

# MISSION VALLEY ROP

## 2025-2026 HIGH SCHOOL COURSE SCHEDULE



## EXPLORE OPPORTUNITIES WITH CTE COURSES

For over forty years, Mission Valley ROP (MVROP) has provided Career Technical Education (CTE) programs preparing students for successful business, medical, and technical careers. Operating under a partnership with Fremont, New Haven, and Newark Unified School Districts, approximately 4,000 students participate each year in ROP's exemplary CTE programs.

MVROP courses are offered on every high school campus and its Center Campus. Programs on the Center Campus are available in the morning block or afternoon block and run for two hours. Specific course details (College Credits, UC "a-g" Credits, and internships) can be found in the schedule details.

To register for a MVROP CTE course, please contact your school counselor, College and Career Specialist or visit your campus Career Center. For additional information about MVROP and our classes visit [www.mvrop.org](http://www.mvrop.org) or our social media channels.

# 2025-2026 COURSES AT ROP CENTER CAMPUS



## **Auto Body Painting and Refinishing 1, 2 (74020/74021)**

This course offers an introduction to Auto Body and Refinishing. Students will learn from a certified instructor and use industry-standard techniques, materials, and tools including a state-of-the-art, heated downdraft paint booth.

## **Automotive Technology 1, 2 (74040/74041)**

### **UC "g" Credit for Year 1 | Chabot College Credit for Year 1**

**Prerequisite for Auto Tech 2: B- or better in Auto Tech 1** This course offers hands-on experience in auto shop operations, tool usage, safety procedures, equipment operation, and customer service; skills learned include general auto repair, brakes, steering and suspension, electrical systems, and engine performance. Year two focuses on advanced skills including various Advanced Drivers Assistance Systems (ADAS), exploring system operation, diagnosis, service, and calibration skills. Students will earn industry-level certifications.

## **Careers in Education 1, 2 (74110/74112)**

### **UC "g" Credit for Year 1 | Ohlone College Credit**

Discover opportunities available in the Early Childhood profession. Explore principles of integrated academic and technical skills, communicate and collaborate with diverse audiences, demonstrate creativity and innovation, develop personal, educational, and career goals. Proof of current TB test and internship required.

## **Civil Engineering & Architecture-PLTW (74120)**

### **UC "d" Credit**

In this PLTW capstone course, students learn civil engineering and architecture including design and development of residential and commercial properties and structures. Students learn hand drafting, build architectural models and use 3D design software.

## **Computer Animation 1, 2 (74126/74127)**

### **UC "f" Credit | Ohlone College Credit for Year 1**

Learn to create 2D and 3D animation using industry-standard software. Students will develop skills in storyboarding, 3D modeling, character design, and concept art.

## **Computer Science Principles/ Digital Electronics-PLTW (74214/74212)**

### **UC "d" Credit | Ohlone College Credit**

This unique course combines one semester of Computer Science Principles and one semester of Digital Electronics using the Project Lead the Way (PLTW) curriculum. Students study topics such as Web Development, Python® programming, drone programming, Ohm's Law, combinational/sequential logic, programmable logic devices, and more. This course will allow students to survey different engineering disciplines before beginning post-secondary education or starting a career.

## **Construction Technology 1, 2 (74150/74151)**

### **Chabot College Credit for Year 1**

This course prepares students for entry-level employment in residential and commercial construction. Students receive hands-on training in carpentry, electrical, and plumbing, and drywall; including roofing, kitchen and bath remodeling, and using energy-efficient building materials. Qualified students are connected to local unions.

## **Digital Video Arts Production 1, 2 (74230/74231)**

### **UC "f" Credit | Ohlone College Credit for Year 1**

Video production including camera work, editing, and the production process of short fiction, documentary, commercial, and "live TV"; analyze film scenes and sequences, develop production management skills. Produce videos from scriptwriting to final edit.

## **Emergency Medical Responder (74315)**

### **UC "g" Credit | Chabot or Las Positas College Credit**

Students in this course will learn EMR skills such as first responder well-being, legal and ethical issues, lifting and moving patients, patient assessment, medical emergencies, EMS system and operations, and managing multi-casualty incidents. Students who complete the EMR program earn an American Heart Association CPR card.

