



# Mission Valley ROP

## Career Technical Training Center

### 2012-2013 High School Courses



## Courses at American High School

### 2-D Animation (TANAP)

Students learn the creative process for producing 2-dimensional digital animations. Students write short stories, draw sketches and storyboards; develop original characters, backgrounds and objects on two-dimensional software, to finally produce short animations. **UC "f" credit.**

### Business Ownership and Management (TMSA)

Basic principles in owning, running, or managing a small business; create a business plan, use business math and accounting principles; understand business systems/functions, advertising, marketing, merchandising and technology. Internships may qualify for up to 20 additional credits. **Receives general math credit. Mission College credit.**

### Careers in Hospitality and Marketing-Eat, Meet, and Greet (TJNA)

Within this one-semester course, students will explore career pathways in the hospitality industry including: hotels, restaurants, clubs, travel, and tourism. Classroom discussions are enhanced by active labs of food preparation and service along with basic management techniques. Students will also explore the fundamentals of marketing to include: research, sales, advertising, and public relations. Skills acquired in leadership, technology and communication will allow students to build confidence in their roles as responsible members of the workforce and community.

### Culinary Arts 1, 2 (TIYA/TIYE)

Study California Restaurant Association and American Culinary Federation standards to prepare students for entry-level positions; Serve-Safe, basic culinary, knife skills, basic cooking techniques, meat classification, grilling, soups, appetizers, and hors d'oeuvres, Garde Manger skills, pantry skills, and plate presentation. **Mission College credit.**

### Digital Photography 1, 2, 3 (TACAP/TACEP/TALAP)

Study of digital photography encourages conceptual thinking and creativity. Explore hands-on digital photography fundamentals to include: Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing. Lab donation. **UC "f" credit.**

### Law Enforcement/Homeland Security (TPJA)

Students learn legal vocabulary, search and seizure, laws of arrest, judicial systems, specialized police practices and improved written and oral communication. Explore careers within the criminal justice system and job search procedures; field trips to local courts, law enforcement agencies. **Ohlone, Chabot College credit.**

### Marketing 1, 2 DECA (TMMA, TMME)

Preparation for entry-level marketing positions. DECA student organization participation encouraged. **Receives general math credit.** Internships may qualify for up to 20 additional credits. **Mission College credit.**



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### 2012-2013 High School Courses



## Courses at Irvington High School

### Computer Support Specialist 1, 2 (TCEA/TCFE)

Two-year course sequence prepares students for industry certifications (IC3 and CompTIA A+), entry-level employment, and further education. Curriculum is Cisco Systems IT Essentials. **Ohlone and Mission College credit.**

### Digital Imaging (TAYAP)

Students use digital tools and technologies as art and design mediums to visually articulate thoughts, ideas, and experiences. Technologies include digital painting, drawing, illustrating and graphic design. **UC "f" credit.**

### Digital Photography 1, 2, 3 (TACAP/TACEP/TALAP)

Study of digital photography encourages conceptual thinking and creativity. Explore hands-on digital photography fundamentals to include: Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing. Lab donation. **UC "f" credit.**

### Digital Video Arts Production 1 (TADAP)

Video production including camera work, editing, DVD authoring and the production process of short fiction, documentary, commercial and "live TV"; analyze film scenes and sequences, develop production management skills. (Recommend prior class in fine arts, computer applications or digital graphics.) Lab donation. **UC "f" credit.**

### Network Technician 1 (TDGA)

Curriculum provided is CCNA Discovery I & II preparing students with the skills needed to obtain the Cisco Certified Entry-level Network Technician Certification (CCENT). Students gain practical experience by providing desktop technical support on campus during school hours. **Ohlone and Mission College credit.**

### Personal Fitness Trainer 1 & 2 SHAPE PE - (THQA/THQE)

Prepare students with entry-level employment skills in the areas of fitness and exercise to include basic anatomy, physiology, nutrition and injury prevention.

### SHAPE Seminar (THUA)

Fifteen-unit, junior-level class for the SHAPE career pathway. Students will learn the skills and education needed for various careers in the health and fitness industry through hands-on activities including job shadows.

### Sports Psychology (THDA)

This course provides a practical approach to 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.

