

CAREER & TECHNOLOGY EDUCATION (CTE)

Enduring Understandings/Essential Questions

- Students will understand that we live in an ever-changing “technological” society; therefore, we must be diligent, life-long learners.
 - How can we be prepared to live and work in an ever-changing “technological” society?
 - What is technological literacy and how can it be developed?
 - How has and will technology affect our personal and professional world?
- Students will understand that there are certain skills required of all people to live and function in society.
 - Why are developing the abilities to reason, analyze, solve problems, and think critically about our lives and the world around important?
 - What are important “life skills”?
 - How can we develop the ability to evaluate ideas and explore what can be done with them?
 - How can we learn to work both collaboratively and independently?
- Students will understand that all humans need to find a meaningful career.
 - How do we encourage career exploration?
 - What skills are necessary for all careers?
 - How can we develop the specific skills necessary for various careers?
- Students will understand that people need the ability to select and apply the tools of technology as they relate to personal, professional, and business decision-making.
 - How do we evaluate technology tools to determine the right tool for the right “job”?

The graduation requirement in Career and Technology Education (formerly Practical Arts) is one unit.
All students will be required to take a course to meet the state personal finance requirement.

CAREER & TECHNOLOGY EDUCATION - BUSINESS

Course offerings in business are designed to acquaint students with the business community and to prepare them to communicate effectively with the business world. Courses are designed to improve students' skills in areas of business and to increase their capabilities as consumers. No sequence of courses is required.

FINANCIAL COMPUTERIZED ACCOUNTING I

10th - 12th Grade

Credit - 1/2

Semester 1

This course will give the student a background in the basic accounting concepts and procedures used to operate a business. Students will learn an entire accounting cycle for a service business organized as a proprietorship and a merchandising business organized as a partnership. Using an automated accounting program, students apply concepts by recording entries into journals and preparing financial statements of a company, as well as activities using spreadsheets and simulations. This course is highly recommended for students interested in business management and/or majoring in business at the college level. **(This course does not qualify for NCAA eligibility.)**

FINANCIAL COMPUTERIZED ACCOUNTING II

10th - 12th Grade

Credit - 1/2

Semester 2

Prerequisite: Computerized Accounting I

This course will give the student applications of the basic accounting concepts and procedures used to operate a business. Students will learn the accounting cycle for the merchandising of a business organized as a corporation. Using an automated accounting program, students apply concepts by recording entries into journals and preparing financial statements of a company, as well as activities using spreadsheets and simulations. This course is highly recommended for students interested in business management and/or majoring in business at the college level. **(This course does not qualify for NCAA eligibility.)**

INTERNSHIP

11th - 12th Grade

Credit - 1/2 per semester

Semester 1 and 2

Students must pre-enroll in this class to be eligible for work internship

Juniors and seniors enrolled in Managing Your Financial Future, Business Management/Entrepreneurship, Marketing, Advertising or Financial Computerized Accounting may also enroll in Internship. The on-the-job training will vary to fit the long-range career, part-time employment, and vocational interests of the student. Students must work an average of 10 hours per week and complete a training plan to earn 1/2 credit. **(This course does not qualify for NCAA eligibility.)**

MANAGING YOUR FINANCIAL FUTURE

THIS COURSE FULFILLS THE PERSONAL FINANCE GRADUATION REQUIREMENT

11th - 12th Grade

Credit - 1/2

Semester - 1 and 2

Managing Your Financial Future is a class designed for juniors and seniors interested in receiving life skills knowledge in areas such as career planning, resume writing, career exploration, interview techniques, budgeting, insurance, saving and investing. Computerized simulations are used throughout the course. Enrollment in this course does not qualify for DECA membership. **(This course does not qualify for NCAA eligibility.)**

BUSINESS MANAGEMENT/ENTREPRENEURSHIP

11th - 12th Grade

Credit - 1/2 or 1

Semester - 1

Business Management/Entrepreneurship is a class designed for juniors and seniors interested in receiving an in-depth look at all aspects of managing a business. The curriculum will cover areas such as the operation of a small corporation, stock market, marketing, advertising, personnel, international business, strategies to motivate employees, and what it takes to be an entrepreneur. To earn one credit for this course, students (juniors and seniors only) must concurrently enroll in Internship. **(This course does not qualify for NCAA eligibility.)**

