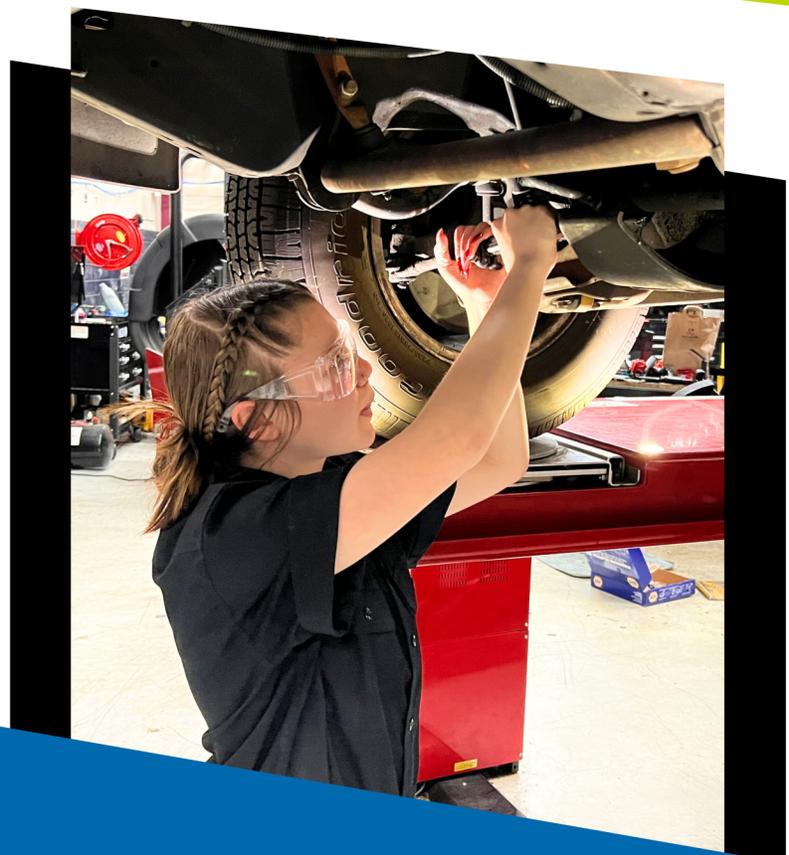




 Eden Area ROP  
**COURSE  
CATALOG  
2026 - 2027**



# MISSION STATEMENT

*The mission of the Eden Area ROP is to build a foundation for students that prepare them academically, technically, and professionally to meet challenging opportunities of the 21st Century with confidence and purpose.*

## OUR VISION

*Our vision is to embody our Core Values, leveraging our trained skills and knowledge to become visionary leaders in our careers and inspire social and economic growth in our communities.*

## CORE VALUES

### EQUITABLE

*We believe in fostering belonging and creating a safe and inclusive environment that works to eradicate the impacts of racism, bias, discrimination, and privilege.*

### ACCESSIBLE

*We believe all students, families and staff should feel seen, heard, welcomed, included, respected, and have access to economic and educational mobility.*

### RESTORATIVE

*We believe instruction should be culturally and historically responsive, restorative, trauma-informed, ethical, and prepare students for a path to self-fulfillment and self-actualization.*

### OUTCOMES

*We believe our students will find a pathway with confidence and purpose that guides them towards a career, college, service to others, and life-affirming endeavors.*

### PROFESSIONAL

*We believe excellence is the standard, as such, we will work with integrity, transparency, respect, and clear communication.*

**WE BELIEVE IN THE EDEN AREA ROP!**

# CONTENTS

## THE EDEN AREA REGIONAL OCCUPATIONAL PROGRAM

- LETTER FROM THE SUPERINTENDENT ..... 4**
  
- ABOUT US ..... 5**
  
- CENTER PROGRAMS ..... 6**
  - AUTOMOTIVE COLLISION AND REFINISHING I P, II P ..... 6
  - AUTOMOTIVE TECHNOLOGY I P, II P ..... 7
  - CAREERS IN EDUCATION I P, II P ..... 8
  - CAREERS IN LAW, FORENSICS, AND PUBLIC SAFETY I P, II P ..... 9
  - CONSTRUCTION TECHNOLOGY I P, II P ..... 10
  - CULINARY SCIENCE I P, II P ..... 11
  - CYBERSECURITY I P, II P ..... 12
  - DENTAL ASSISTING I P, II P ..... 13
  - FIRST RESPONDER (FIRE SCIENCE/EMT) I P, II P ..... 14
  - MEDICAL CAREERS I P, II P ..... 15
  - MERCHANDISING I P, II P ..... 16
  - WELDING TECHNOLOGY I P, II P ..... 17
  - ZERO EMISSION VEHICLE TECHNOLOGY I ..... 18
  
- PARTICIPATING SCHOOL SITES ..... 19**
  - CASTRO VALLEY UNIFIED SCHOOL DISTRICT ..... 19
  - HAYWARD UNIFIED SCHOOL DISTRICT ..... 22
  - SAN LEANDRO UNIFIED SCHOOL DISTRICT ..... 25
  - SAN LORENZO UNIFIED SCHOOL DISTRICT ..... 26
  
- COMMUNITY COLLEGE ARTICULATION AGREEMENTS ..... 30**

# LETTER FROM THE SUPERINTENDENT

---

Dear Students and Families,

The Eden Area Regional Occupational Program (EAROP) provides young people in our four school districts with clear, defined, and articulated pathways to their future. Students receive academic, professional, and technical instruction in a wide range of hands-on disciplines that lead to high demand and high wage post-secondary careers.

The EAROP combines education with work experience. We provide an environment for students to further their educational goals in the context of their career goals. We braid the development of their soft skills, their technical skills, and their academic skills to holistically prepare students for whatever is next (and because of well-developed pathways, we can define “whatever is next”). We are a place where students can explore and experience. Students learn that post-secondary education isn’t a default. It is an intentional goal with an expected outcome.

Our Pathways and instructors help students immerse themselves in relevant learning experiences that build skills, confidence, and a roadmap to their future. Students can earn EAROP and industry standard certifications and gain exposure to the workplace. As they explore hands-on experiences, students also participate in activities designed to expand their leadership skills. EAROP Pathways do not just prepare students for the next step but for the many steps that follow. Through early college credit, students learn that they can be successful in rigorous college courses. Through internships and pre-apprenticeships, students learn that they can thrive in the workplace.

The most important thing an interested student can do while looking through this catalog is to identify which pathway inspires them. The first step on any journey is finding a path that excites the imagination. There is no one path to a successful and satisfying adult life.

Students, the EAROP prepares you for the journey. Our instructors, staff, and business partners are your first guides during the most important leg of that journey – the beginning. We see your potential and know how to help you tap into your strengths and overcome any challenge. EAROP builds a sense of self, a sense of belonging, and a sense of purpose. And we do it while guiding you towards a career, college, service to others, economic and educational mobility, and to a beautiful future.



Blaine C. Torpey  
Superintendent

# ABOUT US

---

**What is ROP?** Regional Occupational Programs (ROPs) are one of the longest-standing forms of postsecondary career preparedness in California. The intent of the ROP structure is to provide a hands-on learning experience through Career Technical Education (CTE) curriculum for students (High School Juniors and Seniors) and adults with entry-level career and technical training. Eden Area Regional Occupational Program offers courses on site, and at Castro Valley, Hayward, San Leandro, and San Lorenzo Unified School Districts. These courses prepare students for careers and further education, as well as instill workplace values that will enable them to compete successfully in the economy of today and the future.

**Why take courses at Eden Area ROP?** Experience is the greatest teacher. We offer hands-on career training that covers 13 different industry sectors. Many of our courses also offer the opportunity to earn industry recognized certification. Our facility is fully outfitted with industry standard equipment and credentialed instructors with years of real-world experience.

**How do I register for Eden Area ROP classes?** Students who are interested in registering for ROP classes are encouraged to make an appointment with their high school counselor or visit the career center on their high school campus. Students may also visit our website [www.edenrop.org](http://www.edenrop.org)

**Are high school & college credits available?** Yes! All courses offer high school credits. Some courses fulfill math and science credits for graduation for some districts. Many of our courses offer early college credit through dual enrollment and articulation agreements with local community colleges, allowing students the opportunity to earn college credit.

**What is an Articulation?** Articulation is a link between a high school or ROP and a collegiate institution. An articulation agreement allows students to earn free college credit. The credit is placed on the student's collegiate transcript and can be taken to some colleges for credit. Additionally, articulation may allow a student to skip the entry level course when they enroll in a college. (Please see pages 29-30 for a list of articulated courses).

**What is Dual Enrollment?** Dual Enrollment is a fantastic opportunity for high school students to begin their college education. This program allows students to take college courses taught by college professors on their high school campuses while also counting towards their high school diploma. Thanks to the College and Career Access Pathways (CCAP) partnership, this opportunity is now available to eligible students, including those who may have never considered college or are underrepresented in higher education. The CCAP program has been extended to make it easier for students to apply and complete their college courses. This program empowers students to take control of their futures and achieve their full potential.

**What is the cost?** EAROP is free to high school students.

**What about transportation?** Eden Area ROP provides free bus transportation to and from student's resident school, for any student enrolled in our programs at the center.

**What is a community classroom?** A community classroom provides the student the opportunity to work while earning high school credits. This type of learning is referred to as an internship. Students work non-paid positions to gain on-the-job experience. This work advances the students' skill set, making them more competitive in the job market.

**Is business involved?** Local employers participate on Eden Area ROP advisory committees to keep training current with industry standards. Many classes offer non-paid internships or on-the-job training at businesses and industry sites throughout the county. Employers who need highly skilled, motivated employees hire Eden Area ROP graduates!

## Automotive Collision & Refinishing I P

### TRANSPORTATION INDUSTRY SECTOR



**COURSE BENEFITS:**  
SLZUSD – Math Credit  
UC “g” Course Credit  
Skills USA Competition

**CERTIFICATION(S):**

- 3M Collision Repair Academy
- Crash Champions: Plastic Repair Series
- Ethics and YOU in the Automotive Industry
- PPG Certification
- S/P2 Certification
- Valvoline Certification
- WD-40 Certification

**Automotive Collision & Refinishing I P** introduces students to the fundamentals of auto body repair and refinishing through hands-on, project-based learning. Students build technical expertise while developing essential workplace skills, including communication, teamwork, and problem-solving.

*Selection of skills and knowledge learned throughout the course:*

- Estimating repair costs and strategies
- Auto body refinishing techniques
- Safety procedures and protocols
- Precision painting and detailing
- Proper use of industry tools and equipment

By the end of the course, students will create professional portfolios showcasing their work, preparing them for entry-level opportunities and further training in the automotive industry.

## Automotive Collision & Refinishing II P

### TRANSPORTATION INDUSTRY SECTOR



**COURSE BENEFITS:**  
SLZUSD – Math Credit  
UC “g” Course Credit  
Skills USA Competition

**CERTIFICATION(S):**

- 3M Collision Repair Academy
- Crash Champions: Plastic Repair Series
- Ethics and YOU in the Automotive Industry
- PPG Certification
- S/P2 Certification
- Valvoline Certification
- WD-40 Certification

**Automotive Collision and Refinishing II P** builds on the skills learned in the first year, advancing students’ technical abilities and leadership experience. In this course, students take on responsibilities such as leading projects, mentoring first-year students, and managing shop operations in a collaborative, professional setting.

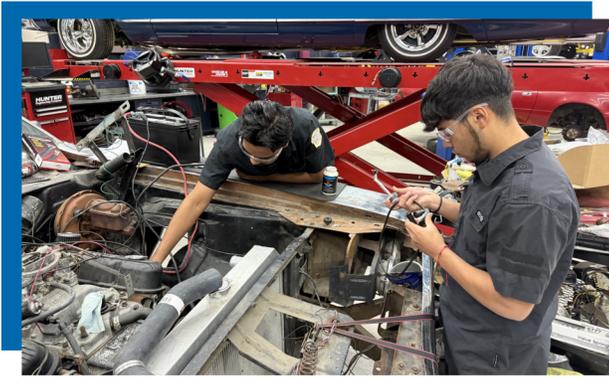
*Selection of skills and knowledge learned throughout the course:*

- Advanced surface preparation, painting, and refinishing techniques
- Auto body restoration and welding
- Project planning, design, and organization
- Leadership skills and teamwork
- Safety protocols and effective use of industry tools

Students develop a deeper understanding of auto-body repair and refinishing through hands-on projects and real-world applications. By completing this course, students gain valuable skills and confidence to explore pathways into advanced training, apprenticeships, or entry-level roles in the automotive repair and refinishing industry.