### Sports Therapy 1 & 2 (THSAP/THSE)

This is an entry-level course focusing on the area of sports medicine. Students will gain valuable hands-on experience by working with Irvington sports teams as student athletic trainers. **Ohlone College credit. UC "g" credit.**



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## Courses at Kennedy High School

Some classes available only in blocks indicated on the JFK Bell Schedule

### Anatomy and Physiology (THZBP) Block 2

Students will gain a strong foundation in anatomy and physiology needed in the health care profession through guest speakers, field trips and labs. Lab skills include study of body systems and basic medical terminology. **UC "g" credit.**

### Auto Body Painting and Refinishing 1 & 2 (TIBB/TIBF) Block 2

I-CAR certified instructor to teach body work, MIG welding, original equipment manufacturer (OEM) finishes, custom painting.

### Construction Technology 1 & 2 (TICB/TICF) Block 2

Train for entry-level employment in residential and commercial construction; training and hands-on projects in carpentry, electrical, plumbing; power tool use and safety. Introduction to "green" construction including roofing/solar systems installation and energy efficient building materials. **Receives general math credit for FUSD students.**

### Culinary Arts 1 & 2 (TIYA/TIYE)

Study California Restaurant Association and American Culinary Federation standards to prepare students for entry-level positions; Serve-Safe, basic culinary, knife skills, basic cooking techniques, meat classification, grilling, soups, appetizers, and hors d'oeuvres, Garde Manger skills, pantry skills, and plate presentation. **Mission College credit.**

### Digital Photography 1.2 (TACAP/TACEP)

Study of digital photography encourages conceptual thinking and creativity. Students explore hands-on digital photography fundamentals to include: Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing. Lab donation **UC "f" credit.**

### Digital Video Arts Production 1 & 2 (TADAP/TADEP) Blocks 1 & 2

Video production including camera work, editing, DVD authoring and the production process of short fiction, documentary, commercial and "live TV"; analyze film scenes and sequences, develop production management skills. (Recommend prior class in fine arts, computer applications or digital graphics.) Lab donation. **UC "f" credit.**

### Event Planning and Catering (TIPA)

Study the principles and practices of public relations, planning and organizing events, and preparation for employment opportunities with a variety of profit and non-profit organizations and corporations. Students must receive a grade of "B" or better to be eligible for internship opportunities.

### Forensic Science 1/ Interdisciplinary Forensic Sciences (TPIAP/TPIEP) Block 2 Fall and/or Spring Term

Crime scene analysis, hair/fiber/glass analysis, fingerprint comparison, firearms, drugs/toxicology, entomology, blood, DNA analysis, physical/chemical analysis, microscopy, chromatography. **UC "d" credit.**

### Introduction to Culinary Arts and Hospitality (TMTA)

Exploration of careers in several related industries including hospitality, culinary arts, travel, tourism, recreation and leisure industries. Introductory course for Culinary Arts.



# Mission Valley ROP

## Career Technical Training Center

### 2012-2013 High School Courses



## Courses at Logan High School

### 2-D Animation (TANAP)

Students learn the creative process for producing 2-dimensional digital animations. Students write short stories, draw sketches and storyboards; develop original characters, backgrounds and objects on two-dimensional software, to finally produce short animations. Lab donation.

**UC "f" credit.**

### Auto Technology 1 (TITA) 1 hour

General auto repair, brakes, steering and suspension, electrical systems, engine performance. Students receive hands-on experience in auto shop operations, tool usage, safety procedures, equipment operation and customer service.

### Auto Tech 2 (TITF) 2 hour

**Prerequisite Auto Tech 1.** Students gain advanced skills in a variety of areas and can then choose to concentrate in areas of specialization. **Chabot College credit.**

### Basic Car Care (TJLA) (semester)

This one-semester 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.

### Culinary Arts 1 (TIYA) 1 hour

Study California Restaurant Association and American Culinary Federation standards to prepare students for entry-level positions; Serve-Safe, basic culinary, knife skills, basic cooking techniques, meat classification, grilling, soups, appetizers, and hors d'oeuvres, Garde Manger skills, pantry skills, and plate presentation. **Mission College credit.**

### Culinary Arts 2 (TIYF) 2 hour

**Prerequisite Culinary Arts 1.** Students continue to focus on sanitation, safety, and knife skills. Students gain advanced skills in preparing stocks, soups, sauces and main entrees courses, nutrition, costing out recipes and menu and other culinary math skills, menu design and regional cooking.

