, 11, 12**

**1 semester, 1 credit per semester**

**Approximate cost per semester: \$19.03**

**Meets requirements: THD, AHD, Core 40**

This is a nutrition class that introduces students to only the basics of food preparation so they can become self-sufficient in accessing healthy and nutritious foods. This class helps students to realize the lifelong benefits of sound nutrition and wellness and helps them plan and cook for healthy living. Topics include impact of nutrition on health; making healthy choices; selection and preparation of nutritious meals and snacks, safety and sanitation of food prep, wellness issues and career paths. Much time is spent developing measurement skills and simple food preparation techniques. This is one of three classes that may be taken as a group in lieu of Health & Safety.

### **T57391 Sports Nutrition and Wellness (5340)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$38.06**

**Meets requirements: THD, AHD, Core 40**

Sports Nutrition and Wellness is a course which provides an extensive study of nutrition. Sports Nutrition and Wellness is an especially appropriate course for students interested in careers in the medical field, athletic training and dietetics. This course is designed to benefit the nutritional needs for all students, but especially athletes. Topics include: simple food preparation, individual dietary needs, nutrition information and analysis, pre-game and recovery foods/drinks.

### **T25502 Advanced Life Science: Foods (5072)**

**Open to grades 11, 12**

**2 semesters, 1 credit per semester May include travel period**

**Approximate cost per semester: \$68.38**

**Meets requirements: THD, AHD, Core 40, NCAA**

**Recommendation: Two years of Core 40/AHD Science**

**Note: This course counts toward Core 40 Science credits.**

**Note: Qualifies as a Quantitative Reasoning course for the General, Core 40, AHD and THD diplomas.**

Advanced Life Science: Foods is a two-semester course that provides students with opportunities to participate in a variety of activities including laboratory work. This is a standards-based, interdisciplinary science course that integrates biology, chemistry and microbiology in the context of foods and the global food industry. Students formulate, design and carry out food base laboratory and field investigations as an essential course component. Students understand how biology, chemistry and physics principles apply to the composition of foods, the nutrition of foods, food and food product development, food processing, food safety and sanitation, food packaging and food storage. Students apply the principles of scientific inquiry to solve problems related to biology, physics and chemistry In the context of highly-advanced industry applications of foods.

### **T57701 Introduction to Fashion and Textiles (5380)**

**Open to grades 9, 10, 11, 12**

**1 semester, 1 credit per semester**

**Approximate cost per semester: \$21.78**

**Meets requirements of: THD, AHD, Core 40**

This is an introductory course for students interested in academic enrichment or a career in the fashion, textile, and apparel industry. This course addresses knowledge and skills related to design, production, acquisition, and distribution in the fashion, textile, and apparel arena. It includes the study of personal, academic, and career success; careers in the fashion, textile, and apparel industry; factors influencing the merchandising and selection of fashion, textile, and apparel goods and their properties, design, and production; and consumer skills. A project-based approach integrates instruction and laboratory experiences including application of the elements and principles of design; selection, production, alteration, repair, and maintenance of apparel and textile products; product research, development, and testing; and application of technical tools and equipment utilized in the industry.



**T57331 Child Development/Adv. Child Dev. (5362)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$36.18 Sem. 1 / \$20.09/Sem. 2**

**Meets requirements: THD, AHD, Core 40**

Semester one students experience an introductory course especially relevant for students interested in careers that draw on knowledge of children, child development, and nurturing of children. It includes the study of prenatal development and birth; growth and development of children; child care giving and nurturing; and support systems for parents and caregivers. Semester two includes the study of professional and ethical issues in child development; child growth and development; child development theories, research, and best practices; child health and wellness; special conditions affecting children; and career exploration in child development and nurturing. This is one of three (3) classes that may be taken as a group in lieu of Health & Safety. Students participate in an in-school lab gaining experience with young children through participation and observation. The emphasis is on parent/child activities.

**T57102 Early Childhood Education I (2 hour) (5412)**

**T57103 Early Childhood Education I (3 hour) (5412)**

**Open to grades 11, 12**

**2 semesters, 2/3 credits per semester**

**Approximate cost per semester: \$55.92**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite: Child Development**

**Dual Credit Available**

Early Childhood Education 1 prepares students for employment in early childhood education and related careers that involve working with children from birth to 8 years (3rd grade) and provides the foundations for study in higher education that leads to early childhood education and other child-related careers. Major course topics include: career paths in early childhood education; promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum, and becoming an early childhood education professional. The course addresses planning and guiding developmentally appropriate activities for young children in various childcare settings; developmentally appropriate practices of guidance and discipline; application of basic health, safety, and nutrition principles when working with

children. Intensive experiences in one or more early childhood settings, resumes, and career portfolios are required components. High school students while under the supervision of the instructor will lead a preschool for children ages 3 – 4 years during the first semester of the class. Students will be placed in community early childhood centers during the second semester.