## Automotive Technology I P

### TRANSPORTATION INDUSTRY SECTOR



#### COURSE BENEFITS:

SLZUSD - Math Credit  
UC "g" Course Credit  
Dual Enrollment with Chabot College  
Skills USA Competition

#### CERTIFICATION(S):

- All Data Certification
- Automotive Lift Institute
- ASE Certification
- Shop Key Pro Certification
- S/P2 Certification
- Tire Repair Certification
- Valvoline Certification
- WD-40 Certification

**Automotive Technology I P** introduces students to the fundamentals of automotive repair and maintenance through hands-on shop work, instructional content, and online safety training. As part of the ASE Certified Program, students develop essential skills to maintain a professional shop environment, work effectively in teams, and diagnose and repair vehicle systems.

#### *Selection of skills and knowledge learned throughout the course:*

- Identification and function of automotive parts
- Safety procedures, hand tool usage, and fasteners
- Accessing and applying service information
- Proper use of automotive chemicals and fluids
- Hazardous waste handling and disposal
- General vehicle servicing and shop equipment use
- Troubleshooting, problem analysis, and shop practices

By the end of the course, students will have a solid foundation in automotive repair, preparing them for entry-level opportunities in the automotive industry or further specialized training.

## Automotive Technology II P

### TRANSPORTATION INDUSTRY SECTOR



#### COURSE BENEFITS:

SLZUSD - Math Credit  
UC "g" Course Credit  
Skills USA Competition

#### CERTIFICATION(S):

- All Data Certification
- Automotive Lift Institute
- ASE Certification
- Shop Key Pro Certification
- S/P2 Certification
- Tire Repair Certification
- Valvoline Certification
- WD-40 Certification

**Automotive Technology II P** advances students' technical expertise and workplace readiness, focusing on leadership, diagnostics, and advanced repair techniques. Students take on key roles leading shop operations, mentoring peers, and tackling complex mechanical challenges, preparing them for success in the automotive industry.

#### *Selection of skills and knowledge learned throughout the course:*

- Advanced technical skills in ASE certification areas
- Diagnostics, troubleshooting, and repair techniques
- Leadership development and teamwork in shop operations
- Electrical systems analysis and repair
- Work ethic enhancement and professional communication

Aligned with National Institute for Automotive Service Excellence (ASE) standards, this course equips students with the skills, confidence, and hands-on experience needed to pursue advanced certifications, specialized training, and rewarding career opportunities in the automotive industry.

## Careers in Education I P

### EDUCATION, CHILD DEVELOPMENT AND FAMILY SERVICES INDUSTRY SECTOR



#### **COURSE BENEFITS:**

UC "g" Course Credit  
Dual Enrollment with Chabot College  
Internship Placement  
ECE Pre-apprenticeship Pending

#### **CERTIFICATION(S):**

- Automated Electronic Defibrillator (AED)
- American Heart Association - Basic Life Support (BLS)
- Cardiopulmonary Resuscitation (CPR)
- CA Child Development Permit
- First Aid Infant and Child

**Careers in Education I P** introduces students to the developmental stages of children, from conception through adolescence, with an emphasis on foundational theories of development and their practical application. Students explore human behavior to gain a deeper understanding of their own actions and those of children.

The course combines in-class instruction (two days per week) with a hands-on internship (three days per week), providing a balanced approach to theory and practice.

#### *Selection of skills and knowledge learned throughout the course:*

- Understanding human behavior and interpersonal dynamics
- Growth and development of children
- Mechanisms of learning and cognitive development
- Memory, intelligence, and processing skills
- Exploration of diverse teaching techniques

Students gain valuable exposure to the education field, including employment preparation and safety protocols such as school emergency procedures. This program lays the foundation for careers in education and related fields.

## Careers in Education II P

### EDUCATION, CHILD DEVELOPMENT AND FAMILY SERVICES INDUSTRY SECTOR



#### **COURSE BENEFITS:**

UC "g" Course Credit  
Dual Enrollment with Chabot College  
Internship Placement  
UC Honors Designation  
ECE Pre-apprenticeship Pending

#### **CERTIFICATION(S):**

- Automated Electronic Defibrillator (AED)
- American Heart Association - Basic Life Support (BLS)
- Cardiopulmonary Resuscitation (CPR)
- CA Child Development Permit
- First Aid Infant and Child

**Careers in Education II P** deepens students' understanding of cognitive, emotional, social, and physical development while helping them identify their personal educational values. The course combines classroom instruction with hands-on work-based learning, placing students in preschool, elementary, and special education settings to assist teachers.

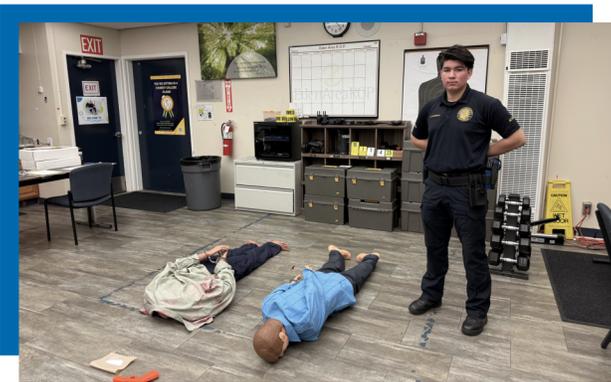
#### *Selection of skills and knowledge learned throughout the course:*

- Developmentally appropriate lesson planning
- Hands-on teaching methods grounded in educational theory
- Techniques for meeting children at their developmental level
- Strategies to support academic and socio-emotional growth
- Problem-solving and critical thinking in educational settings
- Child guidance and classroom management techniques

This program provides valuable classroom experience and professional preparation, equipping students to pursue college or career pathways in early childhood education and related fields.

## Careers in Law, Forensics, and Public Safety I P

### PUBLIC SERVICES INDUSTRY SECTOR



#### COURSE BENEFITS:

SLZUSD – Science Credit  
HUSD – Science Credit  
UC “g” Course Credit  
College Credit Available  
Skills USA Competition

#### CERTIFICATION(S):

- Administration of Justice & Corrections
- Forensics & Crime Scene Investigations
- Law, Public Safety, and Law Enforcement

**Careers in Law, Forensics, and Public Safety I P** introduces students to three key fields: Administration of Justice & Corrections, Forensics & Crime Scene Investigations, and Law, Public Safety, & Law Enforcement. Students gain foundational knowledge of the American legal system, criminal justice operations, and forensic science through hands-on applications. They explore the criminal justice process from incident response to courtroom proceedings, preparing for real-world scenarios in law enforcement and beyond.

#### *Selection of skills and knowledge learned throughout the course:*

- Physical agility training for law enforcement readiness
- People management and crowd control
- Crime scene investigation and evidence processing
- Conducting interviews and documenting evidence
- Crime procedures and photography
- Introduction to civil and criminal law
- Collecting and analyzing physical evidence
- Dusting and lifting fingerprints
- Evidence packaging and submission for laboratory analysis

Students will also participate in mock trials and build foundational skills for future roles in law enforcement, such as detectives, corrections officers, and other criminal justice careers. Certificates earned include basic certification in the program’s focus areas.

## Careers in Law, Forensics, and Public Safety II P

### PUBLIC SERVICES INDUSTRY SECTOR



#### COURSE BENEFITS:

UC “g” Course Credit  
College Credit Available  
Skills USA Competition

#### CERTIFICATION(S):

- Administration of Justice & Corrections
- Forensics & Crime Scene Investigations
- Law, Public Safety, and Law Enforcement

**Careers in Law, Forensics, and Public Safety II P** advances students' expertise in the Administration of Justice & Corrections, Forensics & Crime Scene Investigations, and Law, Public Safety, & Law Enforcement. Second-year students take on leadership roles, guiding first-year students through drills, forensic investigations, and field operations. They also deepen their knowledge of court procedures, corrections, and law enforcement with hands-on experiences like mock trials and advanced crime scene simulations.

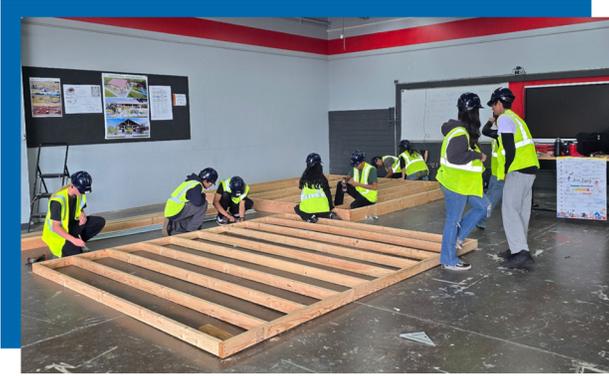
#### *Selection of skills and knowledge learned throughout the course:*

- Leading investigative teams and forensic drills
- Advanced organizational and leadership skills
- Greater understanding of the criminal justice process
- Effective communication and interpersonal skills
- Problem-solving and decision-making in high-pressure situations
- Advanced crime scene investigation techniques
- Mastery of courtroom procedures through mock trials

Students earn certifications at the advanced and mastery levels, preparing them for high-ranking roles in law enforcement, such as cadets, lieutenants, detectives, corrections officers, or other leadership positions. These certifications ensure career readiness in competitive and demanding fields.

# Construction Technology I P

## BUILDING TRADES AND CONSTRUCTION INDUSTRY SECTOR



### COURSE BENEFITS:

SLZUSD - Math Credit  
UC "g" Course Credit  
Skills USA Competition  
College Credit Available  
CTWI Pre-apprenticeship

### CERTIFICATION(S):

- OSHA 10

**Construction Technology I P** introduces students to the fundamentals of residential and commercial construction through hands-on projects and applied mathematics. Students develop skills in structural work, finish carpentry, and electrical systems while utilizing advanced tools and modern construction technologies, such as design software. Emphasizing safety, problem-solving, and critical thinking, this course provides a strong foundation for success in the construction industry.

### *Selection of skills and knowledge learned throughout the course:*

- Construction-related math and measurement
- Developing and interpreting scaled drawings
- Electrical systems and carpentry techniques
- Safe operation of advanced tools and industrial equipment
- Blueprint reading and following technical specifications
- Effective use of construction technology and apps

Through hands-on experience, students work on projects ranging from home remodeling to infrastructure development, honing technical expertise while building essential skills in communication, teamwork, and work ethic to thrive in construction and related industries.

# Construction Technology II P

## BUILDING TRADES AND CONSTRUCTION INDUSTRY SECTOR



### COURSE BENEFITS:

SLZUSD - Math Credit  
UC "g" Course Credit  
Skills USA Competition  
College Credit Available  
CTWI Pre-apprenticeship

### CERTIFICATION(S):

- OSHA 10

**Construction Technology II P** builds on foundational skills, advancing students' expertise in specialized trades and leadership. Second-year students take on roles such as leads, foremen, and project managers, gaining experience overseeing projects, mentoring peers, and managing operations. The course emphasizes advanced techniques in electrical, plumbing, and carpentry while utilizing modern technology and industrial-grade tools to ensure precision and efficiency.

### *Selection of skills and knowledge learned throughout the course:*

- Advanced electrical, plumbing, and carpentry techniques
- Leadership, project management, and team coordination
- Safe and proficient use of advanced power tools and industrial equipment
- Blueprint reading and understanding technical specifications
- Cost estimation, material selection, and resource management

Students gain real-world experience through hands-on projects that prepare them for careers in construction, remodeling, and maintenance. This course equips students with the skills and knowledge to pursue certifications, join trade unions, secure employment, or continue their education in fields like construction management, architecture, or engineering, opening pathways to a wide range of careers in the construction industry.

## Culinary Science I P

### HOSPITALITY, TOURISM AND RECREATION INDUSTRY SECTOR



#### **COURSE BENEFITS:**

UC "g" Course Credit  
College Credit Available  
Skills USA Competition

#### **CERTIFICATION(S):**

- Servsafe Food Handler's Certification

**Culinary Science I P** introduces students to the fundamentals of culinary arts with a focus on food preparation, catering, and customer service. Through hands-on experience, students develop essential skills in kitchen safety, sanitation, and food presentation while exploring the basics of nutrition and event planning. The course emphasizes precision and teamwork, providing a solid foundation for careers in the food service industry.

#### *Selection of skills and knowledge learned throughout the course:*

- Fundamentals of food preparation and presentation
- Kitchen safety and sanitation
- Nutrition
- Event planning
- Knife skills
- Pastry

Students will gain the skills needed to pursue entry-level positions in catering, bakeries, and restaurants, with a strong foundation to grow in the culinary field.