MARKETING

10th - 12th Grade

Credit - 1/2 or 1

Semester - 1

Marketing is a class designed for students interested in studying the exciting world of marketing. The curriculum will cover an in-depth look at marketing analysis and research, product planning, pricing, promotion, and sales. The student is responsible for working in groups to complete several projects. To earn one credit for this course, students (juniors and seniors only) must concurrently enroll in Internship. **(This course does not qualify for NCAA eligibility.)**

ADVERTISING

10th - 12th Grade

Credit - 1/2 or 1

Semester - 1

Advertising is a course designed for sophomores, juniors, and seniors interested in studying the creative, social, and economic aspects of advertising. It gives students the opportunity to explore an exciting career in which creative, marketing, and business management skills are required. The curriculum will cover a study of the advertising industry, the Integrated Marketing Concept, knowing the customer, creating a promotional mix, developing an advertising plan, creating advertisements, and the effects of advertising in society. Students will learn to collaborate in groups for several class projects. To earn one credit for this course, students (juniors and seniors only) must concurrently enroll in Internship. **(This course does not qualify for NCAA eligibility.)**

MARKETING RESEARCH

11th - 12th Grade

Credit - 1/2

Semester - 1

Prerequisite: Business Management/Entrepreneurship, Marketing, Managing Your Financial Future, or Consent of Instructor

This independent study course is designed to allow students to work with a company/organization to complete a marketing research plan for that particular institution. Students, in conjunction with the institution, will determine a research topic, conduct marketing research, analyze the data, draw conclusions, and prepare a written report of the findings. This course meets once a week. Students who enroll in this course must be self-motivated to complete their project independently. **(This course does not qualify for NCAA eligibility.)**

CAREER AND TECHNOLOGY EDUCATION - FAMILY AND CONSUMER SCIENCES (FCS)

Course offerings in FCS focus on the areas of culinary arts, fashion design and merchandising, housing and interior design, and child development. In each area, students will use critical thinking skills and practical skills to solve issues they could encounter in the real world. They combine intellectual knowledge with hands-on experience. Courses in the FCS program are not sequenced. Special contracts in areas of interest are also available.

CULINARY ARTS I (ProStart Year 1)

9th - 12th Grade

Credit - 1/2

Semesters 1 and/or 2

Culinary Arts I (ProStart Year 1) provides an opportunity for the students with little or no prior foods preparation experience, but with an interest in food, to learn about the hospitality and restaurant industry. This basic course introduces students into the world of professional cooking. Training in safety and sanitation (ServSafe), kitchen basics and food service equipment, fruits and vegetables, and nutrition are taught in this beginning course. Lab experiences will be provided throughout the semester in order to reinforce these skills. Students will focus on kitchen sanitation and safety, nutrition, and the fundamentals of breakfast foods and sandwiches. It will be taught in the new state-of-the-art kitchen facilities. This program is a two-year industry-based program that prepares students for careers in the restaurant and food service industry. This course HAS a lab period. **(This course does not qualify for NCAA eligibility.)**

CULINARY ARTS II (ProStart Year 2)

9th - 12th Grade

Credit - 1/2

Semester - 2

Prerequisite: Culinary Arts I

Culinary Arts II (ProStart Year 2) is a course that will broaden or expand students' knowledge and skills acquired in Culinary Arts I. Topics include working with breakfast foods and sandwiches, salads and garnishes, meat, poultry, and seafood, and applying business math to control food service costs. We will also spend part of the semester discussing and experimenting with international foods and cultures. Food service employees today are expected to be well trained and versatile. Students need the knowledge and skills that will give them the qualifications to become a member of the food service industry. Work experiences with specially trained worksite mentors are

combined with a practical curriculum that imparts real-world skills and food service concepts. It will be taught in the new state-of-the-art kitchen facilities. This program is a two-year industry-based program that prepares students for careers in the restaurant and food service industry. This course HAS a lab period. **(This course does not qualify for NCAA eligibility.)**

