



Mission Valley ROP

Career Technical Training Center

2021–2022 High School Courses



Courses at Irvington High School

Anatomy and Physiology (74007)

UC "d" Credit | Ohlone College Credit

Students will gain a strong foundation in anatomy and physiology needed in the healthcare profession through lectures, guest speakers, field trips and labs. Lab skills include study of body systems and basic medical terminology.

Culinary Arts 1 (74170)

Mission College Credit

This competency-based course is geared to introduce students to the Hospitality and Food Service Industry. Included in the course are sections on food safety and sanitation, basic culinary terms, hospitality standards, knife skills, fundamentals of cooking techniques, pantry, soups, and basic pastry. Integrated throughout the course are career preparation standards, which include basic academic skills, communication, interpersonal skills, problem-solving, workplace safety, technology and employment literacy. *Students will earn Food Handlers Certification.*

Computer Support Specialist 1, 2 (74130/74140)

UC "g" Credit | Mission College Credit for Year 1, Ohlone College Credit for Year 2

This course introduces students to computer hardware and software fundamentals, scripting basics, using remote access technologies, IoT device configuration and communication types, disaster prevention and recovery methods, including virtualization, cloud computing, and security. Students are also prepared for the A+ certification exam. Second-year students are introduced to the Linux operating system and network servers, and network security.

Cyber Security (74185)

UC "g" Credit

Prerequisite: Successful completion of Internet Engineering 1 & 2

Students prepare for a career as an associate-level Security Analyst in a Security Operations Center (SOC) and prepare students for the CCNA CyberOps certification.

Digital Imaging 1 (74240)

UC "f" Credit | Ohlone College Credit

Students use digital tools and technologies as art and design mediums to visually articulate thoughts, ideas, and experiences. Technologies include digital painting, drawing, compositing and graphic design.

Digital Photography 1, 2, (74200/ 74201)

UC "f" Credit for Years 1 & 2 | Mission College Credit for Year 1

The study of digital photography encourages conceptual thinking and creativity. Students will explore hands-on digital photography fundamentals to include: Adobe Lightroom Classic, composition, design principles, the elements of art, lighting, history of photography, and analog and digital printing.

Entrepreneurship (74281)

UC "g" Credit | Mission College Credit

Students will learn what it takes to be an entrepreneur, including recognizing and evaluating a business opportunity. Students will expand their critical thinking, problem-solving, communication, and business skills through practice. Team and individual projects incorporate accounting, finance, marketing, operations, management, and understanding legal and economic environments. Students will develop and present a comprehensive business plan, including the capital required, the return on investment desired, and the potential for profit. The curriculum is designed to help students explore entrepreneurship as a career pathway and provide a realistic framework for starting a new business.

Entrepreneurial Marketing (74282)

UC "g" Credit | Mission College Credit

Students will understand the fundamentals of marketing and its importance to small businesses. This class focuses on essential ideas, including identifying markets, the 4 P's (product, price, place & promotion), ethical practices, and developing a marketing plan. The class will include career exploration and retail sales concepts, business presentations, business management, and political influences. Students will need to follow oral and written directions, work well in groups, and demonstrate good work habits to succeed in the course.

Internet Engineering 1 (74370)

UC "g" Credit | Chabot, Las Positas, Mission, or Ohlone College Credit

This course introduces the architectures, models, protocols, networking devices, applications, and data used in today's modern computer networks – including IP addressing and Ethernet fundamentals. Students will build and configure simple local area networks (LANs), includes foundational network security.

Internet Engineering 2 (74380)

UC "g" Credit | Chabot, Las Positas, Mission, or Ohlone College Credit

Prerequisite: Successful completion of Internet Engineering 1.

This course focuses on switching technologies and router operations that support small-to-medium business networks, wireless local area networks (WLANs), and security concepts. Students learn key switching and routing concepts, network configuration and troubleshooting, and identify and mitigate LAN/WLAN security threats.

Introduction to Computer Science (73031)

Ohlone College Credit

This dual credit semester course introduces students to computer systems hardware and software in the field of computer science. The goal is to focus on the Internet of Things and how it enables the Digital Transformation and emerging technologies such as data analytics, artificial intelligence, and cybersecurity. This course will also introduce the importance of the Internet-Based Networking that uses a software-driven approach and machine learning to secure tens of billions of new devices.

Introduction to Engineering and Design (74209)

UC "f" Credit

This Project Lead the Way (PLTW) course will expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. Students will make models and use 3D solid modeling design software to help them design solutions to solve proposed problems and how to document their work and communicate solutions to peers and members of the professional community.

Principles of Engineering (74213)

UC "g" Credit | Las Positas College Credit

This survey course of engineering exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, documenting their work and communicating solutions to peers and members of the professional community.

Sports Therapy 1, 2 (1 Hour) (74460/74461)

UC "g" Credit | Chabot College Credit

This course is for students interested in the areas of athletic training, physical therapy, occupational therapy, and strength and conditioning. Areas covered include: anatomy/physiology, emergency procedures, injury recognition, evaluation and treatment, taping and wrapping. Students will earn CPR certification. Internships are required. *Students must meet all requirements to participate in internships.*

For more information about MVRP and our programs go to www.mvrop.org