

Mission Valley ROP

2008-2009

Table of Contents

Letter from the Superintendent.....	Page 2
Expected Schoolwide Learning Results (ESLRs).....	Page 3
Our State-of-the-Art Facility.....	Page 4
The History of MVROP.....	Page 4
ROP Course Offerings.....	Page 5
Agriculture and Natural Resources.....	Page 6
Arts, Media and Entertainment Technology.....	Page 6-9
Building Trades and Construction Technology.....	Page 10
Business and Finance.....	Page 11
Education, Child Development and Family Services.....	Page 12
Engineering and Design Technology.....	Page 12-14
Fashion and Interior Design.....	Page 14-15
Health Science and Medical Technology.....	Page 16-20
Hospitality, Tourism and Recreation.....	Page 20-21
Information Technology.....	Page 21-24
Marketing, Sales and Service.....	Page 24-25
Public Services	Page 25-26
Transportation Technology.....	Page 26-27
General MVROP Information.....	Page 28
High School Career Center/Contact Information.....	Page 29



Mission Valley ROP

Welcome...

At Mission Valley ROP, we believe in the importance of including career technical education along with the required high school academic classes. Although some students know exactly what they want to do following graduation, many more are unaware of options available to them. ROP courses provide students with opportunities to explore career interests, develop skills for job success, learn skills to help finance the cost of higher education, and earn high school credit. By using a “hands-on” approach to instruction, ROP courses promote a unique atmosphere for learning and understanding the connection between school and the real world!

ROP courses are provided based on projections for growing career trends. Today, we offer over 75 courses representing 13 career fields. All courses receive input through advisory committees consisting of representatives of our business and industry community. With their assistance, we are able to offer our students exemplary educational programs along with the skills they need to achieve success. In addition to our business and industry connections, all ROP instructors are credentialed by the state of California and bring with them relevant experience in their field of instruction. Along with setting high standards for our students, we also set high standards for ourselves and have repeatedly earned accreditation by the Western Association of Schools and Colleges!

If you plan to enter the job market immediately following high school or continue your education at a community college or university, I encourage you to take advantage of the opportunities available to you through Mission Valley ROP. By including career technical education along with your academic courses, you will leave high school with a “first class” education!

Sincerely,

Charles Brown, Superintendent
Mission Valley ROP

Thirty-eight years of leadership in career technical education!

Mission Valley ROP

“Expected Schoolwide Learning Results”

ESLRs

Upon successful completion of MVROP courses and programs, each student will demonstrate:

1.) Workplace Basic Skills and Behaviors

- Apply skills learned in class
- Analyze information and make decisions
- Communicate verbally and in writing
- Work independently and as a team member in a diverse work place
- Work reliably, responsibly, and ethically

2.) Career Technical Skills

- Demonstrate occupational competencies
- Use appropriate technology
- Understand and practice occupational safety standards
- Demonstrate an awareness of how a business or industry functions

3.) Job Employment Skills

- Develop a plan to achieve career goals
- Use effective job search strategies
- Demonstrate an awareness of the importance of lifelong learning

Success Starts Here!



***“Experience”* our new, state-of-the-art MVROP Career Technical Training Center!**

The new 45,000 sq. ft. Mission Valley ROP (MVROP) center opened in Fall 2008 and is located in the heart of Fremont, on the corner of Stevenson and Blacow. The two-story building consists of 17 classrooms (including two state-of-the-art science labs and six cutting-edge computer labs), 14 offices, a Board Room, Student Services Center, and Staff and Student Lounges. For the latest updates and information about MVROP, visit us on the web at www.mvrop.org.



The History of MVROP

Mission Valley ROP is the regional occupational program for the Tri City Area. In existence for over thirty-eight years, MVROP has been instrumental in preparing students for successful business, medical, and technical careers. Through a partnership with Fremont, New Haven, and Newark Unified School Districts, career technical education is provided to over 5,000 students (adults and high school) each year. Mission Valley's dedicated staff, superior learning environment, and high tech equipment all contribute to the high success rate of our students. We keep current with today's standards and continually seek input and advice from business and industry representatives through our advisory committees. In addition, all ROP instructors bring with them experience in their field as well as certification by the state of California. We believe in one common objective...helping our students develop to their full potential!

*Our Business and Industry Partnerships are invaluable
in helping us provide relevant career education!*

2008 - 2009 MVROP Courses

Agriculture and Natural Resources

Veterinary Assistant

Arts, Media and Entertainment Technology

Advanced Video Production
Beginning Video Production
Computer Animation
Computer Game Design
Computer Graphic Design 1, 2
Digital Drawing
Digital Graphics
Digital Imaging
Digital Photography 1, 2
Digital Sound Design 1, 2
Digital Video Arts Production
DreamWeaver Web and Multimedia Building
Stagecraft/Sound Production/Scenic Art Design
Web Design Technology

Building Trades and Construction Technology

Construction Technology 1, 2
3-D Woodworking Art
Woodworking Technology 1, 2, 3

Business and Finance

Business Office Skills
Business Ownership and Management
Business Office Management Certificate Program
Computerized Accounting
Computerized Accounting/Money Management

Education, Child Development and Family Services

Developmental Psychology/Careers in Education 1, 2

Engineering and Design Technology

Alternative Fuels and Energy Technology
Computer Aided Design/CAD
CAD/Industrial Drafting
Engineering Technology
Heating, Ventilation and Air Conditioning (HVAC)
Introduction to Engineering Technology
Robotics Systems Technology
Welding/Metal Fabrication and Layout 1, 2

Fashion and Interior Design

Cosmetology
Fashion Merchandising 1, 2
Interior Design 1, 2
Manicurist

Health Science and Medical Technology

Anatomy and Physiology for Medical Careers
Biotechnology

Continued, Health Science and Medical Technology

Medical Assisting
Medical Occupations
Medical and Health Careers
Medical Lab Technician/Phlebotomy
Medical Terminology 1, 2
Nursing Assistant
Personal Fitness Trainer 1, 2 - (SHAPE PE)
Pharmacy Clerk 1, 2
SHAPE Core
Sports Psychology
Sports Therapy 1, 2

Hospitality, Tourism and Recreation

Culinary Arts/Pastry Arts 1 - hour
Culinary Arts/Pastry Arts 2 - hour
Culinary Arts/Basic Foods 1 - hour
Culinary Arts/Basic Foods 2 - hour
Event Planning and Catering
International Cuisine
Introduction to Hospitality and Tourism

Information/Communication Technology

Computer Networking/CCNA Certification
Computer Programming C++
Computer Programming/JAVA
Computer Service Repair 1, 2
Computer Service Technology 1, 2
Computer Support Internship
Computer Tech/Operations
ICT Essentials

Marketing, Sales and Service

Marketing 1, 2 - DECA
Online Business
Virtual Enterprise 1, 2

Public Services

Fire Science/First Responder 1, 2
Fire Science/Driver/Operator
Forensic Science/Crime Scene Investigation 1, 2
Law Enforcement/Homeland Security

Transportation Technology

Auto Body/Major Collision Repair 1, 2
Auto Body Painting and Refinishing 1, 2
Automotive Technology 1 - hour
Automotive Technology 2 - hour
Automotive Technology/Basic Car Care
Small Engine Repair

Agriculture and Natural Resources

Veterinary Assistant (THVB)

2 - Hour Class

Location: ROP Center - 9:35 am - 11:00 am (Kennedy HS Block 2); 12:45 pm - 2:45 pm

Credit: 20 units per year

This course provides training for students interested in animal related careers, particularly veterinary medicine and veterinary technology. After completing the course, students will have the skills necessary for employment in veterinary clinics, and/or pet shops, grooming facilities, animal shelters, and kennels. First semester is spent in the classroom and laboratory learning terminology, anatomy and physiology, pharmacology, laboratory techniques, animal restraint, veterinary nursing, grooming, front office skills and basic work skills. On-the-job training is available during second semester in an animal care facility. (Students must provide their own transportation for on-the-job training.) It is strongly recommended that enrolling students have successfully completed courses in Biology and Algebra I. (*Advanced placement is available in Foothill College's Veterinary Technician Program.*)

Arts, Media and Entertainment Technology

Beginning Video Production (TAMA)

Advanced Video Production (TAME)

1 - Class Period

Location: Kennedy HS

Credit: 10 units per year

Gain an understanding and practical experience in the creation of video productions using EFP (electronics field production), and television studio techniques. Students will develop basic skills in camera techniques, audio production, directing, non-linear editing, script writing, lighting, set design and a variety of other skills required to create a finished video production. The course includes the history of video production through changes in equipment and production techniques. Students work in a variety of production positions over the course of the year on group projects. Interested students may also create a video project to enter in competition during the school year.

