



# 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)

### Chabot College Credit

**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 for Years 1 & 2 | Chabot College Credit for Year 1

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. Students are able to give presentations to professional engineers and architects.

## 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 (74214/74212)

### UC "d" 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

This course prepares students for entry-level employment in residential and commercial construction. Students receive hands-on training in carpentry, electrical, and plumbing; 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

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 scripting to final edit. (Recommend prior class in fine arts, computer applications or digital graphics.)

## Emergency Medical Responder (74315)

### Chabot, Las Positas, Mission 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 | Las Positas, Mission 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

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 | Ohlone College Credit

**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. CPR certification. 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 activity, including running and Kajukenbo. 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 health-care industry. Students will receive heavy academic instruction in human anatomy. This course will provide students with a fundamental understanding of the MA and their role in health-related fields. Internships are required second semester. Students not meeting all requirements for internships will not continue in the course.

## Music Production (74284)

### UC "f" Credit

Learn about virtual instruments and making music in Digital Audio Workstations including Pro Tools, Cubase, and Adobe Audition. Students develop recording, editing, and mixing techniques, as well as learn music theory and introduction to acoustics. Students explore career and college pathways in the music 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

Career preparation for pharmacy technician in pharmaceutical field; process prescriptions, inventory, compounding, making intravenous medications, and other duties under the direction of a pharmacist. Internships are required during 2nd semester. Students not meeting all requirements for internships will not continue in the course.

## 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 learn about human physiology, immunology, microbiology, medicine, and research processes. During the second semester, in Human Body Systems, students examine the interactions of human body systems and biomedical professionals.

## Sound Design for Film and Video Games (74283)

### UC "f" Credit

Students will learn to create sound effects for film and video games using Pro Tools, Adobe Audition, and Cubase. 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 | 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 earn CPR certification. Internships are required. Students must meet all requirements to participate in internships.