FASHION DESIGN AND MERCHANDISING

9th - 12th Grade

Credit - 1/2

Semester 1 and/or 2

Fashion Design and Merchandising is one of the fastest growing industries in the world. During the semester, students will explore fashion fundamentals, raw and manufactured materials, fabric identification, marketing and retailing. Students will learn the use and care of sewing equipment including sewing machines, sergers, and embroidery machines, the selection of patterns and fabric, and the construction techniques necessary for garment completion. Students will compile a resource notebook that features techniques learned. Students will complete 4-5 garments as projects. Students need to purchase supplies for this course. Costs will vary based on project choices. Little or no sewing experience is required. **(This course does not qualify for NCAA eligibility.)**

HOUSING AND INTERIOR DESIGN

9th - 12th Grade

Credit - 1/2

Semester - 2

Prerequisite: None

Housing and Interior Design is a class devoted to this new and popular career choice. During the semester, students will study various elements that a budding interior designer would encounter. Topics of discussion will include the history of design, color theory, architecture, floor plans and space planning, electrical design, and much more. Students will complete several smaller projects throughout their studies with a culminating design project. Studies will be influenced by field trips to design studios, trade-only showrooms, and guest speakers from the industry. **(This course does not qualify for NCAA eligibility.)**

CHILD DEVELOPMENT & EARLY CHILDHOOD EDUCATION

9th - 12th Grade

Credit - 1/2

Semester - 1

Prerequisite: None

This course prepares students to be able to work with children. Topics of study include prenatal development, childbirth, labor and delivery, and early childhood development. Each week the students will work with the professionals and young children at the Family Center to apply their learning, gaining first-hand experience and observations in the emotional, cognitive, and physical development of children. This weekly experience will count as a practicum experience for those interested in pursuing a degree in early childhood education. **(This course does not qualify for NCAA eligibility.)**

CAREER & TECHNOLOGY EDUCATION - INDUSTRIAL TECHNOLOGY / PRE-ENGINEERING

Course offerings in Industrial Technology encompass the following areas: computer-aided drafting and design; architecture; engineering and engineering design; rapid prototyping; CNC operation; construction; alternative energies; electronics; aerodynamics; robotics; diagnostics; production control methods;

CHS now offers Project Lead the Way (PLTW), a national Pre-Engineering curriculum where students interested in engineering are eligible to receive up to six hours of articulated college credit in engineering through Affiliate Universities.

(POE) PRINCIPLES OF ENGINEERING - PROJECT LEAD THE WAY

9th - 12th Grade

Credit - 1

Full Year

Math Requirement: concurrent enrollment in College-Prep Geometry, Geometry or above.

This course provides an in-depth view of engineering and engineering technology. Students develop problem-solving skills by tackling real-world engineering problems. Through theory and practical hands-on experiences, students address the emerging social and political consequences of technological change.

POE is a part of Project Lead the Way, a multi-year, multi-course curriculum designed to support those students interested in the fields of physics, engineering and technology. Upon successful completion of this course and a college exam, students are eligible to receive three hours of articulated college credit in engineering. **(This course does not qualify for NCAA eligibility.)**

(IED) INTRODUCTION TO ENGINEERING DESIGN - PROJECT LEAD THE WAY

9th - 12th Grade

Credit - 1

Full Year

Math Requirement: concurrent enrollment in College-Prep Geometry, Geometry or above.

Intro to Engineering Design is a PLTW foundation course for students interested in engineering and design. Students will learn the various aspects of design and utilize state-of-the art CAD software and Rapid Prototyping equipment (3D printing) to apply problem-solving skills on a variety of real-world engineering problems. Students may at times be working directly with professional engineers, learning the skills and design knowledge necessary for a career in engineering. IED is part of Project Lead the Way, a multi-year, multi-course curriculum designed to support those students interested in the fields of physics, engineering and technology. Upon successful completion of this course and a college exam, students are eligible to receive three hours of articulated college credit in engineering. **(This course does not qualify for NCAA eligibility.)**