**T57112 Early Childhood Education II (2 hr. Option) (5406)**

**T57113 Early Childhood Education II (3 hr. option) (5406)**

**Open to grades 12**

**2 semesters, 2/3 credits per semester**

**Approximate cost per semester: \$55.92**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite: Early Childhood Education 1**

**Dual Credit Available**

ECE 2 is a sequential course that builds on the foundational knowledge and skills of Early Childhood Education I, which is a required prerequisite. In ECE 2 students further refine, develop. The course standards parallel the expectations and documentation required for Child Development Associate (CDA) credentialing. Extensive experiences in one or more early childhood education settings are required: a minimum total of 480 hours must be accrued in ECE I and ECE II. These experiences may be either school-based or “on-the-job” in community-based early childhood education centers, or in a combination of the two.

**T57122 Education Professions I (2 hour) (5408)**

**T57123 Education Professions I (3 hour) (5408)**

**Open to grades 11, 12**

**2 semesters, 2/3 credits per semester**

**Approximate cost per semester: \$38.90**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Child Development/Adv. Child Development**

**Dual Credit Available**

This is an exciting hands-on exploration of learning and teaching that prepares students for employment in education and related careers and provides the foundation for study in higher education. An active learning approach incorporates communication, leadership and management skills into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Exploratory field experiences in

classroom settings and career portfolios are required components. A standards-based plan guides the students' field experiences. Students are monitored in their field experiences by the Education Professions teacher. Students should be motivated toward exploring a career in education or related careers, have a good attendance record and be willing to accept numerous responsibilities while interning in an elementary or middle school classroom. Students who enjoy working with children will love the activities and experiences in this class. Articulation with postsecondary programs is encouraged.

### **T57132 Education Professions II (2 hour) (5404)**

### **T57133 Education Professions II (3 hour) (5404)**

**Open to grades 12**

**2 semesters, 2/3 credits per semester**

**Approximate cost per semester: \$38.90**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Education Professions I**

Designed for returning Teacher Education students, this course is a continuation of Education Professions 1. The course prepares students for employment in education and related careers and provides the foundation for study in higher education in these career areas. An active learning approach incorporates communication, leadership and management skills into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Extensive field experiences in one or more classroom settings, resumes, and career portfolios are required components. Students are monitored in their field experiences by the Education Professions 2 teacher. Articulation with postsecondary programs is encouraged.

### **T57504 Cosmetology I (5802)**

**Open to grades 11, 12**

**2 semesters, 4 credits per sem. at McDowell (3 periods) +  
Extra Clock Time**

**Approximate cost per semester: \$524.95**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Interpersonal Relationships**

**Prerequisite(s): Application and/or interview may be  
required.**

**Dual Credit Available**

Cosmetology 1 offers an introduction to cosmetology with emphasis on basic practical skills and theories including roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring business and personal ethics, and bacteriology and sanitation. In

the second semester, greater emphasis is placed on the application and development of these skills. State of Indiana requires a total of 1500 hours of instruction for licensure. This class is in session until 5:30 p.m.

### **T57514 Cosmetology II (5806)**

**Open to grades 12**

**2 semesters, 4 credits per sem. at McDowell (3  
periods) + Extra Clock Time**

**Approximate cost per semester: \$22.00**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Cosmetology I**

**Dual Credit Available**

Cosmetology II emphasis will cover the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology, professionalism, and salon management in relation to cosmetology. This class is in session until 5:30 p.m.

### **T57210 Intro to Culinary Arts & Hospitality Management (5438)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credit per semester**

**Approximate cost per semester: \$36.82**

**Meets requirements: THD, AHD, Core 40**

This course is recommended for all students regardless of their career cluster or pathway in order to build basic culinary arts knowledge and skills. It is especially appropriate for students with an interest in careers related to Hospitality, Tourism, and Culinary Arts. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended. Topics include basic culinary skills in the foodservice industry, safety and sanitation, nutrition, customer relations and career investigation. Students explore this industry and examine their own career goals in light of their findings. Laboratory experiences that emphasize industry practices and develop basic skills are required components of this course.

