

TRI-CITIES ROP

2021-2022 CLASS SCHEDULE & COURSE CATALOG

"Prepares Students for College AND Careers"



10800 Ben Avon St Unit E Whittier, CA. 90606
Phone: 562-698-9571 Office Hours M - F 7:30-400
<https://www.tricitiesrop.org>





Tri-Cities Regional Occupational Program

MISSION STATEMENT

Tri-Cities ROP prepares students for college AND careers by offering excellent career-technical education leading to employment, industry certification, or post-secondary education.

Administrative Office Hours

*Monday - Friday
7:30 A.M. - 4:00 P.M.*

Districts Served

El Rancho Unified School District



Whittier Union High School District



South Whittier School District



Governing Board of Trustees

Jeff Baird, President

Carolyn Castillo, Vice President

Dr. Monica Oviedo, Clerk

Dr. Teresa Merino, Member

Dr. Ralph Pacheco, Member

Dr. John J. Smith, Superintendent

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SUPERINTENDENT'S MESSAGE



“Prepares Students for College AND Careers”

Welcome to Tri-Cities Regional Occupational Program (TCROP)

What a year it has been! Life. It certainly has its ups and downs. Few, if any, could have predicted the challenges that would be placed upon all of us over the last 365+ days. And now, as we see light at the end of this proverbial tunnel known as COVID-19, we are reminded that we are stronger than we may have ever believed. Together, we have overcome the obstacles placed in our paths and have gained the unique type of knowledge one can only attain by living through unprecedented times, under extraordinary circumstances.

Our Tri-Cities ROP motto is that we “Prepare students for college AND careers.” I’d like to add that we also prepare students for *life*. Because, over the course of the pandemic, our teachers have carried on, doing whatever it takes to engage students and to give students the education they deserve.

A hundred years from now, students will learn about life in 2020-2021, and they will be in awe of our resilience. They will learn it only takes courage and determination to overcome any challenges placed before them.

It seems fitting that, at this time, I offer you these words of advice from Iyanla Vanzant: “Don’t get hung up on the hard times, the challenges. Tell your story by highlighting the victories. Because it’s your victories that will inspire, motivate, encourage other people to live their stories in grander ways.”

As we start the new school year, we continue our commitment to supporting student success. **We are in this together.** We will continue to be collaborative in our efforts, working together, not in isolation with a singular purpose – “student success!” We will continue to move forward, guided by our vision of student learning and achievement and with appreciation that each student matters.

Best Regards,

A handwritten signature in black ink, appearing to read "John J. Smith". The signature is fluid and cursive, with a long horizontal line extending to the right.

DR. JOHN J. SMITH
Superintendent



What Is ROP?

Regional Occupational Programs (ROPs) are one of the longest standing forms of postsecondary career preparedness in California. The intent of the ROP structure is to provide a hands-on learning experience through Career and Technical Education (CTE) curriculum for students (16 and older) and adults with entry-level career and technical training. These courses prepare students for careers and further education, as well as to instill workplace values that will enable them to compete successfully in the economy of today and the future.

Why Take Courses At Tri-Cities ROP?

Experience is the greatest teacher. We offer hands-on career training that covers nine different business sectors. Some of our courses also offer the opportunity to earn industry recognized certification. Our facilities are fully outfitted with industry standard equipment and credentialed instructors with years of real world experience.

How Do I Register for ROP Classes?

Students who are interested in registering for ROP classes are encouraged to make an appointment with their high school counselors or visit the College and Career Pathway Advisor on their high school campus. Students may also visit our website www.tricitiesrop.org.

What Is The Cost?

ROP is free to high school students.

Are There Any Other Costs?

Some of our courses have additional costs for uniforms, protective equipment, or medical clearances.

Are High School & College Credits Available?

Yes! All courses offer high school credits. Some courses fulfill math and science credits for graduation. Courses may have articulation agreements with local community colleges, allowing students the opportunity to earn college credit.

What Is Articulation?

Articulation (Community College Credit) is defined as a planned process linking two or more education systems to assist students in making a smooth transition from the secondary level of occupational or academic training to the two-year and four-year post secondary level without experiencing a delay of duplication learning. Articulation is envisioned as a continuum of skills which may lead to advanced placement and students being able to receive college credit for articulated high school classes.

