

## 2022—2023

### art & communications

#### **0938/2938 graphic design**

This course will teach students basic skills that will prepare students for a career in art and design. Using industry standard software, students learn basic technical skills in Adobe, Illustrator, Photoshop, and InDesign. Topics include fundamental principles of design, typography, document design, project management and career exploration in design. This is a project-based course where students produce a digital portfolio and may receive college credit upon completion of the course. Basic computer skills required.

#### **0939/2939 advanced graphic design**

*Prerequisite: Graphic Design or instructor permission.* This course teaches the digital fundamentals in layout, design and illustration through a project-based learning approach. Current industry-standard software is used and applied to assess student proficiency and skills. Coursework focuses on enhancing skills in visual literacy, color theory and use of design elements, techniques in digital illustration and advertising. All students will develop a portfolio and will learn about careers in illustration, Advertising, Graphic Design, Animation and Web Design.



### business, management, marketing & technology

#### **0920/2920 fashion merchandising 1**

This introductory course includes the study of textiles, clothing design, visual merchandising, advertising, and marketing, with a stronger emphasis placed on design, marketing basics and the fashion industry. Real-World applications include a trip to Chicago to visit designer showrooms and post-secondary fashion schools, as well as participation with planning the annual charity fashion show that the class puts together each year. Along with the marketing, design and merchandising taught in the class, students will also learn about the sewing machine and basic sewing techniques to accompany the design portion of the class. This class is a hands-on, project-based class.

#### **0921/2921 fashion merchandising 2**

*Prerequisite: Successful completion of Fashion Merchandising 1.* This second-year course is a continuation of the study of textiles, clothing design, visual merchandising, advertising, and marketing, with a stronger emphasis placed on leadership, marketing and fashion show planning. This class plans the entire spring charity fashion show. Real-World applications include a trip to Chicago to visit designer showrooms and post-secondary fashion schools, as well as the opportunity to direct the annual charity fashion show that the class puts together each year. Along with the marketing, design and merchandising taught in the class, students will also learn more complex sewing techniques to accompany the design portion of the class. This class is a hands-on, project-based class.

#### **0902/2902 management business administration 1**

MBA is designed to introduce students to the exciting and challenging world of business. Through the information and activities covered in class, students will increase their preparation to be a knowledgeable consumer, a well-prepared employee, and an effective citizen in today's economy. Topics will focus on economic environment, global competition, entrepreneurship, human resources, marketing, accounting, finance, and information systems.



### engineering, manufacturing & industrial technology

#### **0936/2936 automotive technology 1**

This is a year-long course designed to prepare students for a career in the automotive technology field. All instructional material meets the ASE Education Foundation standards for Maintenance and Light Repair (MLR). Students will be introduced to all eight NATEF areas with concentrations in safe practices, tools, shop equipment, light repair and maintenance skills.

#### **0937/2937 automotive technology 2**

*Prerequisite: Successful completion of Automotive Technology 1.* This is a year-long course designed to prepare students for a career in the automotive technology field. All instructional material meets the ASE Education Foundation standards for Maintenance and Light Repair (MLR). This course advances the basic skills learned in Automotive Technology 1 with concentration on brakes, advanced suspension and steering, and advanced HVAC.

#### **0946/3946 constructions trades 1**

This is a one-year, two-hour block course in which students are introduced to the many different skills involved in construction. This course will involve classroom and laboratory work as well as practical job site experience on construction projects.

#### **0914/2914 construction trades 2**

*Prerequisite: Successful completion of Construction Trades 1 or instructor permission.* This three-hour block course builds on the foundational skills developed in Construction Trades 1. Students participate in an authentic residential remodeling project every year. Acting as contractors, students will complete various tasks in the construction and remodeling process.

#### **0942/2942 engineering design 1**

Students will be introduced to drafting and design concepts, including principles of mechanical, civil and bio-mechanical engineering, as well as product and transportation design. Students will create 3D model design projects and take field trips to tour advanced manufacturing facilities. Students will learn how to use AutoCad, SolidWorks and Bio-Mechanical software.

#### **0944/2944 engineering design 2**

The students will be introduced to Advance Engineering Design concepts of Transportation, Architecture, Bio-Mechanical, Civil and Product Design. Students will produce scale models and sketches of their ideas and concepts. The goal of this class is to learn more design concepts using Revit, Alias, Solid Works, Mimics, AutoCad, Sketchbook designer, Power Draft software. Students will also be trained to use the 3D-Parametric machine for their projects.



### 0933/2933 healthcare foundations

In this course students will explore the knowledge and skills associated with a variety of health care careers. This will include classroom focus on medical terminology and physiology, safety and professionalism while also allowing for specific hands-on skills training, including CPR and vital signs.

### 0941/2941 pre-sports medicine

This hands-on course will be taught by a Certified Athletic Trainer and will focus on anatomy and physiology, disease processes, medical terminology, professionalism, infection control and safety, vital signs, and taping and wrapping techniques. Certifications earned include BLS/CPR, First Aid and Stop the Bleed.