### Digital Photography 1 (TACAP)

Study of digital photography encourages conceptual thinking and creativity. Explore hands on digital photography fundamentals to include: Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing. Lab donation. **UC "f" credit.**

### Digital Photography 2 (TACEP)

**Prerequisite Digital Photography 1.** Students will improve their camera operation skills, work on photo concept, improve and manipulate their photos using Adobe Photoshop CS3, and learn advanced digital printing techniques. Students will practice professionalism and work ethic, and the same challenges faced in "real life" photography. **UC "f" credit.**

### Introduction to Culinary Arts and Hospitality (TMTA) (semester)

Exploration of careers in several related industries including hospitality, culinary arts, travel, tourism, recreation and leisure industries. Introductory semester course for Culinary Arts.

### Law Enforcement/Homeland Security (TPJA)

Students learn legal vocabulary, search and seizure, laws of arrest, judicial systems, specialized police practices and improved written and oral communication. Explore careers within the criminal justice system and job search procedures; field trips to local courts, law enforcement agencies. **Ohlone, Mission College credit.**

### Medical and Health Careers (THOA)

Exploration for career pathways in health, medicine, life sciences, and biotechnology; health care systems, health careers, medical terminology, medical ethics and law, human growth, development, nutrition, and infection control.

### Medical Occupations (THOB)

This course prepares students for entry-level employment in a variety of medical or health careers. Instruction includes professional ethics, medical terminology, infection control, vital signs, basic anatomy and physiology, CPR and special procedures. Internship at hospitals, doctor's offices, pharmacies, and clinics.

### TV Broadcast Technology - Electronic Media Production (EMP 1) (TABA)

Television Broadcasting Technology is a one year course taken over two years. Semester 1 is taken in the 11th Grade. Semester 2 is taken in the 12th grade. Semester 1 (EMP 1) Students will become proficient in the use of television studio equipment while in a classroom setting, in addition to hands on experience during our television production practice. Semester 1 focuses on an introduction to television, audio basics for television and video, lighting for television and video, project planning, and TV studio shooting.

### TV Broadcast Technology - Electronic Media Production (EMP 2) (TABE)

Semester 2 (EMP 2) Students will gain greater proficiency in the use of television studio equipment while in a classroom setting, in addition to hands on experience during our daily live television production. Semester 2 focuses on television and electronic news gathering, props, screens, and sets, the television signal and the future of television. This semester students also run a daily live 6 minute television show for their high school campus.



# Mission Valley ROP

## Career Technical Training Center

### 2012-2013 High School Courses



## Courses at Mission San Jose High School

### Digital Imaging (TAYAP)

Students use digital tools and technologies as art and design mediums to visually articulate thoughts, ideas, and experiences. Technologies include digital painting, drawing, illustrating and graphic design. **UC "f" credit.**

### Digital Photography 1, 2 (TACAP/TACEP)

Study of digital photography encourages conceptual thinking and creativity. Explore hands-on digital photography fundamentals to include: Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing. Digital camera needed. Lab donation. **UC "f" credit.**

### 2-D Animation (TANAP)

Students learn the creative process for producing 2-dimensional digital animations. Students write short stories, draw sketches and storyboards; develop original characters, backgrounds and objects on two-dimensional software, to finally produce short animations. Lab donation. **UC "f" credit.**



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### 2012-2013 High School Courses



## Courses at Newark Memorial High School

### Careers in Biotechnology (TGDA) (semester course)

Students will explore emerging careers in Biotechnology. Application areas: forensics, medical, pharmaceutical, agricultural, environmental, and industrial biotechnology. Course will highlight local biotechnology companies and career opportunities through presentations and discussions. Guest speakers from various companies will discuss career options and essential educational/occupational qualifications required for each of the career paths.