## Culinary Science II P

### HOSPITALITY, TOURISM AND RECREATION INDUSTRY SECTOR



#### **COURSE BENEFITS:**

UC "g" Course Credit  
UC Honors' Designation  
Skills USA Competition

#### **CERTIFICATION(S):**

- Servsafe Food Handler's Certification

**Culinary Science II P** builds on foundational culinary skills, offering advanced training in food service, catering management, and large-scale food production. Students work in an industry-grade commercial kitchen, engage with industry professionals through guest presentations, and complete extended hands-on projects demonstrating their expertise.

The course focuses on catering operations, event planning, and food-cost management, preparing students for careers in the restaurant, travel, catering, and food service industries. Capstone projects and advanced culinary labs provide real-world experience, allowing students to refine their skills for future success.

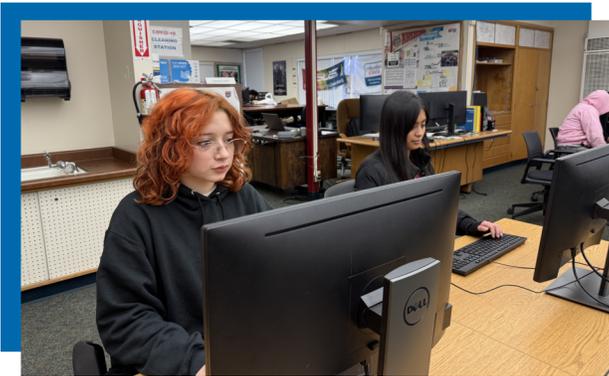
#### *Selection of skills and knowledge learned throughout the course:*

- Advanced catering management and event planning
- Food preparation, presentation, and large-scale production
- Kitchen safety, sanitation, and hygiene practices
- Food-cost control, budgeting, and resource management
- Culinary techniques, knife skills, and precision cutting
- Pastry and dessert production
- Customer service and entrepreneurship

Students leave the program with the expertise to pursue careers in culinary arts, catering management, and food service, with opportunities for professional certifications and further specialization.

## Cybersecurity I P

### INFORMATION AND COMMUNICATION TECHNOLOGIES SECTOR



#### **COURSE BENEFITS:**

SLZUSD - Math Credit  
UC "g" Course Credit  
College Credit Available  
Skills USA Competition

#### **CERTIFICATION(S):**

- Cisco Junior Cybersecurity Analyst
- CompTIA Security+ SY0-601
- Google Cybersecurity Professional Certificate
- Google IT Support Certificate

**Cybersecurity I P** is a full-year high school course covering networking fundamentals. It is equivalent to a college-level Introduction to Networking course. The course interweaves essential networking concepts with relevant, hands-on problem-solving activities to maximize students' understanding of network hardware and configuration, the use of protocols to enable reliable and accurate transmission of data between different hosts around the world, and relevant security practices that secure the transmission of data both within and between computer networks.

Selection of skills and knowledge learned throughout the course:

- Explain networking and cybersecurity concepts
- Design a secure network
- Configure a secure network
- Problem-solving
- Communication
- Collaboration

Networking Fundamentals is designed to help students develop understanding and skills that will contribute to their ability to pass widely recognized professional cybersecurity certifications such as CompTIA Network+, Cisco Certified Networking Associate (CCNA), and Cisco Certified Support Technician (CCST): Networking.

## Cybersecurity II P

### INFORMATION AND COMMUNICATION TECHNOLOGIES SECTOR



#### **COURSE BENEFITS:**

UC "g" Course Credit  
College Credit Available  
Skills USA Competition

#### **CERTIFICATION(S):**

- Cisco Junior Cybersecurity Analyst
- CompTIA Security+ SY0-601
- Google Cybersecurity Professional Certificate
- Google IT Support Certificate

**Cyber Security II P Cybersecurity Fundamentals** is a full-year course covering foundational cybersecurity concepts and skills and is equivalent to a college-level Introduction to Cybersecurity course. Students will explore the current cyber threat landscape to understand the types of adversaries organizations face and the techniques adversaries use to compromise systems and data. Students will learn how vulnerabilities create risk and how organizations implement security controls to manage that risk. Topics in the course include physical, operational, application, and network security; security controls; cryptography; access control; attacks and detection; and response and recovery. Students will research emerging trends in cybersecurity and gain hands-on experience implementing security protocols.

Selection of skills and knowledge learned throughout the course:

- Explain cybersecurity concepts and processes
- Harden a network
- Investigate a cyberattack
- Problem-solving
- Communication
- Collaboration

Cybersecurity 2 Fundamentals is designed to help students develop understanding and skills that will contribute to their ability to pass widely recognized professional cybersecurity certifications such as CompTIA Security+ and Cisco Certified Support Technician (CCST): Cybersecurity.

## Dental Assisting I P

### HEALTH SCIENCE AND MEDICAL TECHNOLOGY INDUSTRY SECTOR



#### **COURSE BENEFITS:**

SLZUSD & SLZUSD - Health and Safety Credit  
HUSD, SLUSD, & SLZUSD - Science Credit  
UC "d" Course Credit  
Pre-apprenticeship Pending

#### **CERTIFICATION(S):**

- CA Dental Practice Act Certificate
- Cardiopulmonary Resuscitation (CPR)
- Infection Control Certificate

**Dental Assisting I P** introduces students to the foundational skills and knowledge required in the dental field. Students study topics such as infection control, dental anatomy, dental charting, clinical sciences, and dental materials while working both independently and collaboratively. Hands-on training develops practical skills for chairside assisting and dental office procedures, providing a strong foundation for advanced study.

#### *Selection of skills and knowledge learned throughout the course:*

- Infection control and sterilization techniques
- Dental charting and patient documentation
- Head and neck anatomy and physiology
- Application of topical fluoride and oral hygiene instruction
- Placement and removal of isolation devices
- Suture removal and assisting with nitrous oxide sedation
- Basic chairside assisting skills

Students leave the course with practical experience and the essential knowledge needed to progress to Dental Assisting II P and pursue certifications such as the California Dental Practice Act Certificate and the Infection Control Certificate in their second year.

## Dental Assisting II P

### HEALTH SCIENCE AND MEDICAL TECHNOLOGY INDUSTRY SECTOR



#### **COURSE BENEFITS:**

UC "g" Course Credit  
Internship opportunity  
Pre-apprenticeship Pending

#### **CERTIFICATION(S):**

- Basic Life Support (BLS) Certificate
- CA Dental Practice Act Certificate
- Cardiopulmonary Resuscitation (CPR)
- Completion of Dental Assisting Certificate
- Infection Control Certificate
- Radiation Safety Certificate

**Dental Assisting II P** builds on the principles and techniques learned in Dental Assisting I, advancing students' knowledge and hands-on experience. Second-year students focus on clinical skills, professionalism, and leadership, taking on mentorship roles and participating in community outreach events. The program includes guest speakers from dental hygiene schools and dental professionals who share real-world insights.

#### *Selection of skills and knowledge learned throughout the course:*

- Advanced chairside assisting and dental office procedures
- Alginate impressions and model fabrication
- Radiology and x-ray procedures
- Patient communication and professionalism
- Leadership and mentorship of first-year students
- Participation in community service and volunteer projects

Eligible students also participate in a 6-week internship at a local dental office, gaining real-world experience to prepare for entry-level positions as dental assistants. This program provides a comprehensive pathway for students to enter the dental field confidently and professionally.

## First Responder (Fire Science/EMT) I P

### PUBLIC SERVICES INDUSTRY SECTOR



#### COURSE BENEFITS:

SLZUSD - Science Credit  
UC "g" Course Credit  
Dual Enrollment with Chabot College  
Skills USA Competition

#### CERTIFICATION(S):

- Basic Life Support (BLS)
- Cardiopulmonary Resuscitation (CPR)
- First Aid HSI
- Automated External Defibrillator (AED)
- Community Emergency Response Team (CERT)

**First Responder (Fire Science/EMT) I P** introduces students to the foundational skills and knowledge required for careers as firefighters, Emergency Medical Technicians (EMTs), and paramedics. The course covers the philosophy and history of fire protection, municipal fire defenses, and the organization and function of Federal, State, County, and private protection agencies. Students also explore career opportunities within professional fire protection services.

#### *Selection of skills and knowledge learned throughout the course:*

- Fire response and first responder training
- Physical agility training required by local fire departments
- Fire department ride-alongs and station visits with firefighter coaches
- Medical terminology, basic anatomy, and physiology
- Disaster preparedness and emergency protocols
- Psychological effects of emergency situations
- Basic CPR, First Aid, and universal precautions

Students who complete this course meet the first-course requirement for the Chabot Fire Science Certificate program, preparing them for further education and careers in fire protection and emergency medical services.

## First Responder (Fire Science/EMT) II P

### PUBLIC SERVICES INDUSTRY SECTOR



#### COURSE BENEFITS:

UC "g" Course Credit  
Skills USA Competition

#### CERTIFICATION(S):

- Basic Life Support (BLS)
- Cardiopulmonary Resuscitation (CPR)
- First Aid HSI
- Automated External Defibrillator (AED)
- Community Emergency Response Team (CERT)

**First Responder (Fire Science/EMT) II P** builds on foundational skills, providing advanced training in fire service and emergency response. Students study fire service subjects, including firefighting tactics, hazardous materials, fire prevention, fire protection systems, codes and standards, and fire department organizations. They also refine their leadership and organizational skills by leading first responder units and training their peers, preparing them for real-world responsibilities in the field.

#### *Selection of skills and knowledge learned throughout the course:*

- Fire response and advanced first responder training
- Fire behavior, prevention, and protection systems
- Hazardous materials handling and safety protocols
- Physical agility training required by local fire departments
- Fire department ride-alongs and station visits with firefighter coaches
- Medical terminology, basic anatomy, and physiology
- Disaster preparedness and emergency protocols
- Psychological effects of emergency situations
- Basic CPR, First Aid, and universal precautions

Students completing this course fulfill the first-course requirement for the Chabot Fire Science Certificate program, equipping them with the advanced skills and experience needed for careers in fire protection and emergency medical services.

## Medical Careers I P

### HEALTH SCIENCE AND MEDICAL TECHNOLOGY INDUSTRY SECTOR



#### COURSE BENEFITS:

SLUSD & SLZUSD – Science and Health Credit  
CVUSD & HUSD – Science Credit  
UC “d” Course Credit  
College Credit Available

#### CERTIFICATION(S):

- American Heart Association - Basic Life Support for Healthcare providers (BLS) and Cardiopulmonary Resuscitation (CPR)
- ASE Stop the Bleed Certificate
- Mental Health First Aid Certificate
- NHA Certified Medical Administrative Assistant (CMAA) Certificate (year 1, seniors only)

**Medical Careers I P** introduces students to the foundational skills and knowledge required for administrative roles in the medical field. The curriculum includes communication and professionalism, medical law and ethics, and an overview of anatomy, physiology, and medical terminology. Students gain practical administrative skills, such as appointment scheduling, filing, charting, and an introduction to vital signs, preparing them for entry-level front office positions in healthcare settings.

#### *Selection of skills and knowledge learned throughout the course:*

- Communication and professionalism in medical environments
- Medical law, ethics, and confidentiality protocols
- Anatomy, physiology, and medical terminology, including dissections
- Appointment scheduling, telephone techniques, and charting
- Billing, coding, and administrative medical assisting skills
- Infection control and proper handwashing techniques
- Resume building, cover letters, references, and interview preparation

Students complete a professional portfolio showcasing their skills and may be eligible for internship opportunities. At the end of the course, students are prepared to sit for the Certified Medical Administrative Assistant (CMAA) National Exam. This course serves as a prerequisite for Medical Careers II.

## Medical Careers II P

### HEALTH SCIENCE AND MEDICAL TECHNOLOGY INDUSTRY SECTOR



#### COURSE BENEFITS:

UC “g” Course Credit  
UC Honors’ Designation  
Skills USA Competition

#### CERTIFICATION(S):

- American Heart Association - Basic Life Support for Healthcare providers (BLS) and Cardiopulmonary Resuscitation (CPR)
- ASE Stop the Bleed Certificate
- Certified Clinical Medical Assistant (CCMA)
- NHA Certified Medical Administrative Assistant (CMAA)
- Mental Health First Aid Certificate
- Narcan Training

**Medical Careers II P** advances students' understanding of healthcare through hands-on clinical experiences and advanced instruction. The program focuses on clinical patient care, including patient intake, vital signs, infection control, and safety protocols. Students refine their medical vocabulary and knowledge of anatomy and physiology while mastering essential skills for the workplace.