What Is A Community Classroom?

A community classroom (work-site learning also known as an internship) is an instructional methodology that supplements classroom instruction. It allows a student to expand on their classroom instruction at a job site in a non-paid position.

Is Business Involved?

Over fifty local employers participate on ROP advisory committees to keep training current with industry standards. Some classes offer non-paid internships or on-the-job training at businesses and industry sites throughout the county. Employers who need high-skilled, motivated employees hire ROP graduates!



Tri-Cities ROP
Prepares Students for College AND Careers

SCHOOLWIDE LEARNER OUTCOMES

*All students will have a
College AND Career Plan*

- * Create a professional college and career portfolio
- * Participate in career exploration using various software
- * Identify careers within an industry sector and summarize requirements for a specific career
- * Choose a post-secondary major or training program

*All students will be
College AND Career Ready*

- * Demonstrate proficiency in the CTE course competencies
- * Demonstrate soft skills attainment, including punctuality, regular attendance, professional dress, effective communication, and teamwork
- * Participate in work-based learning
- * Complete a CTE pathway

*All students will achieve at least
One College AND Career outcome*

- * Earn A-G credit through a CTE course
- * Earn an Industry Certification
- * Earn Articulation or Dual-Enrollment credit
- * Enter employment



Student Services

Counselor Services

- Post-Secondary Transitions Services for Seniors
- College & Career Planning
- Personal Self-Assessments
- How to Investigate Colleges
- Choosing a College Major
- Financial Aid Workshops
- Educational Plan
- RHCC Application Process
- Counseling 105 Course
- Parent Connection

CCPA Services & Workshops

- Career Exploration & Planning
- College Exploration & Planning
- Financial Literacy
- Employment Preparation - Job Skills
- Creating Resumes
- Career Portfolios
- How to Get an Internship
- CTE Month Events
- CTE Pathway Presentations
- Middle School Outreach
- ROP Student Leadership Development



College & Career Pathways Advisors

Alyssa Cabral - Whittier High School

acabral@tricitiesrop.org (562) 781-9402

Mayra Campos - El Rancho High School, Salazar, & Ochoa Prep

mcampos@tricitiesrop.org (562) 320-1761

Adele Cuevas - Santa Fe & La Serna High School

acuevas@tricitiesrop.org (562) 320-1590

Jennifer Ha - California & Frontier High School

jha@tricitiesrop.org (562) 325-7290

Audrey Lemke - Pioneer High School

alemke@tricitiesrop.org (562) 328-3723

Counselors

Malissa Guerra - TCROP CTE Counselor

mguerra@tricitiesrop.org (562) 332-3796

Judy Morales - Rio Hondo Community College Counselor

Work Based Learning & Pathway Coordinator

Candice Marsano - *cmarsano@tricitiesrop.org*

Grants & Special Projects Administrator

Therese Kennedy - *tkennedy@tricitiesrop.org*

Contact us at: (562) 698-9571 ~ www.tricitiesrop.org



Tri-Cities ROP College and Career Pathways Advisors 2021-2022



Whittier
High School

Ms.
Alyssa
Cabral



acabral@tricityrop.org
(562) 781-9402
7:30am - 4:00pm
(Lunch 11:30am - 12:00 noon)

El Rancho,
Salazar &
Ochoa Prep
High Schools

Ms.
Mayra
Campos



mcampos@tricityrop.org
(562) 320-1761
7:30am - 4:00pm
(Lunch 11:30am - 12:00 noon)

Santa Fe &
La Serna
High Schools

Ms.
Adele
Cuevas



acuevas@tricityrop.org
(562) 320-1590
7:30am - 4:00pm
SFHS - M, W, F
LSHS - T, Th
(Lunch 11:30am - 12:00 noon)

California &
Frontier
High Schools

Ms.
Jennifer
Ha



jha@tricityrop.org
(562) 325-7290
7:30am - 4:00pm
Frontier - 1st & 3rd Monday
(Lunch 11:30am - 12:00 noon)