INTRODUCTION TO MATERIALS SCIENCE ENGINEERING

11th - 12th Grade

Credit - 1/2

Semester - 1 and/or 2

Intro to Materials Science is a great hands-on class that allows students to explore many different processes related to design and fabrication. Students will utilize a variety of power tools and machinery while exploring topics such as safety, design, welding, metal fabrication, wood fabrication, and even plastics. Projects are designed to be meaningful for our students and vary from year to year. This course is designed to teach students how to identify, analyze, select and manipulate materials according to their use and composition. Generally, students are allowed to design and build a final project of their own. **(This course does not qualify for NCAA eligibility.)**

(DE) DIGITAL ELECTRONICS - PROJECT LEAD THE WAY

9th - 12th grade

Credit - 1

Full Year

Math Requirement: concurrent enrollment in College-Prep Geometry, Geometry or above.

Digital Electronics is a PLTW specialty course of study in applied digital logic. Students will be introduced to digital circuits found in video games, watches, calculators, digital cameras and thousands of other devices. Students will study the application of digital logic and how digital devices are used to control automated equipment. The use of digital circuitry is present in virtually all aspects of our lives and its use is increasing rapidly. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices. DE is part of Project Lead the Way, a multi-year, multi-course curriculum designed to support those students interested in the fields of physics, engineering and technology. Upon successful completion of this course and a college exam, students are eligible to receive three hours of articulated college credit in engineering. **(This course does not qualify for NCAA eligibility.)**

(CEA) CIVIL ENGINEERING AND ARCHITECTURE - PROJECT LEAD THE WAY

9th - 12th Grade

Credit - 1

Full Year

Prerequisites: 1 foundation PLTW course or Teacher approval

Civil Engineering and Architecture is a PLTW specialty course where students will be presented with the historical influences affecting residential architecture over the years and with the major considerations in the development of home designs. Students will learn how to read, develop, design, and draw architectural floor plans and elevations as related to four basic house designs using CAD software. During the second semester, students will become familiar with various building materials, construction methods, cost estimation and presentation/marketing of Architectural designs. Students will use current professional software to develop and present completed designs and projects. CEA is part of Project Lead the Way, a multi-year, multi-course curriculum designed to support those students interested in the fields of physics, engineering and technology. Upon successful completion of this course and a college exam, students are eligible to receive three hours of articulated college credit in engineering. **(This course does not qualify for NCAA eligibility.)**

(EDD) ENGINEERING DESIGN AND DEVELOPMENT - PROJECT LEAD THE WAY

11th -12th Grade

Credit - 1

Full Year

Prerequisites: 1 foundation PLTW course and 1 PLTW specialty course

This course is the Project Lead the Way capstone course where students will use knowledge gained from previous PLTW courses to solve a real-world problem using the design process. Students will conduct research, identifying a need or a problem, and design or improve a product to meet the need. Students will conduct research, go through the design process, prototype, and explore the patent process. Class may be taken as an independent study with teacher approval. **(This course does not qualify for NCAA eligibility.)**

STAGECRAFT

9th - 12th Grade

Credit - 1/2 (60 hours) or 1 (120 hours)

Semester - 1 or 2

Prerequisite: None

This course will teach the fundamentals and basic processes for technical applications for use in theatrical events such as scenic construction, plotting and reading a draft, lighting concepts and techniques, audio console operation, basic theories of sound engineering and production management. These ideas are part of a basic skill set used in practical work environments such as CAD Drafting, architecture, scenic and lighting (stage, movie, and architectural) design, construction and carpentry, project management, and safety training. **(This course does not qualify for NCAA eligibility.)**

CAREER & TECHNOLOGY EDUCATION – CROSS-CURRICULAR OFFERINGS

Cross-curricular courses allow students to integrate learning from the various career and technology education areas and other disciplines. The courses will be designed based on student interest and will allow for flexible scheduling: for example, Theater Technology (building and construction of props/electrical wiring).