Computer Animation (TANB)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am; 12:45 pm - 2:45 pm

Credit: 20 units per year

Students will create video, web and television/film animation in 2D and 3D. Adobe After Effects, Macromedia Flash and NewTeks Lightwave3D are all used emphasizing timelines, key frames, layers and interactivity. Class projects include the creation of virtual video backgrounds and titling banners, animated elements and special effects for video, e-cards, web animations and 3D movies.

Computer Animation (TANA)

1 - Class Period

Location: American HS, Mission San Jose HS, Washington HS

Credits: 10 units per year

Students will study video, web, game and film animation in 2D and 3D. Adobe After Effects, Alias Wavefront, Maya and Macromedia Flash are all offered emphasizing timelines, key frames, layers and interactivity. Class projects include the creation of virtual video backgrounds, special effects for video, e-cards and web animations.

Computer Game Design (TAZB)

Time: 1 - Class Period

Location: Washington HS

Credit: 10 units per year

This course begins with an introduction to C++ Programming Basics including core topics such as variables, console input and output, functions, loops, programming logic, pointers, strings, classes, and object-oriented design and methodologies. In the second part of the course, students will begin to examine Windows programming with the Win32 API. The third part of the course is to do graphics with the Win32API, something which is not possible with pure C++ programming language. Learn fundamental graphic concepts such as double buffering, sprites, animation and timing, and masking. Additionally, you will begin a detailed exploration of the basic features of the DirectX Graphics fixed-function pipeline. Learn to use each of the features individually and in combination to render complex 3D scenes.

Computer Graphic Design 1 (TAGA)

1 - Class Period

Location: Irvington HS, James Logan HS

Credit: 10 units per year

Computer Graphic Design 1 (TAGB)

Computer Graphic Design 2 (TAGF)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am; 12:45 pm - 2:45 pm

Credit: 20 units per year

Learn how to layout newsletters, articles, mailers and posters with Adobe InDesign. Re-touch photographs and create original artwork for print, web, animation and video using Illustrator and Photoshop. Design animated presentations with Flash. Create portraits, paintings and posters with school supplied writing tablets, flatbed scanners, color laser printers and large-image laser plotters.

Digital Drawing (TAXP)

1- Class Period

Irvington High School

Credit: 10 units per year

Increase your drawing talents by learning to use observation skills and hand-eye coordination to master the techniques of the computer drawing program, Adobe Illustrator 9.0. Students will become competent in the operation of a computer and Windows.

Digital Graphics (TCSA)

1 - Class Period

Location: Irvington HS

Credit: 10 units per year

Digital Graphics follows a lecture/demo/lab format. Instruction focuses on the creation of visual content, concept, design, project development, and production and technique via computer graphics, illustration, and digital imaging. Students produce art work using cutting-edge photo editing, illustration, design, and layout software such as: Adobe Photoshop, Adobe Illustrator and Quark Xpress. Students will learn to work in different color modes, and to develop knowledge of the standards and requirements for different media output including print, CD-ROM and the Web.

Digital Imaging (TAYP)

1 - Class Period

Location: Mission San Jose HS

Credit: 10 units per year

This course covers the basics of both traditional and digital photography. Students will use traditional cameras and digital devices to import their images into the computer. They will create and print out their work. First semester covers camera handling and darkroom procedures, while second semester focuses on computer and digital imaging. Students should have access to a 35 mm camera. A lab donation is also required for the course. Topics include the principles of design and elements of art, art history and multicultural influences.

Digital Photography 1, 2 (TACP/TALP)

1 - Class Period

Location: American HS, Irvington HS, Kennedy HS, Newark Memorial HS, Washington HS

Credit: 10 units per year

This course is designed to provide students with a solid grounding in digital photographic essentials focusing on the power of contemporary software tools such as Adobe Photoshop. Students will have hands-on access to the latest photographic equipment. Instruction covers digital photography essentials, lighting, set design, studio configuration, field issues, camera operation, software interfaces, and color management. (Students may enroll in a second year for more advanced instruction.)

Digital Sound Design (TAKA)

1 - Class Period

Location: Conley-Caraballo HS, James Logan HS

Credit: 10 units per year

Digital Sound Design 1, 2 (TAKB/TAKE)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am, 12:45 pm - 2:45 pm

Credit: 20 units per year

Learn how to use microphones, audio mixers, sound systems and Digital Audio Recording tools. Students will create original recordings and sound effects using school supplied synthesizers and software like Fruity Loops, Adobe Audition and Cakewalk Sonar. Live recording utilizing student and in-house talent is emphasized. Students are encouraged to create their own work for projects that include Digital Storytelling, Radio Theater and Sound Design for animation and video.

Digital Video Arts Production (TADA)

1 - Class Period

Location: American HS, Irvington HS

Credit: 10 units per year

Digital Video Production is designed as a lecture, lab, and hands-on format. Using the fundamentals of traditional film/video making, this course focuses on the complete digital video production process of documentary and short fiction, taking the concept of an idea to the execution of a project. Students will analyze film scenes and sequences as well as other elements of short fiction and documentary formats. By working in teams, students develop ideas for video projects, write short screenplays, technical scripts, draw storyboards, and produce and edit short documentary and fiction videos. Through a series of lectures,

Continued, Digital Video Arts Production

work shops, and production projects, students engage in all aspects of the creative process for digital video production. They acquire valuable experience in team work dynamics and techniques, technical skills, trouble shooting and problem solving techniques. This course is a group experience, depending highly on cooperation, communication, respect, and commitment to a team approach, projects, and classmates. (*Recommend previous class in Fine Arts, Drama, or Digital Graphics.*)

DreamWeaver, Web and Multimedia Building (TCDB)

2 - Hour Class

Location: ROP Center - 12:45 pm - 2:45 pm

Credit: 20 units per year

This is a type of “tract” course where students must take all four quarters in order to fully benefit from the instruction. First quarter starts with fundamentals of learning to use DreamWeaver by designing a basic website using text and graphics. The course includes an introduction to CSS (cascading style sheets) for layout. During second quarter, students will create a CSS layout using DreamWeaver. Learn to create and link to external CSS. Learn how to make a site compatible with major browsers. An introduction to PhotoShop is included with an emphasis on creating and optimizing graphics for the web. In the third quarter, there will be an introduction to creating Flash for the web and multimedia design. The focus will be on creating optimized, web ready animations such as banners, etc. Students will create stand alone animations (including video) that can be integrated into any media without needing a special player. Import and update native PhotoShop files. In the fourth quarter, students will combine files from PhotoShop, DreamWeaver and Flash and will import, and export files from all applications in addition to solving various security problems triggered by browsers.