## **Fire Technology (74310)**

### **UC "g" Credit | Mission or Las Positas College Credit**

Introductory course for careers in fire service; firefighting tactics/ strategies, physical agility, fire safety, ladder, hose and nozzle operations, tools, equipment, and fire prevention. American Heart Association CPR card available. Open to juniors and seniors.

## **Game Design/Interactive Media Arts (74350/74351)**

### **UC "f" Credit | Ohlone College Credit or Chabot College Credit for Year 1**

Learn to create 2D and 3D interactive games, game art and simulations using 3DS Max, Unreal, and 2D game engines. Students will develop skills in game design documents, level design, 2D sprites, 3D modeling, character design and animation.

## **Honors Medical Interventions/**

### **Honors Biomedical Innovation- PLTW (74221/74222)**

#### **UC "d" Credit for each semester course**

**Prerequisite: Completed PBS/HBS course or three years of high school science. Priority placement for PBS/HBS completers.** This is a year-long combined course. First semester, in Honors Medical Interventions, students learn immunology, cancer biology, surgery, genetics, pharmacology, medical devices, and diagnostics. Second semester, in Honors Biomedical Innovation, students learn about public health, biomedical engineering, clinical medicine, and physiology. Work-related experience may be available.

## **Law Enforcement/ Homeland Security 1, 2 (74400/74401)**

### **UC "g" for Year 1 | Ohlone College Credit for Year 1**

Students learn legal vocabulary, general knowledge of the law, search and seizure procedures, laws of arrest, judicial systems, specialized police practices, and improvement in written/oral communication. Students engage in physical agility training defensive tactics, activity, including running and tactical training. Explore careers within the criminal justice system and job search procedures. Year two focuses on leadership and management theory, reinforced through practical application assignments.

## **Medical Assisting (74410)**

### **UC "g" Credit**

This course provides career preparation for Medical Assistant positions in the healthcare industry. Students will receive heavy academic instruction in human anatomy. Internships are required second semester. Students not meeting all requirements for internships will not continue in the course.

## **Music Production 1, 2 (74284/74286)**

### **UC "f" Credit**

Learn about virtual instruments and making music in Digital Audio Workstations including Pro Tools, and Logic Pro X. Students develop recording, editing, and mixing techniques, as well as learn music theory and introduction to live sound. Students explore career and college pathways in the music and live sound industry.

## **Nursing Assistant (74430)**

### **UC "g" Credit**

This course provides career preparation for Nursing/Health Care with personal patient care, systems review, safety principles, infection control, HIPAA, restorative care, body mechanics, nutrition, vital signs, Home and Acute Care. Internships at skilled nursing, Assisted Living, Home Care (medical/non-medical), dementia, or Acute Care facilities are required second semester. Students not meeting all requirements for internships will not continue in the course.

## **Pharmacy Technician (74440)**

### **UC "g" Credit**

Students will gain valuable skills in processing prescriptions, managing inventory, compounding pharmaceuticals, and preparing intravenous medications, under supervision of licensed pharmacists. Students must meet all requirements, including drug testing and background checks, to participate in internships. Successful completion of this program qualifies students for the PTCE (Pharmacy Technician Certification Exam).

## **Principles of Biomedical Science/ Human Body Systems- PLTW (74216/74217)**

#### **UC "d" Credit for each semester course**

This is a year-long combined course. During the first semester, in Principles of Biomedical Science, students explore concepts in biology and medicine such as genetics, microbiology, epidemiology, and clinical care. During the second semester, in Human Body Systems, students learn the interactions of human body systems and apply them to solve real-world medical cases.

## **Sound Design for Film and Video Games 1, 2 (74283/74285)**

### **UC "f" Credit**

Students will learn to create sound effects for film and video games using Pro Tools and Logic Pro X. Record and edit sound effects with Foley recording and ADR techniques. Learn to integrate sounds into gaming projects using programs such as Unreal Engine and Wwise. Students develop an online career portfolio that will highlight their creative work.

## **Sports Therapy 1, 2 (74470/74471)**

### **UC "g" Credit for Year 1 | Chabot College Credit for Year 1**

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 earn CPR certification. Internships are required. Students must meet all requirements to participate in internships.

## **Welding & Metal Joinery 1, 2 (74500/74501)**

### **Chabot College Credit for Year 1**

This course is for students interested in the areas of welding and metalworking. Students learn the use of hand tools, cutting, and preparation techniques as they relate to welding and fabrication, and will take part in group and individual projects throughout the year. Students will be able to earn industry certifications.