#### *Selection of skills and knowledge learned throughout the course:*

- Clinical patient care, including intake and vital signs
- Infection control and safety protocols
- Specimen collection and laboratory procedures
- Phlebotomy and cardiovascular testing
- Documentation of medical procedures
- Professionalism and time management in healthcare settings

In the second semester **possible** internships are available for eligible students at a local hospital or clinic, working four days per week. During the internship, students demonstrate professionalism, apply clinical and administrative skills, and practice the roles and responsibilities of healthcare workers. One day per week is dedicated to classroom instruction, where students continue to enhance their skills as Clinical Medical Assistants and prepare for the NHA Certified Clinical Medical Assistant (CCMA) Examination at the end of the school year.

## Merchandising Occupations I P

### MARKETING, SALES AND SERVICE INDUSTRY SECTOR



#### PRE-REQUISITE:

Special Education or  
Department of Rehabilitation Client  
Internship Placement

**Merchandising Occupations I P** introduces students with disabilities to workforce readiness skills, life skills, and social skills to help them become more independent. Merchandising Occupations students must have an IEP with transition goals written into the plan.

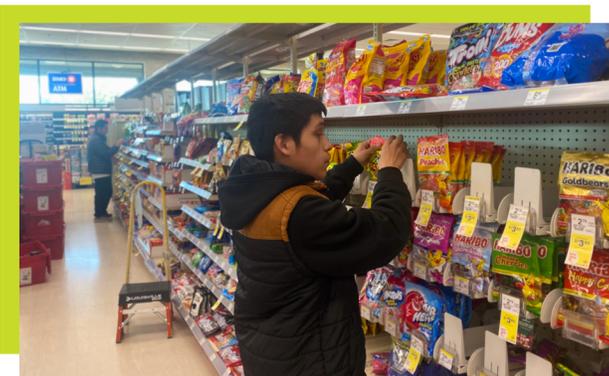
Merchandising Occupations students will work with the “School to Career” curriculum and will move to a work-based learning site. Students will learn on the job and be paid for their internship.

*Selection of skills and knowledge learned throughout the course:*

- How to find a job
- Skills for success
- Career planning
- Job satisfaction awareness

## Merchandising Occupations II P

### MARKETING, SALES AND SERVICE INDUSTRY SECTOR



#### PRE-REQUISITE:

Special Education or  
Department of Rehabilitation Client  
Internship Placement

**Merchandising Occupations II P** students will continue to build upon the Merchandising Occupations I skills. Ready students are offered the opportunity to develop advanced leadership skills by becoming team leaders in the classroom. They will aid the teacher as an assistant, fielding questions and helping organize daily classroom activities.

Merchandising Occupations II students will continue working with the “School to Career” curriculum and move to a work-based learning site early in the school year. Students will gain an understanding of leadership dynamics in the workplace and the effect of good leadership. They will continue to develop their ePortfolio and will gain an understanding of transition resources that will support their post-secondary success.

*Selection of skills and knowledge learned throughout the course:*

- Interview skills
- Transition skills
- Resume writing skills
- Leadership skills
- Computer Technology skills
- Entrepreneurship skills
- Using credit and budget planning

## Welding Technology I P

### MANUFACTURING AND PRODUCT DEVELOPMENT INDUSTRY SECTOR



#### COURSE BENEFITS:

SLZUSD - Math Credit  
UC "g" Course Credit  
Skills USA Competition  
College Credit

**Welding Technology I P** equips students with the foundational skills to enter the welding industry through hands-on training and applied theory. Students master essential welding processes, including MIG, TIG, Stick, and Flux-Cored Arc Welding, while developing precision and accuracy in metal fabrication. The program integrates measurement tools like calipers and squares and introduces entry-level blueprint reading and welding symbols for accurate project execution.

#### *Selection of skills and knowledge learned throughout the course:*

- MIG, TIG, Stick, and Flux-Cored Arc Welding processes
- Entry-level blueprint reading and welding symbols
- Metal fabrication techniques and joint preparation
- Safe operation and troubleshooting of welding equipment
- Measurement tools and precision calculations
- Hands-on projects demonstrating welding skills

By the end of the course, students are prepared to pursue entry-level welding positions with the confidence to perform essential welding processes, troubleshoot equipment, and contribute to real-world projects.

## Welding Technology II P

### MANUFACTURING AND PRODUCT DEVELOPMENT INDUSTRY SECTOR



#### COURSE BENEFITS:

UC "g" Course Credit  
Skills USA Competition

**Welding Technology II P** builds on the skills learned in the first year, helping students advance their welding techniques, teamwork, and project management abilities. In this course, students master advanced welding processes and work on projects like metal sculptures and large-scale fabrications. The program focuses on hands-on practice, advanced blueprint reading, and critical thinking to prepare students for careers in welding, metal fabrication, and related industries.

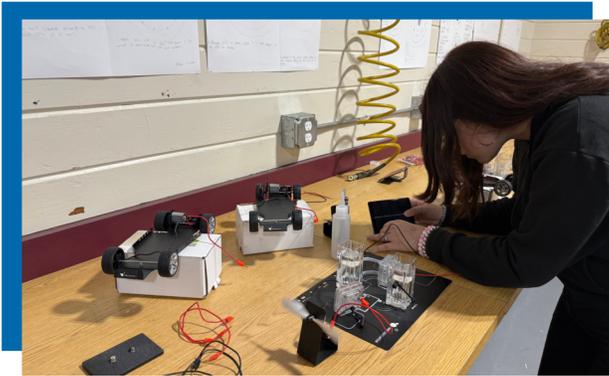
#### *Selection of skills and knowledge learned throughout the course:*

- Advanced MIG, TIG, Stick, and Flux-Cored Arc Welding
- Reading complex blueprints and understanding welding symbols
- Creating metal sculptures and large-scale fabrication projects
- Troubleshooting welding equipment and processes
- Managing projects and working effectively in teams
- Preparing for industry apprenticeships and job interviews

Students complete capstone projects and real-world tasks highlighting their welding skills, measurements, and equipment operation. Students finish the program ready for entry-level jobs in welding, materials joining, or apprenticeships, with a solid foundation to grow their careers.

# Zero Emission Vehicle Technology I P

## TRANSPORTATION INDUSTRY SECTOR



### COURSE BENEFITS:

SLZUSD - Math and Science Credit  
UC "g" Course Credit  
College Credit Pending

### CERTIFICATION(S):

- Basic Life Support (BLS)
- Cardiopulmonary Resuscitation (CPR)
- First Aid HSI

**Zero Emission Vehicle Technology I P** introduces students to the fundamentals of Zero Emission Vehicle (ZEV) technologies through hands-on projects, real-world applications, and multimedia instruction. Students will explore high-voltage systems, Hydrogen fuel cell technology, renewable energy, and how emerging green technologies will shape future industries and net-zero infrastructure.

### *Selection of skills and knowledge learned throughout the course:*

- Fundamentals of Electrical/High Voltage Systems
- Fundamentals of Hydrogen and Hydrogen Systems
- Building and Maintaining Basic High Voltage and Hydrogen Systems
- Basic Safety in Relation to High Voltage and Hydrogen Fuel Systems
- Energy Production and Distribution
- Types of Zero Emissions Vehicles and Alternative Fuels
- ZEV Charging and Fueling Technologies
- ZEV Infrastructure
- Basic ZEV Maintenance
- Basic ZEV Tools and Safety

Students will gain exposure to ZEV-related careers and leave with entry-level skills for future training or employment.

# Zero Emission Vehicle Technology II P

## TRANSPORTATION INDUSTRY SECTOR



### COURSE BENEFITS:

SLZUSD - Math and Science Credit  
UC "g" Course Credit  
College Credit Pending

### CERTIFICATION(S):

- Basic Life Support (BLS)
- Cardiopulmonary Resuscitation (CPR)
- First Aid HSI

**Zero Emission Vehicle Technology II P** builds on the foundational concepts introduced in ZEV I with an emphasis on advanced system operations, diagnostics, and safety. Students deepen their understanding of zero-emission vehicle technology through analysis and hands-on application.

With a strong focus on Hydrogen fuel cell systems and voltage systems, students apply prior learning to more complex tasks that support the global shift toward net-zero emissions.

### *Selection of skills and knowledge learned throughout the course:*

- Advanced Hydrogen fuel cell technology
- High-voltage diagnostics and system analysis
- Hydrogen as an alternative fuel
- Integration of renewable energy sources in transportation
- Advanced electrical safety procedures
- Voltage system troubleshooting and repair
- Green vehicle efficiency and emissions reduction strategies
- Career readiness in clean energy and transportation fields

Students gain the advanced technical knowledge and hands-on experience needed to pursue careers or further training in the zero-emission transportation industry. This course prepares them for entry into specialized postsecondary programs, apprenticeships, or emerging roles in clean energy and green automotive technology.



*This Project is part of California Climate Investments, a statewide program that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment particularly in disadvantaged communities.*

# PARTICIPATING SCHOOL SITES

FOR MORE INFORMATION, CALL EDEN AREA ROP AT (510) 293-2900 OR (510) 293-2973

## CASTRO VALLEY UNIFIED SCHOOL DISTRICT

**CASTRO VALLEY HIGH SCHOOL**  
19400 Santa Maria Avenue  
Castro Valley, CA 94546  
(510) 537-5910

### **AUTO 1-2** **Grades 9-12**

---

Description: Auto 1-2 is an introductory course that explores the modern automobile, its major systems, and careers in the Transportation Industry. The emphasis of this course is on entry level skills and car owner knowledge. Topics will include the safety, tools, tires, wheel alignments, multipoint inspections, engines, transmissions, suspensions, steering, brakes, and electrical systems including computer controls. The first part of the course is primarily in the classroom in conjunction with hands-on activities in the shop to apply the concepts learned in the classroom. Second part of the course is hands-on activities including engine repair, intro to welding, and intro to electrical repair. This course is articulated, B or better earns 3 units of college credit.

### **ADV AUTO MECHANICS** **Grades 11-12**

---

Prerequisites: Successful completion of Auto 1-2

Description: This course provides students the opportunity to develop entry level job skills in the transportation industry. Instruction includes an emphasis on time management and soft skills. Units of instruction include basic fundamentals, maintenance, brakes, steering/ suspension, engine, transmission and electrical. Students learn through both individual and collaborative team activities, projects and problem solving. Class may be repeated for credit with instructor's approval.

### **MARKETING ECONOMICS - ROP** **Grades 11-12**

---

Description: The Marketing Economics is a first-year course within the Marketing Pathway. This class provides instruction to students about marketing foundations and functions. The course covers marketing ideas that have shaped our world, consumer behavior, and research. It helps students understand market forces, demographics, and business types. It teaches students the basics of personal finance, marketing finance, and cost and sales analysis. It supports critical thinking and problem-solving skills through simulations, research investigations, community-based research, role-playing, and case studies.

In addition, students who choose to enroll in the Work Cooperative Education Program through this class are eligible to earn up to 10 additional credits per school year through employment. Students are also encouraged to participate in DECA, a Career Technical Student Organization, and stand to gain valuable skills by participating in career development conferences.

### **BUSINESS ECONOMICS - ROP** **Grade 12**

---

Prerequisites: Successful completion of Marketing Economics

Description: The Economics of Business is an advanced

course in the Marketing, Sales, and Services Pathway offered to second-year students. The primary objective of this course is to equip learners with essential skills that will enable them to pursue entry-level careers in economics or advance their education in business-related fields.

Students are equipped with ten core competencies of economics of business that are directly applicable to management and entrepreneurship.

In addition, students who choose to enroll in the Work Cooperative Education Program through this class are eligible to earn up to 10 additional credits per school year through employment. Students are also encouraged to participate in DECA, a Career Technical Student Organization, and stand to gain valuable skills by participating in career development conferences.

### **INFORMATION TECHNOLOGY ESSENTIALS** **Grades 9-12**

---

Description: This course uses industry based curriculum developed by the Cisco Corporation and is designed to prepare students for employment as computer network designers, installers, and network maintenance and technology support technicians. Students exiting the program may take certification tests through the Cisco Certified Internetworking Association. In Intro to IT Essentials, students learn the basic fundamentals of Computers, Operating Systems, hardware components in PCs, mobile devices, replacement of Field Replaceable Units, Repair, Tune Ups and more.

Nearly the entire course will be using online materials. Students learn well by doing and as such the course consists of hands-on lab sessions as well. The course is articulated with Chabot College and Diablo Valley College and earns the students college credit while still in high school.

### **CISCO 1 ADV TECHNOLOGY** **Grades 10-12**

---

Prerequisites: Successful completion of IT Essentials

Description: This course uses industry based curriculum developed by the CISCO Corporation and is designed to prepare students for employment as computer network designers, installers, and network maintenance and technology support technicians. Students exiting the program may take certification tests through the CISCO Certified Internetworking Association.