### 0930/2930 pre-medicine

This hands-on course will be taught by a Registered Nurse and will focus on anatomy and physiology, disease processes, medical terminology, professionalism, infection control and safety, vital signs, blood glucose monitoring, and injections skills. Certifications earned include BLS/CPR, First Aid and Stop the Bleed.

### 0916/2916 advanced medicine

*Prerequisite:* completion of Pre-Sports Medicine or Pre-Medicine at LCTC with the recommendation from you LCTC medical teacher.

Advanced Medicine provides students with an in-depth understanding of advanced anatomy, physiology, and pathophysiology, advanced patient care skills including phlebotomy and EKG monitoring and analysis, and a robust understanding of professional responsibilities of the health care provider. By the end of this course students will be eligible to sit for the National Healthcare Association: Certified Patient Care Technician (NHA:CPCT) examination. Upon successful completion of the exam students will earn one ACE college credit and hold a national certification as a PCT. The PCT credential allows students to work in any healthcare setting, including hospitals, clinics, offices and long-term care facilities. Additional curriculum includes the study of maternal and fetal health, pediatric through geriatric human growth and development, mental health, and complementary, and alternative medicine. This course has an overarching focus on safe patient practices, ethical competencies, and employability and technical skills. Hands-on clinicals and teamwork are essential standards of medicine, making attendance imperative.



### 0904/2904 animation and web design 1

*Prerequisite:* Must have a basic knowledge of Windows. Students will create, design and produce interactive multi-media products and services. Students will be provided a broad-based foundation for beginning a career in areas such as Animation, Web Design, and Motion Graphics. Students will learn HTML5, CSS3, Bootsharp, Adobe Photoshop and Adobe Animate.

### 0911/2911 game design

*Prerequisite:* Must have a basic knowledge of Windows (i.e. how to create, save and locate files, and create folders). Basic keyboard and mouse skills: copy/paste, right click/left click. This is a project-based course and will cover fundamentals of game design and coding by following a real-world design and engineering process. Students will create socially useful games and applications for mobile devices and the web. The course emphasizes communication, collaboration, creativity and problem solving.

### 0906/2906 internet engineering

This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LAN's, perform basic configurations for routers and switches, and implement IP addressing schemes.

### 0907/2907 computer repair/computer security

The curriculum covers the fundamentals of PC technology, networking, and security. Students will learn hands-on technical aspects of the microcomputer, including hardware and software system setup, and troubleshooting with the use of tools, hardware components, as well as hardware and software interfacing. Students will install, configure, upgrade, optimize, and perform preventive maintenance with respect to security using appropriate tools, diagnostic procedures, and troubleshooting techniques.

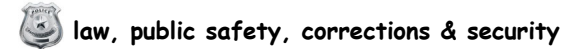


### 0928/2928 hospitality management 1

In this introductory course, students gain practical, hands-on knowledge and skills within a relevant and industry-driven curriculum. This course not only covers the basics of food preparation and food safety, but also crucial food service concepts such as customer relations, cost accounting, controlling food costs, and marketing. Students will participate in the operation of the Patriot Inn restaurant, house at Franklin High School, which will mimic the same table service skills found in the food service industry.

### 0929/2929 hospitality management 2

*Prerequisite:* Successful completion of Hospitality Management 1 or instructor permission. In this second-year course, students will expand on their food service and marketing skills, while also learning how to prepare menus and create new foods. Instruction is student-driven, as second-year students explore a certain cooking or baking skill.



### 0934/2934 criminal justice technology

Criminal Justice is a one-year, two-hour instructional program designed for students interested in investigating careers as criminal lawyers, federal agents, police officers, civilian police personnel, firefighters and EMT, corrections officers, or private security. This course will introduce students to various public safety agencies and provide the students with the recommended path to pursue their desired career choice. Students will learn technical and academic standards used in the public safety careers.



### 1857/2857—3 hr ~ 1859/2859—2 hr ~ career internship program

The Career Intern Program is work-based career exploration experience for high achieving, college-bound seniors. This course is by invitation only. Letters of Invitation to all juniors with a 3.0 or higher GPA are mailed in January.

### 1861/2861—2 hr ~ skilled trades intern program

Students who have an interest in a skilled trade that cannot be met through existing programs may apply for participation in the Skilled Trades Internship Program. Through non-paid in-ternships, students experience careers by working with personnel in the trades industry. At the conclusion of one semester, or a full year's training, the student may be qualified for employment in an entry-level job. This is a full year course.

### embedded credit (except the internship programs)

All LCTC courses earn these additional academic credits:

- (S) Senior Math
- (WL) 2nd year World Language credit
- (V) Visual Performing & Applied Arts
- (H) Health (Health Science classes only)

In addition to the embedded credits LCTC also satisfies the Physics/Physical Science graduation requirements.