CAREER & TECHNOLOGY EDUCATION PORTFOLIO PROGRAM

9th - 12th Grade

Credit - by arrangement with instructor

Semester 1 and/or 2

Students will work with a portfolio supervisor to design a representative collection of work that demonstrates learning in the career and technology education areas. The program will provide one or more of the following opportunities: to pursue an in-depth study of the student's interest in any subject area that is generated from a career and technology education class that he/she has completed; to participate in vocational activities working with employers, businesses, or other career possibilities; to study an area where there is no class in the traditional curriculum; to provide an outlet for the creative, self-directed, and motivated student whose needs may not be met in the traditional classroom. **(This course does not qualify for NCAA eligibility.)**

SENIOR HEALTH ELECTIVE

12th Grade

Credit – 1

Full Year (1 period 1st sem./2 periods 2nd sem.)

Prerequisite: GPA of 2.0 or above

This one-year course is designed to increase interest in health care and bio-medical careers by introducing students to the variety of opportunities and benefits of the industry. There will be clinical experiences in area hospitals that will consist of job shadows, group projects, service learning and individualized mentorship. Students will be able to request several different exploratory experiences. These experiences inform students of the education requirements for each career. The in-school portion of this course will consist of foundation curriculum to prepare the students to function safely in the clinical area. Basic health care essential skills will be covered such as vital signs, CPR and first aid certification. The first semester will mainly consist of in-school foundation. Second semester, students will participate in clinical internships at a local health care institution – students will have opportunities to choose from and rotate through a variety of health care fields. Second semester will be a two-period class with requirements off-site at BJC or other area hospitals. **(This course does not qualify for NCAA eligibility.)**

THIS COURSE IS AVAILABLE FOR ELECTIVE CREDIT ONLY.

NOT AVAILABLE FOR CAREER AND TECHNOLOGY EDUCATION CREDIT.

CAREER & TECHNOLOGY EDUCATION - JOURNALISM

All Journalism courses may be taken for Career and Technology Education (CTE) credit except Newspaper Writing which is available for non-conferenced English credit only.

VIDEO PRODUCTION

9th - 12th Grade
Credit - 1/2
Semesters 1 and/or 2

Prerequisite: By application and consent of instructor

The purpose of this course is to teach students the basics of broadcast reporting, writing, and production, using digital equipment. Students will learn the basics of broadcast writing, digital camera shooting, and video editing with computer software, program production workflow, audio, lighting tools and design, studio and remote shooting, props, set dressing and scenery, production staging and interacting with talent, directing, video switchers and special effects generation, video editing, time, space, composition and language, and distribution to audience. Students will also learn to integrate their reporting skills into projects that demonstrate their abilities to produce news in both field and studio environments. Students will produce a variety of projects including news, feature, sports, commercials, films, music videos, to name a few. As the year progresses, students will demonstrate their ability to utilize various production techniques to produce a news program under deadline conditions as well as contribute to an online news website. They will learn how to shape a news broadcast from a variety of positions on a news team. The students will work on the production of the daily and bi-weekly shows. **(This course does not qualify for NCAA eligibility.)**

YEARBOOK PRODUCTION

9th - 12th Grade
Credit - 1
Full Year

Prerequisite: By application and consent of instructor

Yearbook Production produces CLAMO, the school yearbook, and meets on Thursday (general staff) and Tuesday (editors only) during 0-hour, as well as some lunch periods. The course encourages a hands-on approach to a variety of topics including news, feature, sports and alternative copy writing, as well as computer skills, page design skills, business practices, and photography. Students will engage in classroom group activities and written response and meet individually with the teacher to conference their writing. Enrollment in the class is by application only. Interested students will pick up an application from the instructor in January. Staff will be selected in time to complete the enrollment process in February and March. Selection will be based on completion of the application, an essay, writing samples, and teacher recommendation. Students interested in photography for the year, see Photojournalism for Publication. **(This course does not qualify for NCAA eligibility.)**

YEARBOOK EDITORIAL LEADERSHIP

10th - 12th Grade
Credit - 1
Full Year

Prerequisite: At least one year of Yearbook - Must be part of Editorial Staff and consent of instructor.