Internet Engineering is an interdisciplinary course designed to prepare students for post-secondary success in the Information and Communication Technologies (ICT) field. The course engages students with studies of: the history and implications of network communications; the protocols which make the Internet possible; how networks provide access to services; and college and career preparation in the ICT field. This course integrates the theory and application of network communications, and exposes students to media that invites them to consider how Internet engineers think, design, and solve problems.

Nearly the entire course will be using online materials. Students learn well by doing and as such the course consists of hands-on lab sessions as well. The course is articulated with Chabot College and Diablo Valley College and earns the student college credit while still in high school.

## **CISCO 2 ROUTING & SWITCHING (CCNA-2)      Grades 10-12**

---

Prerequisites: Successful completion of CCNA-1.

Description: This course uses industry based curriculum developed by the CISCO Corporation and is designed to prepare students for employment as computer network designers, installers, and network maintenance and technology support technicians. Students exiting the program may take certification tests through the CISCO Certified Internetworking Association. In RSE, students are introduced to various facets and functions of routers, including operating systems interface (OSI) model, wide area networks (WANs), router components, startup, setup, and use of routers, input-output system (IOS), transportation control protocol (TCP/IP), and routing protocols. Students are also taught the fundamental principles of Cybersecurity Essentials. Worksite learning is an optional component of this class and is available to eligible students.

Nearly the entire course will be using online materials. Students learn well by doing and as such the course consists of hands-on lab sessions as well. The course is articulated with Chabot College and Diablo Valley College and earns the student college credit while still in high school.

## **INTRO TO PROGRAMMING IN PYTHON      GRADE 10-12**

---

Description: Information and Communication Technology (ICT) Pathway students will learn and apply the skills of computer programming by using a popular structured programming language, Python. Students will learn the concepts of program design, algorithm, inputs and outputs, conditional expressions, arithmetic and logical operations, controlled repetitions using loops, file and folder creation and management from a program, controlled handling of exceptions etc. Students will expand and improve their skills by doing programming exercises, individual programming projects, group based projects etc. Students will be exposed to solving real-world problems with some simple programming projects and acquire skills that they can use day to day while in high school. The students will also have the opportunity to participate in external workshops, learn from external guest speakers and also participate in field trips specifically tailored towards local software companies. The course is articulated with Chabot College.

## **INTRODUCTION TO ENGINEERING DESIGN      Grades 9-12**

---

Description: Introduction to Engineering Design (IED) is a high school level foundation course in the Engineering Pathway. In IED students learn the engineering design process. This includes brainstorming, technical drawing, computer modeling, creating/testing prototypes, analyzing data, and creating a portfolio of each project. Utilizing the activity project-problem-based (APB) teaching and learning pedagogy, students will progress from completing structured activities to solving open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Students will go on field trips, interact with guest speakers, participate in career fairs, and other work-based learning opportunities to enhance their understanding of what it is like to be an engineer. At the end of this course, students have the opportunity to take an exam and to become CAD certified. Ethical issues related to professional practice and product development are also presented. Alignment with NGSS, Common Core, and other standards is available through the PLTW Alignment web-based tool.

## **PRINCIPLES OF ENGINEERING      Grades 10-12**

---

Prerequisite: Successful completion of Introduction to engineering and completion of Integrated 1.

Description: Principles of Engineering (POE) is the 2nd foundation course of the Engineering Pathway. Through problems that engage and challenge, students explore a broad range of engineering topics, including but not limited to mechanisms, power and electricity, the strength of materials and structures, thermodynamics, automation and robotics, programming and kinematics. Much of this course parallels and prepares students to take physics or honors physics in high school during their junior or senior years. By solving rigorous and relevant design problems using engineering and science concepts within a collaborative learning environment, project-based learning challenges students to continually hone their interpersonal and problem solving skills. Students will also learn how to document their work and communicate solutions to peers and members of the professional community. Students will be able to participate in field trips, guest speaker events, career fairs, and other work-based learning opportunities to enhance their understanding of engineering and what engineers do. At the end of this course students have the opportunity to earn college credit if they earn a B or better in the class.

## **CIVIL ENGINEERING & ARCHITECTURE      Grades 11-12**

---

Prerequisite: Successful completion of Principles of Engineering, and Integrated 2

Description: Civil Engineering and Architecture (year 3) is the first specialization course in the Engineering Pathway. In CEA, students will gain marketable skills in the building services industry. Students will gain an overview of architectural engineering by learning how to read and develop construction drawings, build architectural models, and design residential and commercial buildings. They will gain exposure to the building codes, and become familiar with architectural, mechanical, electrical, structural and plumbing symbols. Students will learn how to do various calculations commonly used in HVAC, plumbing, and structural engineering. They will also have the chance to explore a variety of careers in both Civil Engineering and Architecture. Work based learning opportunities include guest speakers, internships, field trips, a career fair, and a possible service learning day with Habitat for Humanity. Through both individual and collaborative team activities, projects and problems, students will solve problems as they practice common design and development protocols such as project management and peer review. They will also have the chance to become user certified in AutoDesk REVIT, the current industry standard.

## **ENGINEERING DESIGN & DEVELOPMENT      Grade 12**

---

Prerequisite: Successful completion of Principles of Engineering, and Integrated 2

Description: Engineering Design and Development is the 4th year capstone course in the Engineering Pathway. In Engineering Design and Development (EDD) students identify a real-world challenge and then they apply the engineering design process to research, design, and test a solution, ultimately presenting their unique solutions to a panel of engineers. Students in this course learn what it means to take their engineering knowledge and expertise to solve a real-life problem in their own community. In addition, students will be able to participate in field trips, guest speakers, career fairs, and other work-based learning opportunities to enhance their understanding of engineering and what engineers do. We will showcase these projects in the spring to highlight these students and what they were able to accomplish in engineering. Students will also have a chance to help senior citizens and engineer something to help make their life easier. Students have the opportunity to earn college credit if they earn a B or better in this course along with the second semester of Principles of Engineering.

**FOOD AND NUTRITION****Grades 10-12**

Description: A study of basic principles of food preparation which will include instruction in nutrition, purchasing, food handling, safety, sanitation, serving, and storage of food. Food-related careers will be explored. Laboratory includes preparation and evaluation of individual food products.

**HOSPITALITY AND CULINARY ARTS****GRADES 10-12**

Prerequisite: Food and Nutrition

Description: This course will provide an advanced study of the principles of food preparation and exploration of cuisines of the world as it relates to the hospitality and the food service industry. In addition, students will have the opportunity to apply their culinary and hospitality skills while learning to operate and manage all aspects of a small food service business.

**PHOTOGRAPHY****Grades 11-12**

Description: Beginning Photography offers a broad-based introduction to photography, digital image workflow, editing, image correction and output used in fine art and commercial photography. Further exploration of the creative possibilities of photography include digital image manipulation and outputting. In addition to photography, this course emphasizes critical thinking, problem solving, self-directed and collaborative work skills as well as the leadership skills necessary for entry into advanced digital-media training at the college level, or workplace. Students will leave the class with a portfolio, a resume listing the relevant skills they have learned, and basic interviewing techniques. The students will use Canon DSLR cameras and edit images using Adobe Lightroom and Photoshop.

**ADV PHOTOGRAPHY****Grade 12**

Prerequisite: Students must have completed at least one previous year-long course in photography with a grade of "B" or better, or instructor approval.

Description: The Advanced Photography course extends the students' basic photography, problem solving, leadership and visual literacy skills. Additionally, students will be introduced to advanced photographic techniques, including: use of artificial light sources, studio lighting, location lighting, digital image management and editing techniques using professional-standard software. Students will be required to refine their Photoshop skills to produce color and black & white images suitable for portfolio presentation or exhibition. Students will also learn to create images suited to the specific needs of a "client" and create multimedia presentations that can be easily adapted for web-based presentation. Students will also create a professional resume and a portfolio consisting of black & white and/or color images in a digital-format that can be used to apply for entry-level internships, jobs or admittance to a college-level photography course. The students will use Canon DSLR cameras and edit images using Adobe Lightroom and Photoshop.

**VIDEO PRODUCTION****Grades 11-12**

Description: This course will allow students to develop professional skills in video, film, and television pre-production, production, and post-production. Fundamentals of video production, including the techniques and the aesthetics of shooting, lighting, and editing will be covered. Emphasizes hands-on production experience, using digital video. While in

this course, students will be using class members as the production unit focusing on filmmaking, including story development, pre-production/production/post techniques, directing, and interpretation of drama from script to screen. This class will introduce students to video camera operation, camera stabilization techniques, lighting, scripts, and storyboarding, motion graphics and audio engineering. Software used in this class includes, shooting video and editing using Adobe Premiere Pro, Adobe After Effects, and Adobe Media Encoder and Adobe Audition. Students will develop an understanding of the wide range of business aspects within the industry. Students will also create a digital portfolio (Reel) to display all their work.

**GRAPHIC DESIGN****Grades 10-12**

Description: In this class students will explore elements and principles of design through the Adobe software suite; such as Adobe Illustrator, Photoshop and InDesign. They will develop skills in artistic perception, critiquing, and design strategies through projects that emphasize analyzing and solving visual art problems. Through a study of the history of design, students will also be exposed to the evolving theoretical and practical aspects of the design field.

**ADV GRAPHIC DESIGN****Grades 11-12**

Prerequisite: Must have a "C" or better in Graphic Design or teacher recommendation.

Description: This course provides students with an in-depth experience and mastery of design tools, processes, and systems common to careers in media and print production. Lessons will offer insight to career examinations in the art field and industry skills to include: printing enterprise, art and copy preparation, advertising, image generation and assembly, graphic reproduction operations, binding and/or finishing related to digital imaging, pre-press, and digital production.

**MEDIA ARTS JOURNALISM****Grades 10-12**

Prerequisite: Students must have a 2.0 GPA or better and must have passed their most recent English class with a C or better. Students must obtain approval of teacher/advisor based on an application and teacher recommendation.

Description: Students learn multiple journalism-related skills (such as writing, interviewing and photography).

**MEDIA ARTS ADV JOURNALISM****Grades 11-12**

Prerequisite: Students must have a 2.0 GPA or better and must have passed their most recent English class with a C or better. Students must obtain approval of teacher/advisor based on an application and teacher recommendation.

Description: Students learn multiple journalism-related skills (such as editing, design, video production, web publishing, social media promotion and business management) and apply them as a team to publish the school newspaper, web site and related media pages. Students build upon the skills learned in Media Arts Journalism and serve in newspaper/publishing leadership positions. Students must be able to work independently. Students may repeat the class with teacher/advisor approval. This is a four-year university elective and a Career Technical Education course that earns required CTE graduation credit.

**PUBLICATIONS: PHOTOJOURNALISM****Grades 10-12**

Prerequisite: B or Higher in previous English class and Application recommended

Description: Photojournalism (Yearbook) is a two-semester course that combines the high-level critical thinking, reading and writing skills of print journalism with the artistic, creative and aesthetic skills of the visual and graphic arts. Students will study reading, writing, photography, graphic design and editing, as well as further develop their research skills, providing them with the journalistic expertise necessary to design and produce a year-end journalistic volume of student photography, research and writing.

**HAYWARD UNIFIED SCHOOL DISTRICT****HAYWARD HIGH SCHOOL**

1633 East Avenue  
Hayward, CA 94541  
(510) 723-3170

**ENTREPRENEURSHIP I P - ROP****Grades 10-12**

Description: Students will study the fundamentals of entrepreneurship and will research various business models. Topics include identifying the characteristics of an entrepreneur, discovering entrepreneurial opportunities, building a business, and researching market trends. As a culminating project, students develop a business plan by incorporating the necessary steps to implement their unique venture that conforms to all applicable governmental laws and regulations.

**ENTREPRENEURSHIP II P - ROP****Grades 11-12**

Prerequisite: Entrepreneurship I P

Description: Entrepreneurship II applies the foundations of E1 and explores business concepts in further depth. This course develops students' understanding of the entrepreneurial mindset, business markets, franchises, start-ups, research, and financing. Students develop a business plan and create pitches for prospective investors. Students will learn key business strategies for sustainable market growth to nurture and expand business ventures. Students will participate in a variety of projects which support critical thinking, teamwork, and problem solving skills. Students are also encouraged to participate in a Career Technical Student Organization (CTSO) to gain valuable skills by participating in competitions and career development conferences.