### **T57212 Culinary Arts & Hospitality I (2 hr.) (5440)**

### **T57213 Culinary Arts & Hospitality I (3 hr.) (5440)**

**Open to grades 10, 11, 12**

**2 semesters, 2/3 credits per semester**

**Approximate cost per semester: \$101.35**

**Meets requirements: THD, AHD, Core 40**

**Recommendation: Introduction to Culinary Arts &  
Hospitality**

This course prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the hospitality industry. It prepares students to enter the Advanced Culinary Arts or Advanced Hospitality courses. Major topics include: introduction to the hospitality industry; food safety and personal hygiene; sanitation and safety; regulations, procedures, and emergencies; basic culinary skills; culinary math; food preparation techniques and applications; principles of purchasing, storage, preparation, and service of food and food products; application of sanitation and safety principles to maintain safe and healthy food service and hospitality environments; use and maintenance of related tools and equipment; and application of management principles. Intensive, teacher-monitored standards-based laboratory experiences with commercial applications are required.

**T57222 Culinary Arts & Hospitality II:  
Culinary Arts (2 hr) (5346)**

**T57223 Culinary Arts & Hospitality II:  
Culinary Arts (3 hr) (5346)**

**Open to grades 11, 12**

**2 semesters, 2/3 credits per semester**

**Approximate cost per semester: \$83.86**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Culinary Arts and Hospitality I**

**Dual Credit Available**

Advanced Culinary Arts prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the food industry, including (but not limited to) food production and services; food science, dietetics, and nutrition; and baking and pastry arts. Major topics for this advanced course include basic baking theory and skills, introduction to breads, introduction to pastry arts, nutrition, nutrition accommodations and adaptations, cost control and purchasing, and current marketing and trends. Instruction and intensive laboratory experiences include commercial applications of principles of nutrition, aesthetic, and sanitary selection; purchasing, storage, preparation, and service of food and food products; using and maintaining related tools and equipment; baking and pastry arts skills; managing operations in food service, food science, or hospitality establishments; providing for the dietary needs of persons with special requirements; and related research, development, and testing. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or “on-the-job” or a combination of the two.

**T57233 Culinary Arts and Hospitality II:  
Hospitality Management (3 hour) (5458)**

**Open to grade 12**

**2 semesters, 3 credits per semester**

**Approximate cost per semester: \$39.60**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Culinary Arts and Hospitality II:  
Culinary Arts**

Advanced Hospitality Management prepares students for employment in the hospitality industry. It provides the foundations for study in higher education that leads to a full spectrum of hospitality careers. This is a broad-based course that introduces students to all segments of hospitality, what it includes, and career opportunities that are available; provides a survey of management functions, highlighting basic theories and facts; and exposes students to current trends and current events within the industry. Three major goals of this course are for students to be able to: Identify current trends in hotel and restaurant management, distinguish the difference between hospitality and tourism, and state differences in front of the house versus back of the house. Intensive experiences in one or more hospitality industry settings are a required component of the course.

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## **PROTECTIVE SERVICES CLUSTER**

**T57012 Criminal Justice I (5822)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$92.72**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Digital App. & Responsibility,  
Interpersonal Relationships**

**Dual Credit Available**

Criminal Justice I Introduces specialized classroom and practical experiences related to public safety occupations such as law enforcement, loss prevention services, and homeland security. This course provides an introduction to the purposes, functions, and history of the three primary parts of the criminal justice system as well as an introduction to the investigative process. Oral and written communication skills should be reinforced through activities that model public relations and crime prevention efforts as well as the preparation of police reports. This course provides the opportunity for dual credit for students who meet post secondary requirements for earning dual credit and successfully complete the dual credit requirements of this course.

## **T57022 Criminal Justice II**

### **Advanced (5824)**

**Open to grades 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$76.26**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Criminal Justice I**

**Dual Credit Available**

Criminal Justice II introduces students to concepts and practices in controlling traffic as well as forensic investigation at crime scenes. Students will have opportunities to use mathematical skills in crash reconstruction and analysis activities requiring measurements and performance of speed/acceleration calculations. Additional activities simulating criminal investigations will be used to teach scientific knowledge related to anatomy, biology, and chemistry as well as collection of evidence and search for witnesses, developing and questioning suspects, and protecting the integrity of physical evidence found at the scene and while in transit to a forensic science laboratory. Procedures for the use and control of informants, inquiries keyed to basic leads, and other information-gathering activity and chain of custody procedures will also be reviewed.