Stagecraft/Sound Production/Scenic Art Design (TISA)

1 - Class Period

Location: James Logan HS, Mission San Jose HS

Credit: 10 units per year

This course emphasizes the techniques and processes involved in stage management, prop construction, lighting, set-up and operation of sound systems, and operation of projection equipment. Students will develop basic construction techniques for stage property and scenery; get practice in stage crew work, which includes the building of sets, painting and the erection and striking of scenery; and an overview of related occupations.

Web Design Technology (TCWA)

1 - Class Period

Location: American HS, Irvington HS, Kennedy HS, Washington HS

Credit: 10 units per year

Explore web design as you incorporate graphics, sound, movies, and animation. Students will learn all phases of the design process from the idea state, through planning, production and testing while creating original web sites. Learn design concepts for content and layout as you design commercial web pages.

Building Trades and Construction Technology

Construction Technology 1 (TICB)

Construction Technology 2 (TICF)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am; 9:35 am - 11:00 am (Kennedy Block 2);

12:45 pm - 2:45 pm

Credit: 15 - 20 units per year

Construction is one of the largest industries in the world requiring approximately 250,000 skilled workers to complete new construction projects each year. Skilled workers are paid well, earning substantially higher wages than many other industries. Students train for jobs in construction, home remodeling and roofing. Actual on-the-job experience is provided through hands-on projects. Rules of safety are stressed and students are expected to meet industry standards required in this area. Students will build projects using power tools and the latest in construction technology. Cooperative paid work experience may be available. Students successfully completing the first year may enroll in a second year for more advanced opportunities.

3-D Woodworking Art (TJEP)

Time: 1 - Class Period

Location: Mission San Jose HS

Credit: 10 units per year

(Prerequisite - Wood 1) Furniture styles and cultures are depicted through individual projects, and students learn how the finished wood product reflects the values and needs of the culture. Course content includes the history of cabinetry, furniture and wood sculpture, the art of furniture design, the use of woodworking tools and machines, and the role of culture and values upon the art form. The course will enable students to enrich and enhance the contours, surfaces, strength, fitness, harmony, and proportion of parts in woodworking projects. Creativity of design is emphasized throughout the course. ***This course receives UC Credit!***

Woodworking 1 (TJDA)

Woodworking 2 (TJDE)

Woodworking 3 (TJEA)

Time: 1 - Class Period

Location: Mission San Jose HS

Credit: 10 units per year

This competency based course prepares students in the skills needed for more advanced instruction in fields such as Furniture Design and Fabrication, Cabinetmaking and Architectural Millwork. Integrated throughout the course are career preparation standards, which include basic academic skills, communication, interpersonal skills, problem-solving, workplace safety, and technology and employment literacy. Students will learn the basic proper and safe use of woodworking machines, and will utilize imagination and individual thinking skills to design, create, and implement designs in wood. After completing a required project, students will have opportunities for creative expression through the design and building of projects of their choice. Students successfully completing this course, may take a second and third year of Woodworking.

Business and Finance

Business Office Management Certificate Program (TBIB)

2 - hour class

Location: ROP Center - 12:45 pm - 2:45 pm

Credit: 20 units per year

This course is designed to give students the opportunity to take a sequence of adult ROP courses leading to certification in Business Office Management. The course includes Business Office Skills, MS Office 1&2, and Business Math. Students achieving a “B” or better will complete an internship during 4th quarter.

Following completion of Level 1, students will be eligible to enroll in Level 2 the next year. ***This course receives college credit.***

Business Office Skills (TBOA)

1 - Class Period

Location: Newark Memorial HS, Washington HS

Credit: 10 units per year

This course will enable students to learn basic skills necessary to work in a business office. Instruction includes document creation and work flow, word processing exercises, memo preparation, record-keeping, filing, records organization, customer service, sales basics, telephone answering, interpersonal skills, problem solving and basic administrative support procedures. Students learn in a variety of ways including lectures, group exercises, and individualized study presentations.

Business Ownership and Management (TMSA)

1 - Class Period

Location: American HS, Newark Memorial HS

Credit: 10 units per year

Students successfully completing the Business Ownership class will learn how to set up and operate a small business. Classroom instruction will include business systems and functions, advertising, marketing, merchandising and technology. Students will study effective selling, customer service, cashiering and loss prevention. Upon completion of the class, students will have the components necessary to start, operate and maintain a successful business. Up to 20 units may be earned for approved work outside the classroom. ***This course receives math credit.***

Computerized Accounting/Money Management (TBGA)

1 - Class Period

Location: American HS, Irvington HS, James Logan HS, Mission San Jose HS

Credit: 10 units per year

Using QuickBooks software, students learn how to run an accounting system designed for a small business. Students will learn basic business math and accounting principles. Essential components of this course include business operations, income and financial statements, consumer finance and credit. Learn survival techniques through budgeting and the use of computers to process personal and business accounts. ***This course receives credit at Ohlone.***

Computerized Accounting (TZOA)

1 - Class Period

Location: Washington HS

Credit: 10 units per year

This course provides instruction in basic accounting fundamentals including accounts payable, accounts receivable, payroll and general ledger, plus advanced concepts used in sole proprietorships, partnerships and corporations. Computer accounting simulations and spreadsheet software will be used to reinforce accounting principles and fundamentals. ***This course receives credit at Ohlone College.***

Education, Child Development & Family Services

Developmental Psychology/Careers in Education 1, 2 (TPCA/TPCE) - Logan

1 - Hour Class

Location: James Logan HS

Credit: 10 units per year

This course offers students the opportunity to study concepts of child development from birth to age 6 while experiencing hands-on training in a demonstration pre-school facility. Students learn to plan age and developmentally appropriate curriculum, manage a childcare center, deliver lessons, evaluate materials, and create an extensive resource file. Students may also have the opportunity to work with elementary-age students.

Developmental Psychology/Careers in Education 1, 2 (TPCB/TPCF)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am

Credit: 20 units per year

This course is designed for students interested in working with children as a profession as well as gaining knowledge of child growth and development. Students work with children at various sites such as pre-schools, day care centers, elementary schools, and schools for children with special needs. (Students must provide their own transportation to and from their on-the-job training sites.) Students will develop skills in leadership, supervision of children, equipment operations, and curriculum development. A TB test is required and students must be at least 16 years old. *This course receives credit with Ohlone and Chabot College.*

Engineering and Design Technology

Alternative Fuels and Energy Technology (TJFB)

Time: 2 - Hour Class

Location: ROP Center - 12:45 pm - 2:45 pm

Credit: 20 units per year

Rapid increase in fuel prices, combined with concerns for the environment and air quality, have led many Americans to seek information about alternatives to current energy products. This introductory course is designed to provide basic information and will allow you to begin to understand the nature and extent of the problems, as well as some viable solutions that are currently available or in development. Technologies addressed in the course include compressed natural gas, liquid petroleum gas, methanol, ethanol, electric, compressed air, fuel cell and hybrid electricity. Students will discuss the usefulness of various types of energies as they relate to the future of our planet.

Computer Aided Design/CAD (TIKA)

1 - Class Period

Location: American HS, James Logan HS

Credit: 10 units per year

This course trains students in the fundamentals of mechanical design drafting techniques. Students will be introduced to AutoCAD software and its applications including basic 3D wireframe drawing. Gain skills and knowledge to prepare for the next level of study towards careers in computer-aided drafting or other technical fields.