**PHOTOGRAPHY I P****Grades 10-12**

Description: This course trains students for various areas of specialization within the photography industry. This course is designed to integrate knowledge and hands-on learning through the production, processing, and editing of photography projects. The essentials of photography include editing techniques and aesthetics, lighting sets and background development. Those who choose to take an additional year will have the opportunity to work independently for in-depth achievement beyond the basics. They will set goals for

completion of projects conducive to critique and exhibition. This course is sponsored by ROP at HHS & MEHS.

**PHOTOGRAPHY II P****Grades 10-12**

Description: Extension to basic photography course. Advanced students do independent regular photo projects and learn Photoshop.

**SPORTS MEDICINE I P****Grades 10-11**

Description: Students explore human anatomy and physiology, and acquire a strong foundation for further study of these sciences. Students learn how systems of the body function and interact through physical activity and develop a thorough understanding of the structure and function of the musculoskeletal system. This knowledge serves as a platform for understand the physiological response to injury and improving performance. Students will apply skills learned in the classroom as well as in the field practicum.

Students will be able to: a. Relate/apply their knowledge of anatomy and physiology - explore through laboratory activities designed to illustrate and expand upon concepts. b. Collect and interpret data, and finally form and communicate conclusions in lab reports and group discussions. c. Research and present anatomy and its relevance to a specific injury d. Demonstrate skills in oral and written communication by using professional terminology, developing active listening skills, and writing effectively in a variety of different formats e. Demonstrate the ability to be critical, complex and creative thinkers by completing challenging group and individual projects. f. Study and work productively, both as individuals and team members, by demonstrating initiative through various projects and assessments. g. Gain knowledge of career pathways in the medical and science field as well as the skills, knowledge and education necessary to attain a degree in this discipline. Early college credit available.

**SPORTS MEDICINE II P****Grades 10-12**

This Sports Medicine II course is designed for students to continue to explore their interest in the fields of health science and medicine, specifically focused toward careers in athletic training, emergency field medicine, and therapeutic services. This course is aligned with California Career Technical Education Model Curriculum Standards and is a second level course in a Sports Medicine CTE pathway. This course builds on the concepts learned in Sports Medicine I and further deepens the knowledge base and practical skillset. Through a lecture/lab/project-based learning format, students will acquire fundamental practical concepts of training room development; risk management; administrative and legal issues; and hands-on application of theory on evaluation, assessment, prevention, treatment, and rehabilitation of athletic injuries. This course may be sponsored by ROP.

**THEATER I P****Grades 9-12**

Description: This course will contain units from pantomime, improvisation, scene study, theater games and imagination exercises, vocal warm-ups and voice study, reading plays, technical theater, theater history, costuming and playwriting. The

student should get a well-rounded introduction to the theater and an understanding of the interaction of the elements of theater production.

## **THEATER II P**

**Grades 10-12**

Description: This advanced course is standards driven and covers acting, directing, improvisational theater, political theater, movement, voice, dramaturgy, theory, audition techniques, and playwriting. Emphasis is placed on performance as well as the creative process, with strong dedication to innovative expression and imagination. Theater II will also include the technical aspects of stagecraft, and an expansion of knowledge and skills acquired in Theater I.

This advanced course is standards driven and covers acting, directing, improvisational theater, political theater, movement, voice, dramaturgy, theory, audition techniques, and playwriting. Emphasis is placed on performance as well as the creative process, with strong dedication to innovative expression and imagination. Theater II will also include the technical aspects of stagecraft, and an expansion of knowledge and skills acquired in Theater I.

## **WOOD TECHNOLOGY I P**

**Grades 10-12**

Description: This is a beginning woodworking class encompassing the use of hand tools and machines. Emphasis is placed on safety and good workmanship habits. Students will spend class time developing plans, figuring costs and layout of materials, and seeking pride in craftsmanship through well-designed woodworking projects. Instruction will include lectures, demonstrations, and hands-on building experiences. Students will be introduced to different methods of woodworking used in furniture, cabinetry, framed construction, and woodcrafts. This is a project-based class where students learn by doing and includes many hours of hands-on building experience through constructing required projects. Students will experience assignments at an individual and group level, with opportunities for advisory positions. Students will also have the opportunity to design and build projects of their own choosing. Students will build a job skills portfolio and learn about careers in the industrial trades. This course is sponsored by ROP.

## **WOOD TECHNOLOGY II P**

**Grades 10-12**

Description: This is an advanced course where students will continue advancing their experience in safety, operations, and maintenance of woodworking machines. Emphasis will be placed on expanding skills and techniques involved in the more advanced designing and problem-solving procedures. Students will have the opportunity to spend many hours on a single project in individual and team settings. Methods of woodworking in the areas of furniture, cabinetry, framed construction, and woodcraft projects will continue to be investigated. This course is sponsored by ROP.

## **YEARBOOK**

**Grades 9-12**

Description: Yearbook publication is the class that prepares and publishes the school yearbook. Skills reinforced are paragraph writing, revision of copy, precise use of language, and organization of copy. Planning and preparing the yearbook for publication and distribution also includes artwork and photography. Students develop business skills by selling advertisements and subscriptions.

## **MT. EDEN HIGH SCHOOL**

**2300 Panama Street**

**Hayward, CA 94544**

**(510) 723-3180**

## **ENTREPRENEURSHIP I P - ROP**

**Grades 10-12**

Description: Students will study the fundamentals of entrepreneurship and will research various business models. Topics include identifying the characteristics of an entrepreneur, discovering entrepreneurial opportunities, building a business, and researching market trends. As a culminating project, students develop a business plan by incorporating the necessary steps to implement their unique venture that conforms to all applicable governmental laws and regulations.

## **ENTREPRENEURSHIP II P - ROP**

**Grades 10-12**

Prerequisite: Entrepreneurship I P

Description: Entrepreneurship II is a college prep elective course that analyzes and applies the steps for new venture creation. Using Network For Teaching Entrepreneurship (NFTE) Curriculum, the course is designed to provide students with an understanding of the external drivers and internal levels of business launching, start-ups, and financing. It is structured in modules that form the foundation for students' creation of a business plan, and investor elevator pitch. Concepts covered include entrepreneurial mindset, business structure, opportunity recognition, value proposition and market research. Students will learn to apply business theory to their own ventures, marshaling available resources to gather relevant information. By using extensive scenario analysis through classroom projects and group work, students will develop critical thinking and problem structuring skills. Experiential course activities include product development, work-based learning experiences, and participation in regional and national competitions. This course is sponsored by ROP. Early college credit available.

## **PHOTOGRAPHY I**

**Grades 10-12**

Description: This course trains students for various areas of specialization within the photography industry. This course is designed to integrate knowledge and hands-on learning through the production, processing, and editing of photography projects. The essentials of photography include editing techniques and aesthetics, lighting sets and background development. Those who choose to take an additional year will have the opportunity to work independently for in-depth achievement beyond the basics. They will set goals for completion of projects conducive to critique and exhibition. This course is sponsored by ROP. Early college credit available.

## **PHOTOGRAPHY II**

**Grades 11-12**

Description: Extension to basic photography course. Advanced students do independent regular photo projects and learn Photoshop. This course is sponsored by ROP. Early college credit available.

## **SPORTS MEDICINE I P - ROP**

**Grades 10-12**

Description: Students explore human anatomy and physiology, and acquire a strong foundation for further study of these sciences. Students learn how systems of the body function and interact through physical activity and develop a thorough

understanding of the structure and function of the musculoskeletal system. This knowledge serves as a platform for understand the physiological response to injury and improving performance. Students will apply skills learned in the classroom as well as in the field practicum.

Students will be able to: a. Relate/apply their knowledge of anatomy and physiology - explore through laboratory activities designed to illustrate and expand upon concepts. b. Collect and interpret data, and finally form and communicate conclusions in lab reports and group discussions. c. Research and present anatomy and its relevance to a specific injury d. Demonstrate skills in oral and written communication by using professional terminology, developing active listening skills, and writing effectively Students explore human anatomy and physiology, and acquire a strong foundation for further study of these sciences. Students learn how systems of the body function and interact through physical activity, and develop a thorough understanding of the structure and function of the musculoskeletal system. This knowledge serves as a platform for understand the physiological response to injury and improving performance. Students will apply skills learned in the classroom as well as in the field practicum. Early college credit available.

### **SPORTS MEDICINE II P - ROP**

**Grades 11-12**

This Sports Medicine II course is designed for students to continue to explore their interest in the fields of health science and medicine, specifically focused toward careers in athletic training, emergency field medicine, and therapeutic services. This course is aligned with California Career Technical Education Model Curriculum Standards and is a second level course in a Sports Medicine CTE pathway. This course builds on the concepts learned in Sports Medicine I and further deepens the knowledge base and practical skillset. Through a lecture/lab/project-based learning format, students will acquire fundamental practical concepts of training room development; risk management; administrative and legal issues; and hands-on application of theory on evaluation, assessment, prevention, treatment, and rehabilitation of athletic injuries. This course may be sponsored by ROP.

**TENNYSON HIGH SCHOOL**  
27035 Whitman Street  
Hayward, CA 94554  
(510) 723-3190

### **ENTREPRENEURSHIP I P - ROP**

**Grades 10-12**

Description: Students will study the fundamentals of entrepreneurship and will research various business models. Topics include identifying the characteristics of an entrepreneur, discovering entrepreneurial opportunities, building a business, and researching market trends. As a culminating project, students develop a business plan by incorporating the necessary steps to implement their unique venture that conforms to all applicable governmental laws and regulations.

### **ENTREPRENEURSHIP II P - ROP**

**Grades 11-12**

Prerequisite: Entrepreneurship I P

Description: Entrepreneurship II applies the foundations of E1 and explores business concepts in further depth. This course develops students' understanding of the entrepreneurial mindset, business markets, franchises, start-ups, research, and financing. Students develop a business plan and create pitches for prospective investors. Students will learn key business strategies for sustainable market growth to nurture and expand business ventures. Students will participate in a variety of

projects which support critical thinking, teamwork, and problem solving skills. Students are also encouraged to participate in a Career Technical Student Organization (CTSO) to gain valuable skills by participating in competitions and career development conferences.

### **HUMAN BODY SYSTEMS**

**Grade 10**

Description: This is the first course in the Project Lead the Way (PLTW) Biomedical Science Pathway. In this class, students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. This course is designed to provide an overview of all the courses in the Biomedical Science program and lay the scientific foundation for subsequent courses.

### **MEDICAL INTERVENTIONS**

**Grade 11**

Description: Medical Interventions (MI) allows students to investigate the variety of interventions involved in the prevention, diagnosis, and treatment of disease as they follow the lives of a fictitious family. Utilizing a "how-to" manual for maintaining overall health and homeostasis in the body, the course will explore how to prevent and fight infection, how to screen and evaluate the code in our DNA, how to prevent, diagnose, and treat cancer, and how to prevail when the organs of the body begin to fail. Through these scenarios students will be exposed to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Each family case scenario will introduce multiple types of interventions, reinforce concepts learned in the previous two courses, and present new content. Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders. These interventions will be showcased across the generations of the family and will provide a look at the past, present, and future of biomedical science. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important role that scientific thinking and engineering design play in the development of interventions of the future. Early college credit available.

### **MULTIMEDIA I**

**Grades 10-12**

Description: This is a beginning level course in multimedia production and computer technology. The course will provide students with a basic introduction to multimedia, using industry standard software and hardware. Students will learn the basic fundamentals of web design, presentation, digital image editing and basic video production/editing. Through projects, class exercises and homework, students will learn work ethics, leadership, initiative, teamwork, self-management, and responsibility. Career path skills, such as working as a production team member, project planning and management, professional criticism, and presentation skills are introduced and practiced. The curriculum will integrate project-based learning with core academic classes in English, Social Studies, and related topics. Academic content will focus on themes related to social justice, World and American literature and historical events.

### **MULTIMEDIA II**

**Grades 11-12**

Description: This is an advanced level course in multimedia production and computer technology. It teaches advanced techniques involved in project planning, production, project completion and presentation. The course will build upon the skills learned in Multimedia I and challenge students with further skills

and advanced topics. The technical aspects of the course will involve video production, editing, and streaming to the world wide web. Students will continue advanced web design production and interactive authoring. At the end of the course, students will create a digital portfolio of completed projects for personal or professional use.

### **PRINCIPLES OF BIO SCIENCE**

**Grade 9**

Description: This is the second course in the Project Lead the Way (PLTW) Biomedical Science Pathway. Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical

## **SAN LEANDRO UNIFIED SCHOOL DISTRICT**

### **SAN LEANDRO HIGH SCHOOL**

2200 Bancroft Avenue  
San Leandro, CA 94557  
(510) 618-4600

### **AUTOMOTIVE TECHNOLOGY I**

**Grades 10-12**

Description: For students interested in learning about the mechanical aspects of their car, repair procedures, and the auto repair industry. The course introduces students to safety, tools, engine operation, basic engine overhaul procedures, fuel system, electrical system and drive trains - including transmissions and differentials, brakes, suspension, steering, tires, cooling systems, and lubrication systems. Shop projects will be provided for students.

