Career and Technical Education – Pathways Detail

The Career and Technology Education Department (CTE) at Hillcrest High offers multiple pathways. When taken in sequence, these courses give students an opportunity to experience work skill requirements and prepare for further education and/or a global workforce.

Principals Classes

Principals of Business Marketing and Finance - In Principles of Business, Marketing, and Finance, students gain knowledge and skills in economies and private enterprise systems, the impact of global business, the marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. Allowing students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, & settings in business, marketing, and finance.

Principals of Information Technology - In Principles of IT class the students learn about cybersecurity, identity theft, netiquette and the advantages and disadvantages of social media. In addition, they learn about job interview techniques, nonverbal communications and traits of good & bad employees.

Professional Communications - Professional Communications blends written, oral, and graphic communication in a career-based environment. Careers in global economy require individuals to be creative and have a strong background in computer applications, a strong and solid academic foundation, & a proficiency in professional oral and written communication. Write, read, edit, speak, listen, apply software & manipulate computer graphics.

Career Prep Pathway

Career Prep - Practicum in Business Management is designed to give students supervised practical application of previously studied knowledge and skills. Experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of experience. Implement skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs.

Information Technology Pathway

A) Digital Media - The design of computer based media creations to solve simulated client briefs/jobs. Learn the processes and skills to use digital media development software to produce professional photography, advertisements, logo design, video and animation. Gain this in conjunction with other 21st century skills required to succeed in business.

B) Web Technology - The student will create and build websites with html coding in word pad. The students will build webpage and create blogs in WordPress.

Academy of Health Sciences (PLTW)

The Principles of Biomedical Science (PBS) - PLTW course provides an introduction to biomedical science through hands-on projects and problems. Students investigate concepts of biology and medicine as they explore health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases.

The Human Body Systems (HBS) - Students examine the interactions of body systems as they explore deeply biological identity, communication, power, movement, protection, and homeostasis. Through individual and team activities, projects, and problems, students design experiments, investigate the structures and function of the human body, and use data acquisition software.

In the Medical Interventions (MI) - PLTW course students investigate the variety of interventions involved in the prevention, diagnosis, and treatment of disease as they follow the lives of a fictitious family. Through these scenarios students will be exposed to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

The Biomedical Innovation (BI) - Students apply what they have learned in the previous three courses to solve unique problems in science, medicine, and healthcare. Students will work systematically through required problems before completing optional directed problems or independent work.

Finance Pathway

A) Money Matters - In Money Matters, students will investigate money management from a personal financial perceptive. Students will examine various methods of achieving short-term and long-term financial goals through various methods such as investing, tax planning, asset allocating, risk management, retirement planning, and estate planning.

B) **Banking and Financial Services –** In Banking and Financial Services, students will develop knowledge and skills in the economic, financial, technological, international, social, and ethical aspects of banking to become competent employees and entrepreneurs.

Business Management & Administration Pathway

A) Business and Information Management 1 - In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Apply technical skills to address business applications of emerging technologies.

B) Business and Information Management 2 - In Business Information Management II, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies, create complex word-processing documents, develop sophisticated spreadsheets using charts & graphs, & make an electronic presentation using multimedia software.

C) Global Business - Global Business is designed for students to analyze global trade theories, international monetary systems, trade policies, politics, and laws relating to global business as well as cultural issues, logistics, and international human resource management.

D) Human Resource Management – H.R.M. is designed to familiarize students with the concepts related to human resource management, including legal requirements, recruitment, and employee selection methods, and employee development and evaluation.

Marketing Pathway

A) Advertising - A comprehensive introduction to the principles and practices of advertising. Students gain knowledge used in current advertising, including print, broadcast, and digital media. Explore the social, cultural, ethical, and legal issues of advertising, historical influences, strategies, media decision processes as well as integrated marketing communications.

B) Fashion Marketing - Explore the colorful side of the business world! Explore fashion trends and methods, plan and design window displays, learn merchandising strategies, develop store promotions and layouts.

C) Entrepreneurship - The understanding of entrepreneurial practices, and keys for success in starting/taking over your own business. Learn about profiling customers, handling competition, financial management, marketing effectively and business planning. Gain this in conjunction with other 21st century skills required to succeed in business.

D) Sports and Entertainment Marketing - Sports & Entertainment Marketing will provide students with a thorough understanding of the marketing concepts and theories that apply to sports and entertainment. Including basic marketing concepts, publicity, sponsorship, endorsements, licensing, branding, event marketing, promotions & sports & entertainment.

Academy of Engineering (PLTW)

A) Introduction to Engineering - 3D computer modelling software, study the design process.

B) Digital Electronics - Use of computer simulation to learn the logic of electronics

C) Principles of Engineering - Exploration of technology systems and engineering processes.

D) Civil Engineering and Architecture - Students collaborate on the development of community based building projects.

E) Computer Integrated Manufacturing - Robotics and automated manufacturing; production of 3D designs.

F) Engineering Design and Development - Teams of students, guided by community mentors, research, design and construct solutions to engineering problems.