CAD/Computer Aided Design (TIKB)

2 - Hour Class

Location: ROP Center - Mon. - Thurs. 3:00 pm - 5:00 pm

Credit: 15 units per year

This course covers key concepts of vector graphics, descriptive geometry, geometric construction, and an introduction to 3D Modeling. At the end of the class, students will create an impressive computerized slideshow of the drawings they have completed during the course. Students use AutoCAD - the software for those interested in pursuing a career in design or engineering.

CAD/Industrial Drafting (TIKB)

2 - Class Periods

Location: James Logan HS

Credit: 20 units per year

Students are provided with the technical knowledge and skills required for entry-level jobs in mechanical drafting, electronic drafting, and other computer-aided design drafting. Computer-aided design drafting is taught using AutoCAD software.

Engineering Technology (TINB)

2 - Hour Class

Location: ROP Center - 9:35 am - 11:00 am; 12:45 pm - 2:45 pm

Credit: 20 units per year

This course is designed for those students interested in Engineering as a career. The course provides hands-on instruction in a variety of related technologies. Scientific principles, mathematical concepts, and communication skills are experienced and learned through an activity oriented approach. Robotics, electronics, fluid systems, mechanical mechanisms and computer design technologies will be explored. Using a team approach, students will research, design and build projects for practical application as well as possible competitive events. Students will combine interdisciplinary skills to produce a final product using design systems. Projects will include team design of an engineering problem, a production plan, engineering drawing, cost estimate and a technical report. This course introduces the student to the world of engineering and technology by learning about the fields of engineering and experiencing three-dimensional thinking while problem solving. The fields of engineering, CAD, mechanics, computer technology, electronics and robotics have been chosen for their implication in the economics of the Silicon Valley.

Introduction to Engineering Technology (TIKA)

1- Class Period

Location: James Logan HS

Credit: 10 units per year

This is an overview of engineering for students interested in becoming an engineer. The course explores the design process and basics of mechanical, civil, and electrical engineering fields. Hands-on instruction include a “shaketable” to analyze effects of earthquakes on structures, model bridges for load/stress testing, and more. Students will learn sketching, the design process, drafting, engineering math, applied physics, surveying, applied geometry, trigonometry, structural systems, electronic symbols, electronic schematics, and mechanical design. If you’re considering a career in engineering, building, or construction, this course is a must!

Heating, Ventilation & Air Conditioning / HVAC (TIJB)

2 - Hour Class

Location: ROP Center - 12:45 pm - 2:45 pm

Credit: 20 units per year

This course is designed to provide students with job-qualifying skills in the refrigeration and air conditioning field. Instruction includes fundamental principles and service techniques needed to diagnose and solve HVAC problems. Students will become skilled in repairing refrigerators, washers, dryers, and other HVAC equipment. Strong math, writing and reading skills are required.

Robotics Systems Technology (TIFA)

Time: 2- Hour Class

Location: ROP Center - 12:45 pm - 2:45 pm

Credit: 20 units per year

Learn to assemble, program, maintain, and repair robotic devices. The course includes instruction in the history and development of robotic devices; the types of robotic devices used in industry and their component makeup; computer control systems and robot computer language programming; troubleshooting techniques; especially with regard to servomechanisms, microprocessors, and computer operation; and the integration of these devices and factors into a total manufacturing system.

Welding/Metal Fabrication and Layout 1, 2 (TJAB)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am; 12:45 pm - 2:45 pm

Credit: 20 units per year

This hands-on course is for students interested in employment as welders, fabricators, sheet metal workers, and machine operators in light industry. Students will develop skills in the construction of prototypes and mechanical components used in light industry. The course covers the skills for print reading, layout, fitting, welding and fabrication. Through class projects, students will apply all techniques learned in the design and fabrication process. Students taking a second year, will prepare for beginning positions as layout mechanics in heavy industry (building of bridges, buildings and large industrial machines). Students will be introduced to ANSI-standard print reading, layout, fitting, and welding techniques. Welding technologies used include metal-inert gas (MIG), tungsten-inert gas (TIG), and stick-electro arc welding. Instruction includes workplace skills training and preparation for internship opportunities and employment in the welding field.

Fashion and Interior Design

Cosmetology (TXHC)

3 - Hour Class, plus Saturdays

Location: Fremont Beauty College

Credit: 30 units per year

Students gain practical and theoretical skills required to pass the California Cosmetology Examination. In addition to hair styling and care of skin and nails, instruction includes business practices and procedures used in beauty salons. Learn how to complete job applications and conduct interviews with prospective employers. Saturday classes are required. Students must provide their own transportation. *(Call 797-7318 to request an orientation with Ms. Vieira before being accepted into the Fremont Beauty College. Twelvth grade students only accepted in the program!)*

Fashion Merchandising 1 (TMFA)

Fashion Merchandising 2 (TMFE)

1 - Class Period

Location: James Logan HS

Credit: 10 units per year

Fashion Merchandising 1 (TMFB)

Fashion Merchandising 2 (TMFF)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am; 9:35 am - 11:00 am (Kennedy Block 2);

11:05 am - 12:30 pm (Kennedy Block 3); 12:45 pm - 2:45 pm

Credit: 20 - 40 units per year

The Fashion Merchandising program is a three-part instructional program designed to prepare students for careers in the fashion industry. The class uses internships and DECA (an association of marketing students) to supplement classroom instruction. Develop the skills necessary for success in careers of buying, clothing design, management, promotion, and manufacturing. Students must be available to train with local retailers, earning up to 40 units of credit per year. Students have an opportunity to test their creative skills through the production of an annual fashion show. After successful completion of the first year, students may enroll in a second year. *(Students can earn 6 units of credit by attending FIDM after graduating from high school.)*

Interior Design (TMIA)

1 - Class Period

Location: James Logan HS

Credit: 10 units per year

Interior Design 1 (TMIB)

Interior Design 2 (TMIF)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am; 9:35 am - 11:00 am (Kennedy Block 2);

11:05 am - 12:30 pm (Kennedy Block 3)

Credit: 20 units per year

This course prepares students in a variety of interior design fields. Students analyze and create interiors using basic principles and elements of design: space planning, color, textiles, furniture and lighting. The course provides students with the skills required to continue their education in the field of interior design at the college level. Students will develop drafting skills related to architectural interiors. Internships may be available for advanced students. After successful completion of the first year, students may enroll in Interior Design 2.

Manicurist (TXNC)

3 - Hour Class, plus Saturdays

Location: Fremont Beauty College

Credit: 30 units per year

Students will gain practical and theoretical skills needed to pass the California Manicurist Examination. This course includes instruction in manicures, pedicures, acrylic nails, wraps, floaters and extensions, as well as nail painting and decorating. Students will learn business practices used in salon management. Saturday classes are required. Students must provide their own transportation. *(Twelfth grade students only accepted into program.)*

Health Science and Medical Technology

Anatomy and Physiology for Medical Careers (THZP)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am

Credit: 20 units per year

This full-year program provides students with an in-depth study of health care careers including actual clinical experience in a variety of areas. Instruction includes intermediate anatomy and physiology, medical terminology, diseases and disorders, medical ethics and CPR and first aid. The class is designed to prepare students for Advanced Health Science courses and/or a variety of health technology programs. Prerequisite: Biology. ***UC Credit pending.***

Biotechnology (TFAA)

1 - Class Period

Location: Mission San Jose HS

Credit: 10 units per year

This course prepares students for careers involving laboratory science and the biotechnology industry. Students learn procedures and laboratory skills required for lab technicians working with DNA manipulation and micro-pipetting, and other advanced laboratory techniques. Instruction includes both “hands-on” and traditional classroom experiences. After completing the course, students will be prepared to continue at the university level or apply for entry-level positions with biotechnology labs and research facilities. ***Prerequisite: Biology (Receives BIOT 105 credit at Ohlone College and Chabot College. UC “D” Credit Pending!***