### **AUTOMOTIVE TECHNOLOGY II**

**Grades 10-12**

Description: A shop-based study of automotive repair and maintenance. Students will experience many phases of automotive reconditioning comprised of, but not limited to: service, maintenance, and repair of engines, transmissions, suspensions (including alignment), tires, brakes, and cooling, fueling, and electrical systems. This class is primarily hands-on work.

### **BUSINESS APPLICATIONS**

**Grades 9-12**

Description: Business Computer Applications is an introduction to computer applications as it relates to business and home use. The course introduces and improves the skill of keyboarding, and also includes software topics in Operating Systems, Microsoft Office, Google Suite, Internet, World Wide Web, electronic mail, file management, and data communications. Hardware topics include PC system components and troubleshooting issues. Other topics include computer-based careers and trends, electronic computing issues, terminology, electronic communication skills, ethics, security, and etiquette in today's business computing environment. Business Computer Applications will provide students with computer knowledge and skills to increase their productivity which will give them a competitive advantage in the job market.

### **BUSINESS OWNERSHIP (E1) - ROP**

**Grade 10**

Description: This course is the first class of a two-year career pathway. This course focuses on student development, knowledge and skills vital for careers in business and entrepreneurship. During the first semester students will learn how to write a business plan to start their own small business. This is a very creative hands-on business class that supports student creativity and ownership of ideas. Academic areas of study include but are not limited to: business law and ethics, financial strategies, and how to overcome the challenges of business ownership. During the second semester students will take their businesses global and learn about the international business environment and its effects on small business and entrepreneurship. Students who choose to enroll in the Work Cooperative Education Program through this class are eligible to earn up to 10 additional credits per school year through employment. Students are also encouraged to participate in DECA, a Career Technical Student Organization, and stand to gain valuable skills by participating in career development conferences.

### **MARKETING ECONOMICS I P - ROP**

**Grade 11**

Description: This course provides students with an academically challenging course of study that allows students to demonstrate mastery of the course objectives. Marketing Economics is a course that focuses on the history and study of financial markets and institutions. The primary objective of this course will be to help students obtain a better understanding of these and other important financial issues facing citizens and government policymakers both here in the U.S. and abroad. The overarching goal of these courses is to develop each student's critical thinking, reading, and writing skills. An in-depth study of the economy of the 21st century and aspects of marketing are examined. Economic and marketing concepts, such as database management, advanced communications strategies, decision-making for the market place, and resource allocation and product distribution, are emphasized. Students who choose to enroll in the Work Cooperative Education Program through this class are eligible to earn up to 10 additional credits per school year through employment. Students are also encouraged to participate in DECA, a Career Technical Student Organization, and stand to gain valuable skills by participating in career development conferences.

Students will explore traditional advertising, integrated marketing communications, and new media in local, regional, national, and global markets. Students will be able to demonstrate critical thinking skills, to evaluate ideas and information, and to analyze and synthesize qualitative and quantitative evidence (both in the classroom and in the community). This course will enable students to establish a breadth of understanding of history and economics. Students will also be required to complete class and homework research assignments.

### **BUSINESS ECONOMICS & FINANCE (E2) - ROP**

**Grade 12**

Description: This course is the second class of a two-year career pathway. It is an experiential learning course which provides students with knowledge of business and global business economics. Students learn about business planning, marketing, and personal finance. The students explore financial aspects of credit, money management, and risk management in a global economy. Students apply macroeconomics theory in terms of supply and demand, pricing, and marketing through various class projects. This class is held in a computer lab, which provides access to the internet and simulates a true business environment. All students complete their own personal financial plan for short, medium and long term goals.

**COLLEGE & CAREER SEMINAR****Grade 9**

Description: This course is designed to help students foster academic success in their high school years and to aid in successfully reaching life goals set by the individual student. This course introduces students to a decision-making process that will help them envision and plan for a future career that is productive, achievable, and stimulating. This personalized 10-year plan provides students with the focus and intrinsic motivation to succeed in high school, college, at work and in life.

**GRAPHIC ARTS****Grades 10-12**

Description: Experience the many facets of a graphics occupation by engaging in the process of design problem-solving. Manipulate hand tools and computer applications within the Adobe Creative Suite to develop ideas that fit the parameters of a given job. While acquiring the ability to communicate ideas visually is essential, the real value of this class is the nurturing of imagination and creative thinking! Creativity statistics report that 98% of 3-5-year-olds test out as creative geniuses five years later; it's down to 32%. By the time students become teenagers; creative genius applies to only 10% of the population! And yet, creative thinking is one of the critical 21st century skills. This class provides the opportunity to access your hidden creativity!

**INTRO TO ENGINEERING (PLTW)****Grades 9-12**

Description: This is the introductory course for the Advanced Manufacturing Pathway. Instruction will be given in the following areas of engineering and design: elements of design, design history, technical sketching including orthographic projection, dimensioning, perspective drawing, 2-point perspective drawing, and hand drawn 2D and 3D representations. Students will also explore sustainable design, clean energy and computer aided design. Students will experience design problems related to the vocational fields in construction architecture, interior design and engineering, and examine trade-related occupations; and global human impact.

**PRODUCT DESIGN 1****Grades 10-12**

Prerequisite: Grade of C or better in Intro to Engineering

Description: Have you ever wondered how an iPhone or your favorite toy was made? Students will learn how to design, develop, and create a fully functional device (prototype) that includes the mechanics, electronics, and software. The class is highly collaborative and project based. Students will learn first-hand user centric design. Students learn about the methods of design and problem solving. From there, students learn about the various tools needed to create tools and how to apply the use of the tools back to the design process. This process will include individual work as well as group work. The class is designed with real world projects that provide students with the skill set needed to complete product design from initial creativity to CAD models, to electronics, to woodshop, to 3D printing and laser cutting.

**PRODUCT DESIGN 2****Grades 11-12**

Prerequisite: Grade of C or better in Product Design 1

Description: In continuation from Produce Design 1 skills, students produce two products in the first semester and learn how to manage tasks and deadlines on relatively simple products. The entire second semester is devoted to the development of a third project and students are expected to create a functioning prototype that has been through several iterative cycles.

**ROBOTICS I****Grades 11-12**

Prerequisite: Grade of C or better in Algebra, concurrent enrollment in Geometry and Physics

Description: Robotics I introduces high school students to the working principles and foundations of computer science through robotics. Students learn to control robots using both block-based programming and text-based programming in "C" programming language. Virtual and hardware robots are used as platforms to engage students in personalized and collaborative learning of computer science integrated with science, technology, engineering, art, and math (STEAM) concepts. The course emphasizes hands-on robotics activities with a focus on human-computer interaction, computational thinking, and data analysis. It prepares students for solving math problems through coding. With creative design and extensive project-based activities, students develop critical thinking, problem solving, effective communication, and teamwork skills.

**WOOD TECHNOLOGY I****Grades 10-12**

Prerequisite: For safety, students who do not demonstrate a maturity level appropriate for the class curriculum must choose another class

Description: This course teaches skills used in the woodworking trade. Students will learn and apply skills in:woodworking, teamwork, drafting, and business. These skills will enable students to see how small and large scale manufacturing operates in the business world. Students will learn the safe use of hand and power tools, how to read technical drawings, calculate measurements using whole numbers, decimals, and fractions. Building useful and beautiful projects in wood will enable students to learn in a "hands on" environment.

**WOOD TECHNOLOGY II****Grades 10-12**

Prerequisite: Grade of C or better in Wood 1 or instructor approval

Students will participate in the advanced manufacturing program building on the skill gained in Wood 1. Students will take on a much higher degree of leadership and tackle more advanced projects. Students will be encouraged to enter a final advanced project into the California State Fair. Successful completion of this course will provide real job skills for students looking to move into the woodworking trade.

**INTRO YEARBOOK & JOURNALISM****Grades 10-12**

Prerequisite: Required 2.0 GPA or portfolio approval

Description: Introduction to Yearbook and Journalism focuses on developing and strengthening students' understanding of the practices and purposes of journalism. Students will write and edit several forms of journalistic stories; read and analyze non-fiction through expository writing; learn and practice the basics of designs and layout; analyze, evaluate and create images, videos, and graphics; use word processing, web publishing, and design software; evaluate and understand print and online ethics including the use of social media; and demonstrate knowledge and understanding of the history of journalism and press law.

**JOURNALISM 2 (HONORS)****Grades 10-12**

Prerequisite: Required Completion of Introduction to Journalism with C or higher or by portfolio approval.

Description: Journalism II Honors: Newspaper Production is a year-long capstone option and a reading and writing heavy course which centers on both academic and practical applications of language arts. Students will learn advanced journalistic writing style with a focus on publication both of the school newspaper and national publications. Students will master journalistic style and analytical reading, writing, thinking and listening. Students will also develop/learn AP style, journalism laws and ethics, extensive reading and critical analysis of professional news writing and other non-fiction works, practice and exploration of expository writing techniques and discussions on the history and current state of journalism in the United States and the world. The course will also feature other aspects of student journalism and newspaper production, including but not limited to, editing, photography, design, digital publishing, podcasting, business leadership skills, business writing and advertising. Students will deepen their understanding of journalism in modern American life and its implications to American and global society through continual reading, discussion, analysis, and writing. Ultimately, students will use their reading, writing, leadership and media skills in the production of the print Cargo and the digital Cargo online.

## **YEARBOOK 2 (HONORS)**

**Grades 10-12**

Prerequisite: Required Completion of Introduction to Journalism with C or higher or by portfolio approval

Description: Advanced Media Leadership is a year-long capstone option in which students undertake editorial positions, which teach leadership skills. Editors in this class have successfully completed prerequisites in design, photography and journalism production and writing. This leads to a year of serving in a design leadership role in the production team for the student yearbook, as well as studying college and career options and preparing for the future.

Leadership options will range from serving as the chief design organizer and planner of story teams to serving as editors over larger staffs. In this course, students will demonstrate mastery of all publication design principles, Online Design, through planning a comprehensive design scheme for print production of the school yearbook.

## **WEB DESIGN**

**Grades 10-12**

Prerequisite: Grade of C or better in Algebra 1

Description: Students will learn to code in three computer languages: HTML, CSS, and Javascript. Students will show artistic creativity and precise technical knowledge through front-end web development projects that use industry standard practices and tools, such as Bootstrap and JQuery, to create visually pleasing, interactive web applications. Strong analytical and mathematical skills are recommended due to the exact and logical nature of programming languages. Students who are successful in this course will be prepared to start a journey toward becoming web developers or be ready for further study in other computer science fields.

## **AP COMPUTER SCIENCE PRINCIPLES**

**Grades 10-12**

Prerequisite: C or better in Advanced Algebra/Trigonometry recommended.

Description: Students will learn how the internet works, how information is stored digitally in various types of encoding, the influence of big data on our lives, and an introduction to computer programming in Javascript. This course is aimed at

students who want a college-level computer science course but want the opportunity to be creative and explore more than just code. Students will create simple interactive apps and graphics with code and be able to explain their process and development choices in writing. Students can receive college credit for completing 2 thorough-course projects and a multiple choice AP exam in the Spring. Strong reading comprehension and writing skills are recommended.

## **AP COMPUTER SCIENCE A**

**Grades 10-12**

Prerequisite: Grade of B or better in Advanced Algebra/Trigonometry recommended. Grade of B or better in AP Computer Science Principles or teacher approval.

Description: Students will learn object-oriented computer programming in Java. This rigorous, college-level course focuses on computer science theory such as search and sort algorithms, data structures, encapsulation, and polymorphism. Students will use the Java programming language to solidify their knowledge of big ideas in programming that can be translated to other popular languages in further study or future careers. Strong mathematical and analytical skills are recommended. Previous programming experience recommended but not entirely necessary.

## **SAN LORENZO UNIFIED SCHOOL DISTRICT**

### **ARROYO HIGH SCHOOL**

**15701 Lorenzo Avenue  
San Lorenzo, CA 94580  
(510) 317-4000**

## **BUSINESS OWNERSHIP (E1) - ROP**

**Grades 10-11**

Description: This course is the first class of a two-year career pathway. This course focuses on student development, knowledge and skills vital for careers in business and entrepreneurship. During the first semester students will learn how to write a business plan to start their own small business. This is a very creative hands-on business class that supports student creativity and ownership of ideas. Academic areas of study include but are not limited to: business law and ethics, financial strategies, and how to overcome the challenges of business ownership. During the second semester students will take their businesses global and learn about the international business environment and its effects on small business and entrepreneurship. Students who choose to enroll in the Work Cooperative Education Program through this class are eligible to earn up to 10 additional credits per school year through employment. Students are also encouraged to participate in DECA, a Career Technical Student Organization, and stand to gain valuable skills by participating in career development conferences.