### Introduction to Biotechnology (TGAAP)

This course is designed to teach students basic principles and techniques that are used in the biotech industry. This lab-intensive course prepares students for jobs in the field, and incorporates hands-on work into the course curriculum by teaching students how to use different instruments like pipettors, pH meters, microscopes, autoclave, and spectrophotometer used in the field of biotechnology. **Ohlone College credit. UC "g" credit.**

### Biotechnology 1 (THBBP)

This lab intensive 2-hour course emphasizing applications and use of Biotech instruments such as balances, pipettes, pH meters, microscopes, autoclave, and spectrophotometer. Students will learn industry approved techniques like Chromatography, ELISA, PCR, Gel Electrophoresis, Yeast Fermentation and Biofuel production from Algae. Biotech company tours and seminars will take place throughout the course. **Ohlone College credit. UC "d" credit.**

### Business Ownership and Management (TMSA)

Basic principles in owning, running, or managing a small business; create a business plan, use business math and accounting principles; understand business systems/functions, advertising, marketing, merchandising and technology. Internships may qualify for up to 20 additional credits. **Mission College credit.**

### Computer Tech / Operations (TZHA) (semester course)

Learn Microsoft Office suite, develop business skills, file management, and improve keyboarding skills. Write and edit letters, file lists, format business forms, create PowerPoint presentations and Excel spreadsheets.

### Culinary Arts 1 & 2 (TIYA/TIYE)

Study California Restaurant Association and American Culinary Federation standards to prepare students for entry level positions; Serve-Safe, basic culinary, knife skills, basic cooking techniques, meat classification, grilling, soups, appetizers, and hors d'oeuvres, Garde Manger skills, pantry skills, and plate presentation. **Mission College credit.**

### Introduction to Culinary Arts and Hospitality (TMTA) (semester course)

Exploration of careers in several related industries including hospitality, culinary arts, travel, tourism, recreation and leisure industries. Introductory course for Culinary Arts.

### Money Management (TBGA)

Learn business survival techniques to include business operations, income and financial statements, consumer finance and credit, and budgeting. Using QuickBooks software learn how to run an accounting system designed for small business to process personal and business accounts.



# Mission Valley ROP

## Career Technical Training Center

### 2012-2013 High School Courses



## Courses at ROP Center

### Auto Body Painting and Refinishing 1 & 2 (TIBB/TIBF)

I-CAR certified instructor will teach body work, MIG welding, original equipment manufacturer (OEM) finishes and custom painting.

### Biotechnology 1 (THBBP)

This lab intensive course emphasizing applications and use of Biotech instruments such as balances, pipettes, pH meters, microscopes, autoclave, and spectrophotometer. Students will learn industry approved techniques like Chromatography, ELISA, PCR, Gel Electrophoresis, Yeast Fermentation and Biofuel production from Algae. Biotech company tours and seminars will take place throughout the course. **Ohlone College credit. UC "d" credit.**

### Careers in Education 1 & 2 (TPCB/TPCF)

**Proof of current TB test required.** Develop skills in leadership, supervision of children, equipment operations, and curriculum development. Internship required. **Ohlone, Chabot, Mission College credit.**

### Computer Animation 1 & 2 (TANB/TANF)

Create animation in 2D and 3D for web, TV and film. Create visual effects for video, movies, and TV. Collaborate with animators, videographers and sound designers and learn how real productions come together. Adobe After Effects, Adobe Flash, and Lightwave 3D. Lab donation.

### Computer Graphic Design 1 & 2 (TAGBP/TAGE)

Learn how to create posters, original print, 2D & 3D animation, real time animation, retouch & manipulate photographs, game graphics, all created with cutting edge tools such as Adobe Photoshop CS4, Illustrator, 3DS Max, Unreal engine, large format printing scanning and more. Lab donation. **Mission College Credit - Year 1. UC "f" credit-Year 1.**

### Construction Technology 1 & 2 (TICB/TICF)

Train for entry level employment in residential and commercial construction; training and hands on projects in carpentry, electrical, plumbing; power tool use and safety. Introduction to "green" construction including roofing /solar systems installation, and energy efficient building materials. **Receives general math credit for FUSD students.**

### Digital Sound Design 1 & 2 (TAKB/TAKF)

Learn microphones, synthesizers, audio mixers and sound systems. Create music sound effects, sound effects for video, animation and CDs using Digidesign Pro Tools, Cakewalk Sonar and Adobe Soundbooth. Lab donation.