Biotechnology (TFAB)

2 - Hour Class

Location: ROP Center - 12:45 pm - 2:45 pm

Credit: 20 units per year

This course introduces students to the basic concepts of the science and business of biotechnology. The course includes overviews of biotechnology product development cycle, bioethics and relevant laws and regulations. Students will learn laboratory procedures including basic laboratory math and statistics, experiment design and laboratory safety procedures. This course explores biotechnology techniques involving recombinant DNA, DNA replication, protein synthesis, transcription, translation, PCR, cloning and chromatography. Students will prepare for career opportunities such as labeling operators, packaging specialists, bio-process technicians, instrumentation analysis, media prep technicians and related positions in pharmaceutical manufacturing. Students are expected to complete an internship with a Biotech company as a component of the course. ***(UC “D” credit pending!)***

Medical Assisting (THAB)

2 - Hour Class

Location: American HS - 7:20 am - 9:20 am; ROP Center - 7:20 am - 9:20 am; 12:45 pm - 2:45 pm

Credit: 20 units per year

This course instructs students in the skills required for entry-level medical assistant positions in doctors’ offices and other health care facilities. Students learn psychology and human behavior, medical terminology, anatomy and physiology, medical law and ethics, secretarial and clinical assisting skills. During second semester, students will be placed in a health care facility for on-the-job training. Professional work habits and ethics are emphasized. Proof of current immunizations and a negative TB test are required and the Hepatitis B vaccination is highly recommended. Readiness for employment is stressed throughout the

Continued, Medical Assisting

course. A uniform is required for on-the-job training, and students must provide their own transportation to and from the work site. ***This course receives college credit at Chabot College.***

Medical and Health Careers (THOA)

1 - Class Period

Location: American HS, Irvington HS, James Logan HS

Credit: 10 units per year

This course is designed for students who wish to pursue a career path in health, medicine, life sciences, and biotechnology. Students will be provided with a variety of experiences in studying health care systems and health careers, medical terminology, medical ethics and law, human growth, development, nutrition, and infection control. Additionally, the course focuses on the biology of living things, human anatomy and physiology, basic microbiology and epidemiology concepts, hands-on laboratory experiments using the scientific method, and performance of entry-level medical skills and emergency procedures.

Medical Occupations (THOB)

2 - Class Periods

Location: James Logan HS, ROP Center

Credit: 20 units per year + community service credit

This course prepares students for entry-level employment in a variety of medical or health careers including pharmacy, dental, respiratory, physical therapy, veterinarian, social worker, radiology, optical, imaging, laboratory, cardiology, medical records, health information, unit coordination, medical clerical, central sterile supply, food service, and many more. Instruction includes professional ethics, medical terminology, infection control, vital signs, basic anatomy and physiology, CPR and special procedures. During 2nd semester, students are placed in a local hospital or other health care facility for on-the-job training. *Students must provide their own transportation to the clinical site.*

Medical Lab Technician/Phlebotomy (THEA)

Time: 2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am

Credit: 20 units per year

This course teaches phlebotomy theory and skills, basic clinical laboratory analyses of body materials, specimen processing, EKG, CPR, First Aid, immunology, hematology, microbiology, urinalysis, chemistry, and coagulation. The course includes entry-level and upgrade instruction as well as practice in all methods of blood collection. Students learn techniques and devices for successful acquisition of blood specimens using both venous and capillary methods. Upon successful completion of the course and an internship, students may be eligible for a state certification. *Students must attend an orientation in order to register for the class.*

Medical Terminology 1 (THTA)

Medical Terminology 2 (THTE)

2 - Hour Class

Location: ROP Center, 7:20 am - 9:20 am

Credit: 20 units

The course teaches the language of medicine. Medical, surgical, diagnostic, therapeutic terms, and abbreviations will be taught using a body-systems approach. This course is a “must” for any student wishing to enter the medical field.

Nursing Assistant (THNB)

2 - Hour Class

Location: James Logan HS, ROP Center - 7:20 am - 9:20 am; 12:45 pm - 2:45 pm

Credit: 20 units per year

Classroom instruction includes professional ethics, medical terminology, CPR, first aid, personal patient care, food and nutrition, safety principles, infection control, body mechanics and vital signs. On-the-job training is provided in local community hospitals and skilled nursing facilities. Prior to patient contact, students will be required to provide the following: 1) Health history and physical exam taken within the last year, and 2) Current TB screening (PPD) or chest x-ray taken within the last three months, and 3) Fingerprints (required by the State Department of Health Services). Required forms will be provided to you by the instructor. *(Students successfully completing this course will be eligible to test for the Nurse Assistant Certification issued by the State Department of Health Services.)*

Personal Fitness Trainer 1 - SHAPE PE - (THQA)

Personal Fitness Trainer 2 - SHAPE PE - (THQE)

Time: 1 - Class Period

Location: Irvington HS

Credit: 10 units per year

This competency-based course is designed to introduce and prepare students with entry-level employment skills in the areas of fitness and exercise, (i.e. physical therapy, and athletic training). Instruction will include basic anatomy and physiology, vital signs, and nutrition for fitness and sports. Specific topics such as training room management, theory and application of exercises (isometric, isotonic, isokinetic), and injury prevention are also taught. Upon successful completion of the course, students may enroll in the second year.

Pharmacy Clerk 1, 2 (THYB)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am; 12:45 pm - 2:45 pm

Credit: 20 units per year

This course provides the background for an entry-level career in the pharmaceutical field. Pharmacy clerks are responsible for ordering and receiving stock and supplies, labeling drugs and chemicals, delivering drugs, cleaning equipment and work areas, sterilizing containers and other duties under the direction of a pharmacist. Interested students must have completed Pre-Algebra and Science courses and be in 12th grade. To obtain a Pharmacy Technician State Board License upon completion of the program, the student must:

- *Maintain a B average or above*
- *Complete 360 hours of lecture and laboratory (covers 2 semesters)*
- *Complete 180 hours of externship (summer session)*

SHAPE Core ((THRA)

Time: 1 - Class Period

Location: Irvington HS

Credit: 5 units per semester

This is a one-semester, five-unit introductory course into career options in the health care field. Topics covered include an introduction to careers in the NHCSS health career clusters, educational requirements for specific careers, personal qualities of health care workers, legal and ethical issues that face health care workers and employment skills for health care workers. Students gain this knowledge through lecture,

Continued, SHAPE Core

individual and group projects, hands-on activities, guest speakers and field trips. SHAPE students who complete this course will have a better understanding of what area of health care they would like to investigate further as they continue their studies in the SHAPE Academy.

Sports Psychology (THDA)

Time: 1 Class Period

Location: Irvington HS

Credit: 10 units

This course provides a practical approach to the primary components of Sports Psychology. The course details the athlete's and athletic team's goal of obtaining the Optimal Performance Zone and how motivation and anxiety in practice and competition can deviate the athlete from their peak performance. This course will offer methods that can reduce anxiety and increase motivation to assist athletes and athletic teams to reach their full potential in their chosen athletic arena as well as improving individual and group performance beyond the realm of athletics. Integrated throughout the course are Career Preparation Standards, including Workplace Basic Skills and Behaviors, Career Technical Skills, and Job Employment Skills.