## **BUSINESS ECONOMICS AND FINANCE (E2) - ROP**

**Grade 12**

Description: This course is the second class of a two-year career pathway. It is an experiential learning course which provides students with knowledge of business and global business economics. Students learn about business planning, marketing, and personal finance. The students explore financial aspects of credit, money management, and risk management in a global economy. Students apply macroeconomics theory in terms of supply and demand, pricing, and marketing through various class projects. This class is held in a computer lab, which provides access to the internet and simulates a true business environment. All students complete their own personal financial

plan for short, medium and long term goals. Students who choose to enroll in the Work Cooperative Education Program through this class are eligible to earn up to 10 additional credits per school year through employment. Students are also encouraged to participate in DECA, a Career Technical Student Organization, and stand to gain valuable skills by participating in career development conferences.

### **PHOTOGRAPHY - BEGINNING**

**Grades 10-12**

Description: Students will become technically and aesthetically proficient with both traditional and digital photography processes. Students will learn to operate a manual SLR film camera, process black and white film and prints, use a scanner, a digital camera, manipulate images in Adobe Photoshop CS4, use a photography studio and create a digital portfolio. This course will also explore the aesthetic, technical, cultural and historical aspects of photography and its role as a form of visual communication.

### **PHOTOGRAPHY - ADVANCED**

**Grades 11-12**

Description: Students continue to build skills both in taking photos using digital cameras and film cameras and using Industry Standard software such as Photoshop CS4 for digital editing. Students will make a digital a print portfolio of images.

### **SPORTS MEDICINE I P**

**Grades 11-12**

Description: Students explore human anatomy and physiology, and acquire a strong foundation for further study of these sciences. Students learn how systems of the body function and interact through physical activity and develop a thorough understanding of the structure and function of the musculoskeletal system. This knowledge serves as a platform for understand the physiological response to injury and improving performance. Students will apply skills learned in the classroom as well as in the field practicum.

## **SAN LORENZO HIGH SCHOOL**

**15701 Lorenzo Avenue  
San Lorenzo, CA 94580  
(510) 317-4000**

### **CAREERS IN LAW & PUBLIC SAFETY I P - ROP**

**Grades 9-12**

Description: The Criminal Justice course is for students interested in exploring how criminal and civil laws are enforced by law enforcement agencies and the judicial system. The course covers all areas of criminal justice and its process, including forensic science, which is the application of science to criminal and civil legal processes. Students will learn about police, court, and corrections systems. Students will also learn about laws and how they are made, causes of crimes, how citizens react to the breaking of laws, the police and the challenges they face, court procedures, correction and probation, and rehabilitation and juvenile justice.

### **CAREERS IN LAW & PUBLIC SAFETY II P - ROP**

**Grades 10-12**

Prerequisite: "C" or better in Criminal Justice or teacher recommendation.

Description: Criminal Justice II is a capstone course in the Public Safety Pathway. Designed to build upon Criminal Justice I, the course integrates academic and technical preparation with a focus on providing students continued in-depth and advanced instruction pertaining to the criminal justice investigation,

evidence collection, and more. Through project based learning, students enrolled will explore the history of law enforcement from the early beginnings of civilization, and travel through time into current law enforcement. Crimes against the person and property get broken down by elements of the crime through research of written and case law. Upon completion of the course, students will be prepared to transition to post-secondary career training, and/or be prepared for an entry level position in today's Public Safety industry. UC/CSU (g).

### **MEDIA ARTS 12**

**Grades 11-12**

Prerequisite: "C" or better in Basic and Advanced Video. Special permission can be given if the student has taken Video Production, but not Advanced Video, and received a grade of "B" or better.

Description: This course is the capstone class for the BADA students. Students will use the skills they have mastered in Basic and Advanced Video to create personal projects. Students will design and create a senior project that showcases their skills and serves the community. Students will learn through extensive hands-on practice, demonstration, and discussion. UC/CSU (f)

### **MULTIMEDIA/ WEB**

**Grade 9**

Description: Multimedia introduces students to the professional world of digital media. Students will learn the history of film and be introduced to digital editing and digital videography. Students will write, produce, and edit their own short movies and learn the basics of special effects and their proper use in storytelling.

### **PHOTOGRAPHY - BEGINNING**

**Grades 10-12**

Description: Students will begin exploring all major aspects of black and white and digital photography, including camera techniques, film developing, enlarging, printing, print finishing, and digital manipulation. This hands-on class emphasizes technical skills and development of an artistic vision. Lab donations accepted. UC/CSU (f)

### **PHOTOGRAPHY - ADVANCED**

**Grades 11-12**

Prerequisite: "C" or better in Photography.

Description: Students will continue to refine their photographic skills and artistic vision. Emphasis on more advanced digital skills such as studio lighting, alternative processes, and advanced digital skills and an exploration of careers in photography. A hands on, activity based class. Lab donations accepted. UC/CSU (f)

### **VIDEO PRODUCTION**

**Grade 10**

Prerequisite: Must be in BADA.

This is a CA Partnership Academy (CPA) pathway course for BADA Academy. The course introduces and develops the skills necessary for students to interpret and discuss the complex meanings and social impact of film and television media. Students learn the vocabulary necessary to discuss the various artistic, social and technical implications of various television and film productions from a variety of cultures and countries. In groups and individually, students use the information gained to produce written works that will serve as the basis for short video productions. Students learn and put into practice the communicative, cooperative, and creative

skills necessary to produce a video product for commercial and artistic goals. Students will learn and be able to discuss the history of the film and television media and their part in shaping the culture of the world in which they live.

### **ADVANCED VIDEO PRODUCTION**

**Grade 11**

---

Prerequisite: "C" or better in Video Production or have special teacher permission. Must be in BADA.

Students use and expand skills developed in Video Production to create productions based on the needs of the school. Students act as the SLZ-TV crew. Students learn feature film script writing techniques and produce a short film. Students produce SLZ-TV broadcasts for the school. UC/CSU (f)

### **YEARBOOK PUBLICATION**

**Grades 9-12**

---

Prerequisite: Teacher recommendation and permission of instructor is required. Beginning computer skills are strongly recommended.

Students prepare, publish and market the school yearbook. Selecting the theme, design section formats, writing copy, selecting and cropping photos, writing captions, editing and proofing copy, creating marketing idea, and planning budget are included.

### **SPORTS MEDICINE I P**

**Grades 11-12**

---

Description: Students explore human anatomy and physiology, and acquire a strong foundation for further study of these sciences. Students learn how systems of the body function and interact through physical activity and develop a thorough understanding of the structure and function of the musculoskeletal system. This knowledge serves as a platform for understand the physiological response to injury and improving performance. Students will apply skills learned in the classroom as well as in the field practicum.



# COMMUNITY COLLEGE ARTICULATION AGREEMENTS

The following courses have been articulated with one of the local community colleges. Students who complete these courses with grades of B or better earn transferable, college credit which is put on their community college transcript. Students may use these credits at the community college or take them directly to a 4-year university. While most colleges and universities will accept these credits, they may differ in how they will be applied towards graduation credit. All courses are free of charge to high school students in Castro Valley, San Leandro, Hayward, and San Lorenzo Unified School Districts.

<i>School</i>	<i>High School Course Name</i>	<i>A-G CSU/UC Pre-requisite</i>	<i>College Credit Availability</i>	<i>Honors Designation</i>
<b>EDEN AREA REGIONAL OCCUPATIONAL PROGRAM</b>				
EAROP	Automotive Collision & Refinishing I P and II P	g	no	
EAROP	Automotive Technology I P and II P	g	yes	
EAROP	Careers In Education I P	g	yes	
EAROP	Careers In Education II P (Honors)	g	yes	★
EAROP	Construction Technology I P	g	yes	
EAROP	Culinary Science I P	g	yes	
EAROP	Culinary Science II P (Honors)	g	yes	★
EAROP	Careers in Law, Forensics & Public Safety I P and II P	g	yes	
EAROP	Cybersecurity I P and II P	g	yes	
EAROP	Dental Assisting I P	d	no	
EAROP	Dental Assisting II P	g	no	
EAROP	First Responder (Fire Science/ EMT) I P and II P	g	yes	
EAROP	Medical Careers I P	d	yes	
EAROP	Medical Careers II P (Honors)	g	yes	★
EAROP	Welding Technology I P and II P	g	yes	
EAROP	Zero Emission Vehicle Technology I P	g	-	

<b>CASTRO VALLEY UNIFIED SCHOOL DISTRICT</b>				
Castro Valley	Auto 1-2	g	yes	
Castro Valley	Biotechnology	d	yes	
Castro Valley	Introduction to Programming	g	yes	
Castro Valley	IT Essentials	g	yes	
Castro Valley	Introduction to Networks	g	yes	
Castro Valley	Routing and Switching	g	yes	
Castro Valley/ EAROP	Economics of Business	g	yes	
Castro Valley	Food & Nutrition	g	yes	
Castro Valley	Graphic Design I	f	yes	
Castro Valley/ EAROP	Marketing Economics I P	g	yes	
Castro Valley	Medical Careers 1/2	g	yes	
Castro Valley	Photography	f	yes	
Castro Valley	PLTW Intro to Engineering	d	yes	
Castro Valley	PLTW Principles of Engineering	d	yes	

<i>School</i>	<i>High School Course Name</i>	<i>A-G CSU/UC Pre-requisite</i>	<i>College Credit Availability</i>	<i>HONORS</i>
<b>HAYWARD UNIFIED SCHOOL DISTRICT</b>				
Hayward	PLTW - Introduction to Engineering	d	yes	
Hayward/ EAROP	Entrepreneurship I P	g	yes	
Hayward/ EAROP	Entrepreneurship II P	g	yes	
Hayward	Photography	f	yes	
Hayward	Sports Medicine I P	g	yes	
Mt. Eden/ EAROP	Entrepreneurship I P	g	yes	
Mt. Eden/ EAROP	Sports Medicine I P	g	yes	
Mt. Eden	Photography	f	yes	
Tennyson/ EAROP	Entrepreneurship I P	g	yes	
Tennyson/ EAROP	Entrepreneurship II P	g	yes	
Tennyson/EAROP	Medical Interventions	d	-	
Tennyson/EAROP	Sports Medicine I P and II P	g	yes	

<b>SAN LEANDRO UNIFIED SCHOOL DISTRICT</b>				
San Leandro	Automotive Technology I	g	yes	
San Leandro	Business Applications	g	yes	
San Leandro/EAROP	Entrepreneurship I P/Business Ownership	g	yes	
San Leandro/EAROP	Entrepreneurship II P/Business, Economics & Finance	g	yes	
San Leandro	PLTW - Introduction to Engineering Design & Invention	d	yes	
San Leandro/EAROP	Marketing Economics I P	g	yes	

<b>SAN LORENZO UNIFIED SCHOOL DISTRICT</b>				
Arroyo/ EAROP	Entrepreneurship I P/Business Ownership Tech	g	yes	
Arroyo/ EAROP	Entrepreneurship II P/Business, Economics, and Finance	g	yes	
Arroyo/ EAROP	Marketing Economics I P	g	yes	
Arroyo	Photography I	f	yes	
Arroyo	Sports Medicine I	g	yes	
Arroyo	PLTW Intro to Engineering	d	yes	
Arroyo	PLTW Principles of Engineering	d	yes	
San Lorenzo	Video Production	f	TBD	
San Lorenzo	Advanced Video Production	f	TBD	
San Lorenzo/ EAROP	Careers in Law and Public Safety I P	g	yes	
San Lorenzo	Beginning Photography	f	yes	

**P** - college preparatory program

**yes** - a current articulation is on file

**TBD** - course is being considered but an application had not been submitted when this catalog was printed

**new application pending** - awaiting approval from the college

**renewal application pending** - awaiting approval from the college

**★** - honors designation

# **THANK YOU FOR YOUR SUPPORT**

CASTRO VALLEY USD

HAYWARD USD

SAN LEANDRO USD

SAN LORENZO USD

CHABOT COLLEGE

DIABLO VALLEY COLLEGE



26316 HESPERIAN BLVD. HAYWARD, CA 94545  
510-293-2900 | [www.edenrop.org](http://www.edenrop.org)



FOLLOW US @EDENAREAROP