### Digital Video Arts Production 1 & 2 (TADBP/TADFP)

Video production including camera work, editing, DVD authoring and the production process of short fiction, documentary, commercial and "live TV"; analyze film scenes and sequences, develop production management skills. (Recommend prior class in fine arts, computer applications or digital graphics.) Lab donation. **UC "f" credit.**

### Fire Technology 1 (TPAB)

Introductory course for careers in fire service; firefighting tactics/strategies, physical agility, fire safety, ladder, hose and

nozzle operations, tools, equipment, and fire prevention. CPR certification and EMS First Responder certification available. Open to juniors and seniors; sophomores with instructor approval.

### Fire Technology 2 (TPAF)

**Prerequisite Fire Technology 1.** Work independently, leadership training, class presentations, community events involvement, and peer mentoring. Inventory control, set up of equipment, operate fire engines, field trips to Fremont Fire Tactical Training Center.

### Forensic Science 1/Interdisciplinary Forensic Sciences (TPFBP)

Hands-on experience in applied sciences: Biology, Chemistry, and Physics. Labs include: casting footwear impressions, dusting for fingerprints, identifying unknown substances, creating DNA profiles, crime scene to legal proceedings. **UC "d" credit.**

### Forensic Science 2/Forensic Biology (TPFBP)

Analysis of soil, water, and serology (blood typing, stains and patterns), toxicological studies of poisons and narcotics with extensive field work on trace evidence identification and collection. Chemical processing of latent prints, electrophoresis and PCR production of DNA. **UC "g" credit.**

### Game Design/Interactive Media Arts (TECBP)

**Prerequisites 2 years Computer Graphics, Animation, or Computer Programming with "B" or better and/or instructor approval. Limited seats-application required.** Learn to create 3D interactive games, simulations, and mobile applications using 3DS Max, Unreal 3, and Photoshop. Students will develop skills in level design, modeling, digital sculpting, character design, programming, animation and scripting. **UC "f" credit pending.**

### Medical Assisting (THAB)

Learn medical terminology, anatomy and physiology, medical law and ethics, secretarial and clinical assisting skills; internship at health care facility.

### Nursing Assistant (THNB)

**Prerequisite Legal photo identification.** Career prep for Nursing/Health Care with personal patient care, systems review, safety principles, infection control, HIPAA, restorative care, body mechanics, nutrition and vital signs. Internship at skilled nursing facilities. Qualified students sit for state certification.

### Pharmacy Clerk 1, 2 (THYB/THYF)

Career prep for entry level in pharmaceutical field; stocking and supplies, labeling drugs and chemicals, delivering drugs, sterilizing containers other duties under direction of pharmacist. Summer internship opportunity.

### Sports Therapy 1 & 2 (THSBP/THSE)

Fitness, physical therapy, athletic training; anatomy, physiology, musculoskeletal system, prevention, assessment, treatment, rehabilitation, first aid, CPR, nutrition. Internship required. **Ohlone College Credit. UC "g" credit-Year 1.**



# Mission Valley ROP

## Career Technical Training Center

### 2012-2013 High School Courses



## Courses at Washington High School

### 2-D Animation (TANAP)

Students will learn the creative process for producing 2-dimensional digital animations. Students will write short stories, draw sketches and storyboards. Students will develop original characters, backgrounds and objects on two-dimensional software, to finally produce short animations. **UC "4" credit.**

### Auto Technology 1 One-Hour Course (TITA) Auto Technology 2 Two-Hour Course (TITF)

General auto repair, brakes, steering and suspension, electrical systems, engine performance. Students receive hands on experience in auto shop operations, tool usage, safety procedures, equipment operation and customer service. **Receives Chabot College credit for Year 2.**

### Auto Technology/Basic Car Care (TJLA)

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.

### Web Design Technology (TCWA)

Introduction to web design, incorporating graphics, sound, movies, and animation. Students 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, design commercial web pages.

# Be the Star in Your Future Success Starts Here!

## Mission Valley ROP

Mission Valley ROP offers courses in:

- Fire Technology/ EMT
- Biotechnology
- Automotive Technology
- Auto Body Painting
- Construction Technology
- Forensic Science
- Game Design
- Video Arts Production
- Digital Sound Design
- Animation
- Medical Health Careers
- Sports Therapy
- Culinary Arts
- Careers in Education
- and many more!

Talk to Your Counselor for Class  
Registration Information



## Success Starts Here!

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