Sports Therapy 1 (THSA)

1 - Class Period + 180 hrs. minimum community classroom experience

Location: Irvington HS, Washington HS

Credit: 20 units per year

This is an entry-level course focusing on the area of sports medicine. Students will learn to evaluate, treat, rehabilitate, and prevent common athletic injuries. Instruction addresses the development and evaluation of personal fitness programs, basic nutrition, CPR, first aid and emergency procedures. Students will gain valuable hands-on experience by working with Irvington and Washington sports teams as student athletic trainers. ***This course may provide 2+2 articulation with Ohlone College.***

Sports Therapy 2 (THSE)

1 - Class Period + 180 hrs. minimum community classroom experience

Location: Irvington HS, Washington HS

Credit: 20 units per year

(Completion of Sports Therapy I with a grade of "C" or better required.) This course will allow students to explore more in depth concepts introduced in Sports Therapy 1. Topics include advanced anatomy of the musculoskeletal system, advanced evaluation techniques, design of rehabilitation programs and therapeutic modalities. CPR training is included. Students gain valuable hands-on experience by working with Irvington and Washington sports teams as student athletic trainers or in area physical therapy clinics.

Sports Therapy 1 (THSB)

2 - Hour Class

Location: ROP Center - 12:45 pm - 2:45 pm

Credit: 20 units per year

Through classroom instruction and on-the-job training, students will gain skills, knowledge, and experience in the area of physical fitness, physical therapy, and athletic training. The course focuses on anatomy and physiology of the musculoskeletal system, the prevention, assessment, treatment and rehabilitation of athletic injuries. Additionally, students learn emergency procedures including First Aid and CPR, nutrition, sports psychology, theory of exercise, use of physical fitness equipment and safety factors. Students must provide

Continued, Sports Therapy I

their own transportation during 2nd semester to their on-the-job training site. ***This course may provide 2+2 articulation with Ohlone College.***

Sports Therapy 2 (THSF)

2 - Hour Class

Location: ROP Center - 12:45 pm - 2:45 pm

Credit: 20 units per year

(Completion of Sports Therapy I with a grade of “C” or better is required.) This course will allow students to explore more in depth concepts introduced in Sports Therapy 1. Topics include advanced anatomy of the musculoskeletal system, advanced evaluation techniques, and therapeutic modalities. Additionally, students will learn how to design rehabilitation, fitness and nutritional programs for athletes. CPR training is included. Second semester students will receive on-the-job training at sports medicine facilities in the community. Students must provide their own transportation to the on-the-job training site.

Hospitality, Tourism and Recreation

Culinary Arts/Pastry Arts 1 (TIUA - 1 hour class)

Culinary Arts/Pastry Arts 1 (TIUB - 2 hour class)

Location: American HS (1), Kennedy HS (1), Mission San Jose HS (1), James Logan HS (1 & 2), Newark Memorial HS (1 & 2), Robertson HS (1)

Credit: 10 units per year - 1 hour class

Credit: 20 units per year - 2 hour class

This competency-based course is geared toward California Restaurant Association and American Culinary Federation accreditations in preparing students for entry and mid-level positions in the restaurant baking and food services industry. Included is Serve-Safe sanitation certification, basic culinary, fundamentals of baking and pastry including breads, pies, cakes, cake icings and decorations, cookies, plated desserts, cream, fillings and laminate dough. Integrated throughout the course are career preparation standards which include basic academic skills, communication, interpersonal skills, problem solving, workplace safety, technology, and employment literacy.

Culinary Arts/Basic Foods (TIYA - 1 hour class)

Culinary Arts/Basic Foods (TIYB - 2 hour class)

Location: American HS (1), Bridgepoint HS (2), James Logan HS (1 & 2), Newark Memorial HS (1 & 2)

Credit: 10 units per year - 1 hour class

Credit: 20 units per year - 2 hour class

This competency-based course is geared toward accreditations set by the California Restaurant Association and American Culinary Federation to prepare students for entry and mid-level positions in the restaurant baking and food services industry. Included in the course are Serve-Safe sanitation certifications, basic culinary, knife skills, fundamentals of cooking which include basic cooking techniques, meat classification by animal type, grilling, soups, appetizers and Hors d’oeuvres, Garde-Manager skills, pantry skills, soups, and plate presentation.

Event Planning and Catering (TIPA)

1 - Class Period

Location: American HS, James Logan HS

Credit: 10 units per year

Students will be introduced to the mechanics of a catering event. Students will learn and practice all elements from creating menus and taking orders to the execution of the events. Emphasis will be placed on professionalism, cost control and organization.

International Cuisine (TJGA)

1 - Class Period

Location: Newark Memorial HS

Credit: 10 units per year

This culinary “tour of the world” includes exploration of international foods as well as product identification, correct utilization and cooking methods of foods and beverages from Europe, South America, Asia and the Middle East. Students will have the opportunity to gain additional experience producing ethnic meals while researching the influence of culture on the development of international cuisine.

Introduction to Hospitality and Tourism (TMTA)

1 - Class Period

Location: American HS, James Logan HS

Credit: 10 units per year

This course explores the major components and organizations structure of the hospitality and tourism industry. Students will learn culinary and restaurant operations. The class also presents historical development, opportunities and current trends. The importance and relationship of education and work experience to career success is stressed throughout the course.

Information and Communication Technology

Computer Networking/CCNA Certification (TCCB)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am; 12:45 pm - 2:45 pm

Credit: 20 units per year

This course offers a hands-on, career oriented approach to learning networking, emphasizing practical experience. Students will complete easy-to-follow labs to learn the general theory needed to apply their skills at building and implementing networks. The Cisco Network Academy, in its tenth year, has totally revamped its curriculum to meet the needs of today’s IT users. The new curriculum focuses directly on everyday experiences with networks and covers key concepts according to the types of practical environments students may encounter; ranging from small office or home office (SOHO) networking to more complex enterprise and theoretical networking models. The CCNA class is for students who are considering further education in IT, and also helps students prepare for entry level IT careers by teaching applied skills. Strong PC skills are recommended for enrollment in the course. Students will gain excellent preparation for CCNA certification. The CCNA certification (Cisco Certified Network Associate) indicates a foundation in and apprentice knowledge of networking. ***The course is fully articulated with Ohlone College and accepted for credit at CSU.***

Computer Programming C++ (TCPA)

1 - Class Period

Location: James Logan HS

Credit: 10 units per year

This course offers an introduction to computers, problem solving, algorithms, and program design using the C++ programming language. Topics include control structures, arrays, functions, input/output, and object oriented design. The course uses a hands-on approach to instruction and builds a strong foundation of structural programming. This course receives college credit. Prerequisite: Algebra I and knowledge of basic computer operating systems. **(UC credit approved for James Logan students.)**

Computer Programming/JAVA (TCGA)

1 - Class Period

Location: James Logan HS

Credit: 10 units per year

Prerequisite: A grade of “C” or higher in Algebra plus knowledge of basic computer operation systems is recommended. This course is designed to introduce students to the study and writing of computer programs. Analytical thinking skills and logic are emphasized. The JAVA language is used with an emphasis on programming for the Internet so structured as well as object-oriented methods of programming is studied. Elementary study of digital computer hardware is included. This course is recommended for the college bound student planning on a business math or science major, or for the student preparing to take the AP - JAVA exam. **(AP credit for James Logan HS students.)**

Computer Service Repair 1 (TCRB)

Computer Service Repair 2 (TCRF)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am; 12:45 pm - 2:45 pm

Credit: 20 units per year

Students will install hardware modules including multimedia kits, modems, and hard disk drives and will learn to upgrade and customize computer systems. Lab projects include testing, troubleshooting, and repairing of microcomputers. This course also prepares students for the A+ Certification. After successfully completing the first year, students may enroll in a second year for more advanced opportunities.