Students enrolled in Yearbook Editorial Leadership are in charge of all editorial aspects of producing the CLAMO Yearbook. They will meet 0-hour two days a week, plus lab time to be met during lunch periods. They will make all ethical and content decisions, as well as learn two complicated software programs, Adobe InDesign and Adobe Photoshop. They will study and understand the legal and ethical dimensions of journalism, design principles to be used in designing and laying out pages, and coaching techniques to use with younger writers. They will learn how to

handle all aspects of copy-editing. They will be responsible for managing the business and advertising section of the yearbook. They will study the work of other scholastic and professional newspapers in depth. They will also develop leadership skills so they will become capable of passing on their vision for the book to the younger staff members. Enrollment in the class is by application only. Interested students already enrolled in the Yearbook class will pick up an editorial application from the instructor in January and selection will be made in time for class registration in February. **(This course does not qualify for NCAA eligibility.)**

PHOTOJOURNALISM FOR PUBLICATION

10th - 12th Grade
Credit - 1
Semesters 1 and 2

Prerequisite: Photography I

Photojournalism is the art of telling the story of the human experience. This particular course will focus on telling the stories of our community through photographs. Students will work as photographers for both the CHS Globe newspaper and CLAMO yearbook, as well as Globe Online. Assignments may consist of photographing sports, activities, news events, and any other subjects chosen by the editorial staffs or advisors. Photojournalism students will also learn to write captions, compose photo essays, learn to use digital editing software, and study the history and significance of photojournalism. Photojournalism will meet as a 0-hour with additional weekly meetings during the student's lunch hour; date and time of zero-hour to be determined by the instructor. **(This course does not qualify for NCAA eligibility.)**

NEWSPAPER WRITING

9th - 12th Grade
Credit - 1
Full Year

Prerequisite: By application and consent of instructor (Available for NON-CONFERENCED ENGLISH CREDIT ONLY - NOT AVAILABLE FOR CAREER & TECHNOLOGICAL EDUCATION CREDIT.)

Newspaper Writing is the class for reporters for the Globe, the school newspaper, and the Globe online, an interactive, web-based publication that updates regularly. The staff meets Tuesday, 0-hour, plus 2 hours lab time to be met every other day during lunch periods. The course encourages a hands-on approach to a variety of topics including news, feature, sports and editorial writing, as well as being introduced to journalism style, history, law and ethics. Students will engage in classroom group activities and written responses in addition to quizzes and tests over various aspects of journalism. All students will write a minimum of nine articles intended for the print publication and nine shorter web articles over the year, in addition to other class assignments. Enrollment in the class is by application only. Interested students will pick up an application from the instructor or from the English office in January. Staff will be selected in time to complete the enrollment process in February. Selection will be based on completion of the application, a writing sample, and teacher recommendation. Students interested in being a newspaper photographer should sign up for Photojournalism for Publication and those interested in being artists should see the instructor about signing up for the independent study options for that work. Those interested in working on the construction end of the website should see the instructor about an independent study contract. We also have limited offerings for an Independent Study Newspaper Business Management team, who handle all advertising, database management and business relations. **A workshop at the end of the summer is mandatory for all staff members.**

NEWSPAPER EDITORIAL LEADERSHIP

10th - 12th Grade

Credit - 1

Full Year

Prerequisite: At least one year of Newspaper Writing - Must be part of Editorial Staff and consent of instructor.

Students enrolled in Newspaper Editorial Leadership are in charge of all editorial aspects of producing the Globe and the Globe Online. They will meet 0-hour two days a week (Tuesday and Friday) plus 2 hours lab time to be met every other day during lunch periods. They will make all ethical and content decisions as well as learn two complicated software programs, InDesign and Photoshop. They will study and understand the legal and ethical dimensions of journalism, design principles to be used in designing and laying out pages, and coaching techniques to use with younger writers. They will learn how to handle all aspects of copy-editing. They will be responsible for setting up a budget for the paper, and making sure that fundraising is adequate to cover that budget or make adjustments in the paper to reduce the cost. In addition, they will continue to develop as reporters and/or photographers, taking the more challenging assignments on the paper. They will study the work of other scholastic and professional newspapers in greater depth than the newspaper writing class. They will also develop leadership skills so they will become capable of passing on their vision for the paper to the younger staff members. Enrollment in the class is by application only. Interested students already enrolled in the Newspaper Writing class will pick up an editorial application from the instructor in January and selection will be made in time for class registration in February. **(This course does not qualify for NCAA eligibility.)**