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## **TRANSPORTATION CLUSTER**

## **T55031 Introduction to Transportation (4798)**

**Open to grades 9, 10, 11, 12**

**2 semesters, 1 credits per semester**

**Approximate cost per semester: \$10.00**

**Meets requirements: THD, AHD, Core 40**

This is an introductory course designed to help students become familiar with fundamental principles in modes of land, sea, air, and space transportation, including basic mechanical skills and processes involved in transportation of people, cargo and goods. Students gain and apply knowledge and skills in the safe application, design, production, and assessment of products, services, and systems as it relates to the transportation industries. Content of this course includes the study of how transportation impacts individuals, society, and the environment. This course allows students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant transportation related activities, problems, and settings.

## **T58012 Automotive Services Technology I (5510)**

**Open to grades 10, 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$73.60**

**Meets requirements: THD, AHD, Core 40**

**Recommendation(s): Introduction to Transportation  
Dual Credit Available**

This is a one-year course that encompasses the sub topics of the NATEF/ ASE identified areas of Steering & Suspension and Electrical Systems. This one-year course offering may be structured in a series of two topics per year offered in any combination of instructional strategies of semester based or yearlong instruction. Additional areas of manual transmissions and differentials, automatic transmissions, air conditioning, and engine repair should be covered as time permits. This one-year offering must meet the NATEF program certifications for the two primary areas offered in this course. This course provides the opportunity for dual credit for students who meet post secondary requirements for earning dual credit and successfully complete the dual credit requirements of this course. Mathematical skills will be reinforced through precision measuring activities and cost estimation/calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors.

## **T58022 Automotive Services Technology II (5546)**

**Open to grades 11, 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$73.60**

**Meets requirements of: THD, AHD, Core 40**

**Prerequisite: T58012 Automotive Services  
Technology I**

**Dual Credit Available**

Automotive Services Technology 2 is a one-year course that encompasses the sub topics of the NATEF/ASE identified areas of Braking Systems and Engine Performance. This one-year course offering may be structured in a series of two topics per year offered in any combination of instructional strategies of semester based or year- long instruction. Additional areas of manual transmissions /differentials, automatic transmissions, air conditioning, and engine repair should be covered as time permits. This one-year offering must meet the NATEF program certifications for the two primary areas offered

in this course. Mathematical skills will be reinforced through precision measuring activities and cost estimation/calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors.

## **T58032 Automotive Services Technology III (5546)**

**Open to grade 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$73.60**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite: Automotive Services Technology II with a “C” or better**

This program is designed for third-year Automotive Technology students. Students must have met the program standards and maintained a grade of C or above in Year One and Year Two Auto Technology classes before they can be placed in a Community Training Site/Automotive Position.

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## **WORK-BASED LEARNING**

### **C<sup>4</sup> Work-Based Learning (WBL) Options**

Components of the WBL system involve cooperative education, extended labs and advanced placements in partnership with community learning stations through C<sup>4</sup> programming. Additional WBL opportunities available to all students include job shadowing, internship and on-the-job training.

**Advanced Job Placement (AJP):** Advanced occupational training students may qualify for community placement training if they meet the criteria for eligibility. To qualify, the student must be a highschool senior and the C<sup>4</sup> instructor must agree that the student has shown the necessary technical skills to work in the community. The students must also be in good standing for graduation, have a good behavioral transcript, show no attendance issues, meet the standards for placement and have passed the End-of-Program Assessment. Representatives from local industry will interview students prior to placement. Selected students are placed in on-the-job training sites under the supervision of a department manager. Student will work a minimum of 15 hours a week.

**Co-op:** The expectation for co-op students is that they will be placed into employment opportunities within the community for pay.

**Extended Lab:** Students in extended labs engage in community placement sometime after the first nine weeks. This experience is an extension of their classroom training; placement sites provide training and evaluation. Due to occupational training requirement, there is no pay for this experience.

### **T59579 Interdisciplinary Coop. Education (ICE) Related (5902)**

**Open to grade 12**

**2 semesters, 1 credit per semester**

### **T59599 Interdisciplinary Coop. Education (ICE) Job (5902)**

**Open to grade 12**

**2 semesters, 2 credits per semester**

**Approximate cost per semester: \$45.16**

**Meets requirements: THD, AHD, Core 40**

**Prerequisite(s): Application and coordinator approval required. Student must provide their own transportation. Minimum age of 16 and eligibility requirements of the Federal and State Child Labor Laws.**

This course provides occupational training in work areas not currently provided for in regular Career and Technical Education courses. It combines classroom instruction and work experiences in community workstations. In addition to a morning schedule of required and elective courses, the student attends a related class each day before being released to work in the community. In the related class, students study topics relevant to employee effectiveness and making the transition into the workforce. Work sites are identified through a cooperative effort of the student and teacher, who will supervise the total program. Students are required to provide their own transportation.