Computer Service Technology 1 (TCRA)

1 - Class Period

Location: American HS, Irvington HS

Credit: 10 units per year

With a focus on personal computer hardware and operating systems, this course helps students prepare for the IC3 Certification and A+ exams. The course uses a combination of lectures, discussions, and hands-on laboratories to develop skills with the identification, installation, configuration, and trouble shooting of field replaceable components. The goal of the course is to provide students with a comprehensive understanding of the hardware and multiple operating systems commonly found in the Information Technology field today. Instruction includes how hardware interacts with operating systems and basic functions and design of

Continued, Computer Service Technology 1

file systems found in Windows operating systems. Learn how operating systems interface with input, output, and storage devices. Students will set up network resources through the multiple versions of software. The class includes projects that provide real experience in the support of multiple operating systems. ***This course receives math credit.***

Computer Service Technology 2 (TCRE)

1 - Class Period

Location: American HS, Irvington HS

Credit: 10 units per year

(This is a follow-up course to the curriculum in Computer Service Technology 1.) Through a combination of lectures, discussions, and increased hands-on labs, Computer Technology 2 will aid students in developing skills with the identification, installation, configuration, and troubleshooting of field replaceable components. The course goal is to provide students with a comprehensive understanding of the hardware and multiple operating systems commonly found in the Information Technology field today. A broad range of desktop support techniques, troubleshooting skills and basic networking components are covered. Students will learn advanced operating system functions and interfaces with input, output, and storage devices. An emphasis is on providing students with basic skills to embark on a successful career in the field of information technology. ***This course receives math credit.***

Computer Support Internship (TCZA)

1 - Class Period

Location: American HS, Irvington HS

Credit: 10 units per year

This is a continuation of the curriculum provided in Computer Service Technology 1 and 2. It is designed to provide on-going computer support throughout the high school campus. This course uses a combination of lectures, discussions, and hands-on assignments to develop skills required to solve computer user problems in a real-time work environment. The focus is to provide students with real experience in computer desktop support, minor networking, and interaction with customers. Students will apply technical and customer service concepts learned in the classroom to practical experience in the field.

Computer Tech/Operations (TZHA)

1 - Class Period

Location: American HS, Bridgepoint HS, Kennedy HS, Newark Memorial HS, Washington HS

Credit: 10 units per year

This program is designed to improve office and business skills and to teach the latest skills and file management techniques used in offices today. A focus of the class is developing proficiency with the Microsoft Office Suite. Appropriate software is used to write and edit letters, make labels, file lists, format business forms, create exciting PowerPoint presentations, create Excel spreadsheets, and manage databases.

ICT Essentials/Technology 101 (TDBA)

Time: 1 - Class Period

Location: Irvington HS

Credit: 5 units per semester

This is an introductory semester course designed to prepare students for technology career pathways. Students will have the opportunity to explore and understand concepts related to multimedia, graphic design, computer hardware, computer networking, computer programming, and robotics. Students will develop a study plan for accomplishing learning objectives.

Marketing, Sales and Service

Marketing 1/DECA (TMMA)

Marketing 2/DECA (TMME)

1 - Class Period

Location: American HS, Irvington HS, Kennedy HS, Mission San Jose HS, Newark Memorial HS

Credit: 10-30 units per year

Students completing the Marketing Program will have developed the skills for an entry-level position in the marketing field or for further education leading to a career in business. Through classroom instruction, students will be able to apply ten-core competencies of marketing to actual job situations and will acquire the knowledge to make better informed consumer purchases. Through DECA (an association of marketing students), students will gain skills to enhance their self confidence and business opportunities by participating in career development conferences. They will acquire leadership, computer, and communication skills to assist them in being responsible young adults in their community and in the workforce. Students who are employed by local merchants can earn up to 20 units of credit per year. Students successfully completing the first year may enroll in Marketing 2. (***This course receives math credit and also provides credit at Ohlone College.***)

Online Business (TMJA)

1 - Hour Class

Location: American HS

Credit: 10 units per year

Learn how to buy and sell online. Make money while learning how to setup and run your own business. Explore the various aspects of running an e-commerce business. Students will implement policies and procedures for inventory control, shipping and receiving, marketing, collections, accounts receivable, accounts payable, customer service, pricing and more.

Virtual Enterprise 1 (TMKA)

Virtual Enterprise 2 (TMKE)

1 - Class Period

Location: James Logan HS, Washington HS

Credit: 10 units per year

This course simulates a business modeled on the successful Virtual Enterprise International program taught in high schools and colleges throughout the world. It is designed to give students experience in a real business environment. Students determine the nature of their business, products and services, management and structure, and learn the daily operation of a business under the guidance of the instructor with the support of real business partners. Students conduct business transactions with other high school and college Virtual Enterprise companies from California, the United States and throughout the world. Learn market research, advertising, buying and selling products and services, accounting, paying wages, taxes and monthly business and personal expenses along with negotiating loans with a central bank.

Public Services

Fire Science/First Responder 1, 2 (TPAB/TPAF)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am; 12:45 pm - 2:45 pm

Credit: 20 units per year

This course is designed to give students interested in a career in Fire Services an opportunity to identify those qualifications and requirements for the position of Firefighter. The focus of the course is on a variety of fire service related subjects including the history of fire service, fire department organizations, fire behavior, firefighting tactics and strategies, hazardous materials, fire safety, tools and equipment, fire prevention, fire protection systems, codes and standards, fire service occupations, and related subjects. Emphasized throughout this course is the importance of personal integrity, self-discipline, goal-setting, effective oral and written communication skills, interpersonal relationships, physical fitness and health, strong academic skills and effective problem solving skills. (*Students may enroll in a second year for more advanced instruction.*)

Fire Science/Driver Operator (TPHB)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am

Credit: 20 units per year

Second year Fire Science students receive advanced training in fire engine cab operations, pumping operations, hose lays, hydraulics calculations, and care and maintenance of fire apparatus. The course prepares students in basic leadership skills needed for further training and/or employment in the Fire Service. One or more students take on the leadership role of Fire Captain, and will assist the instructor with lecturing, presenting class information, skills training, providing assistance and guidance to students during exercises with equipment, mainly for the purposes of maintaining a safe environment.

Forensic Science/Crime Scene Investigation 1, 2 (TPFB/TPFF)

2 - Hour Class

*Location: ROP Center - 7:20 am - 9:20 am; 9:35 am - 11:00 am (Kennedy Block 2);
11:05 am - 12:30 pm (Kennedy Block 3); 12:45 pm - 2:45 pm*

Credit: 20 units per year

Forensic Science is a fast-paced, rigorous, multi-disciplinary, college level course integrating concepts and state standards from Biology, Chemistry, Physics and Earth Sciences. Topics covered include crime scene analysis, physical/chemical analysis, microscopy, chromatography, hair/fiber/glass analysis, fingerprint comparison, comparative analysis, document analysis, firearms, drugs/toxicology, entomology, anthropology, blood (serology) and DNA analysis. Guest speakers from a wide range of fields add to the class by providing real applications in the field of forensic science. *(Students may enroll in a second year for more advanced instruction.) UC “D” credit pending.*

Law Enforcement/Homeland Security (TPJA)

1 - Class Period

Location: American HS, James Logan HS, Mission San Jose HS, Newark Memorial HS

Credit: 10 units per year

Students learn legal vocabulary, general knowledge of the law, search and seizure procedures, laws of arrest, judicial systems, specialized police practices and improvement in written and oral communication. The course will provide opportunities to explore careers within the criminal justice system and job search procedures. Field trips are provided to local courts to witness the judicial system in operation and to Alcatraz, the closed Federal penitentiary. *This course receives college credit with Ohlone.*

Transportation Technology

Auto Body/Major Collision Repair 1 (TIRB)

Auto Body/Major Collision Repair 2 (TIRF)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am; 12:45 pm - 2:45 pm; 3:00 pm - 5:00 pm

Credit: 20 units per year

Students will learn auto body repair, body panel replacements, collision repair, as well as metal inert gas (MIG) welding. Instruction includes collision repair, correcting rust problems, and some customizing. Students successfully completing the first year may enroll in a second year for more advanced opportunities.

Auto Body Painting and Refinishing 1 (TIBB)

Auto Body Painting and Refinishing 2 (TIBF)

2 - Hour Class

*Location: ROP Center - 7:20 am - 9:20 am; 9:35 am - 11:00 am (Kennedy Block 2);
12:45 pm - 2:45 pm*

Credit: 20 units per year

Students will learn to identify and utilize materials and tools efficiently. Instruction includes light body work and metal inert gas (MIG) welding with an emphasis on original equipment manufacturer (OEM) finishes as well as custom painting. Students successfully completing the first year may enroll in a second year for more advanced instruction.

Automotive Technology 1 /NATEF &AYES Certified (TITB)

Automotive Technology 2 /NATEF &AYES Certified (TITF)

2 - Hour Class

Location: ROP Center - 7:20 am - 9:20 am; 12:45 pm - 2:45 pm; 3:00 pm - 5:00 pm

Credit: 20 units per year

This course prepares students for entry-level positions in the automotive technology industry. Instruction includes tool usage, understanding technical manuals and diagnosing and repairing basic automotive systems. The course is certified by NATEF (National Automotive Technicians Education Foundation) and AYES (Automotive Youth Educational System). An emphasis of the course is on brakes, steering and suspension, electrical systems, and engine performance. Students successfully completing the first year may enroll in a second year for more advanced opportunities and industry certification. (Students are required to purchase shop overalls.)

Automotive Technology/Basic Car Care (TITA)

Time: 1 Class Period

Location: James Logan HS

Credit: 5 units - 1 semester

This course provides pre-entry level training in automotive service/maintenance and is designed to be the first course for students entering transportation technology career pathways. Instruction covers the following areas: engine systems, electrical systems, tires and brakes, lubrication service, cooling systems, ignition and emission device service. Approximately 180 hours are needed to complete the course.

Automotive Technology 1 (TITA) 1 - hour class

Automotive Technology 2 (TITE) 1 - hour class

1 - Class Period

Location: James Logan HS, Washington HS

Credit: 10 units per year

Automotive Technology 1 (TITB) 2 - hour class

Automotive Technology 2 (TITF) 2 - hour class

2 - Class Periods

Location: James Logan HS, Washington HS

Credit: 20 units per year

This course prepares students for entry-level positions in the automotive technology industry. Students learn basic automotive theory, and preventive maintenance with an emphasis in the areas of brakes, steering and suspension, electrical systems, and engine performance. Students successfully completing the first year may enroll in a second year for advanced opportunities and industry certification.

Small Engine Repair (TIIA)

1 - Class Period

Location: James Logan HS

Credit: 10 units per year

This class covers the principles and procedures needed for overhauling, troubleshooting and repairing small engines. Instruction includes safety, engine types and identification, engine operation and maintenance, disassembly and inspection, engine reconditioning and assembly, fuel and ignition system assembly, and mechanical operation and testing.

General MVROP Information

MVROP Administration

Charles Brown, Superintendent
Rick Herrmann, Director of Educational Services
Marie dela Cruz, Director of Business Services
Shelley Adams, Adult Coordinator
Jim Omlid, High School Coordinator
TBA, Public Relations Administrator
Phil Subasa, Technology Supervisor

MVROP Governing Council

Ray Rodriguez, Newark Unified School District
Jenn Stringer, New Haven Unified School District
Larry Sweeney, Fremont Unified School District

Advanced Placement/College Credit: Many ROP courses offer opportunities for advanced placement and/or credit at local community colleges for students who receive an “A” or “B” grade in the course. Individual course descriptions indicate whether the course receives college credit or advanced placement.

Bus Transportation: Students must have transportation to the ROP Center for 7:20 am - 9:20 am classes. Bus transportation, however, will be available from the Center to all high schools at 9:20 am. Bus transportation is provided to the ROP Center and return for 12:45 pm ROP classes.

Course Structure: ROP course content is approved by CDE (California Department of Education) for a specific number of hours. Curriculum is subject to change in response to industry needs. Practical hands-on experience is a critical component of ROP courses and is accomplished through classroom labs, community classrooms, or cooperative vocational education sites. Integrated throughout all ROP courses are career preparation standards that include communication skills, inter-personal skills, problem solving, safety, technology, and job search skills.

High School Units: Students can earn 5 to 20 high school units per semester. ROP courses count as part of the GPA for college admission at UC and CSU campuses.

Internships: Community Classroom (CC) and Cooperative Vocational Education (CVE) internships are an important component of many ROP courses. Community Classroom is a non-paid internship and Cooperative Vocational Education is paid. Each of these two strategies is an extension of the classroom and provides excellent opportunities for hands-on learning. Some programs may require participation in an internship to successfully complete the program.

Locations: ROP classes are offered on high school campuses in Fremont, Newark, and Union City, and the ROP Center in Fremont. Locations are listed on the next page.

Notice of Non-Discrimination: Mission Valley ROP does not discriminate on the basis of race, color, national origin, religion, sex, age, or handicap in its educational programs, activities, or employment practices.

Registration Process: Students register for ROP classes at the same time they register for classes on their high school campus. The ROP course code is to be marked (bubbled in) on the high school registration form. For questions or information on registration or particular courses of interest, see your Career Center Specialist, counselor, call the ROP Center (510) 656-0533, or visit our web site at www.mvrop.org.

Parking: Student parking is available for all students attending classes at the ROP Center. Students must pay a \$10 per school year fee for a parking pass.

Sexual Harassment Statement: Mission Valley ROP is committed to maintaining an employment, educational and business environment free from harassment, intimidation, or insult on the basis of an individual’s sex. Positive action will be taken if necessary to eliminate or correct such practices. Sexual harassment is a violation of Federal law, State of California law, and MVROP policy.

Smoke Free Facilities: All Mission Valley ROP facilities are designated as smoke free; therefore, smoking at anytime on ROP facilities is prohibited.

Mission Valley ROP High School Career Centers

American High School

36300 Fremont Blvd., Fremont
Contact: Theresa D'Audney (510) 796-1776 Ext. 57-408

Bridgepoint High School

35753 Cedar Blvd., Newark
Contact: (510) 818-3200

Conley-Caraballo High School

541 Blanche Street, Hayward
Contact: Margaret Velasquez (510) 471-5126

Irvington High School

41800 Blacow Road, Fremont
Contact: Linda Kimmel (510) 656-5711 Ext. 46-377

James Logan High School

1800 H Street, Union City
Contact: Barbara Hart (510) 471-2520 Ext. 5561

Kennedy High School

39999 Blacow Road, Fremont
Contact: Janelle Coleman (510) 657-4070 Ext. 27-122

Mission San Jose High School

41717 Palm Avenue, Fremont
Contact: Janet Aldinger (510) 657-3600 Ext. 37-072

Newark Memorial High School

39375 Cedar Blvd., Newark
Contact: Sally Holguin (510) 818-4332

Robertson High School

4455 Seneca Park Avenue, Fremont
Contact: Suzanne Creek (510) 657-9155 Ext. 49-022

Washington High School

38442 Fremont Blvd., Fremont
Contact: Michelene Wittmer (510) 505-7379