Pioneer
High School

Ms.
Audrey
Lemke



alemke@tricityrop.org
(562) 238-3723
7:30am - 4:00pm
(Lunch 11:30am - 12:00 noon)

Additional Student Services Team Members

CTE Counselor, Malissa Guerra, mguerra@tricityrop.org

Rio Hondo Counselor, Judy Morales, jumorales@riohondo.edu

WBL & Pathway Coordinator, Candice Marsano, cmarsano@tricityrop.org

Grants & Special Projects Administrator, Therese Kennedy, tkennedy@tricityrop.org



TRI-CITIES REGIONAL OCCUPATIONAL PROGRAM

2021-22 AFTERSCHOOL/SATURDAY COMMUNITY-BASED CLASSES

OPEN TO ALL WUHSD & ERUSD STUDENTS

(Transportation Not Provided)

Enroll Today at: www.tricitysrop.org



HEALTH SCIENCE & MEDICAL TECHNOLOGY

DENTAL ASSISTANT (63100) FALL/SPRING

207 Hours

Students must be enrolled and complete both fall and spring semesters (annual program)

<u>Day / Time</u>	<u>Fall/Spring</u>	<u>Location</u>	<u>Instructor</u>
Tues. & Thurs. 3:30 – 6:30 p.m.	08/17/21 to 05/19/22	Pioneer High School, ROP Dental Room <i>Classes do not meet on: 11/11/21, 11/23/21-11/26/21 (Thanksgiving), 12/20/21 – 1/7/2022 (Winter Recess), 03/21/22 – 3/25/2022 (Spring Break)</i>	Ms. Washington

Prepare for employment as a chair side dental assistant. Learn to provide preventive, supportive, restorative, and interceptive services for patients and related office and laboratory procedures. Students who successfully complete the program will earn Radiation Safety and Infection Control Certificates recognized by the Dental Board of California. Includes American Heart CPR training. Students must participate in work-based learning in a dental office to complete course. Students may have the opportunity to participate in a 75-hour summer externship program based on site availability.

(Prerequisite: Completion of ROP Medical Core class with a grade of “C” or better. Open to high school seniors only)

NURSE ASSISTANT PRE-CERT (63010) FALL/SPRING

162 Hours

<u>Day / Time</u>	<u>Fall</u>	<u>Spring</u>	<u>Location</u>	<u>Instructor</u>
Mon. & Wed. 3:30 – 8:00 p.m.	08/16/21 to 12/15/21	01/10/22 to 05/25/22	El Rancho Education Center 9515 Haney St, Pico Rivera CA 90660 <i>Classes do not meet on: 09/06/21, 11/11/21, 11/22/21- 11/26/21 (Thanksgiving), 12/24/21 – 1/3/2022 (Winter Recess), 01/17/22, 02/14/22, 02/21/22, 03/21/22 – 3/25/2022 (Spring Break)</i>	Ms. Brooks
Tues. & Thurs. 3:30 – 8:00 p.m.	08/17/21 to 12/16/21	01/11/22 to 05/26/22		

Prepare to take the California Department of Public Health State Exam to become a licensed CNA. Learn patient care, infection control, observation, and communication skills with an emphasis on caring for the geriatric resident in a long-term care facility. Clinical site training is a requirement of this class and is available to eligible students.

(Prerequisite: Completion of ROP Medical Core class with a grade of “C” or better. Open to high school seniors only)

PHARMACY TECHNICIAN - *Coming Soon – Spring 2022*

<u>Day / Time</u>	<u>Spring 2022</u>	<u>Location</u>	<u>Instructor</u>
TBD	To Be Determined (TBD)	To Be Determined (TBD)	TBD

This course will include the review of Pharmacology for Technicians, Pharmacy Law and Regulations, Sterile and Non-Sterile Compounding, Medication Safety, Pharmacy Quality Assurance, Medication Order Entry and Fill Process, Pharmacy Inventory Management, Pharmacy Billing and Reimbursement, and Pharmacy Information System Usage and Application. The goals/purpose of course is to equip the student with the knowledge and skills necessary to pass the National Pharmacy Technician Certification Exam (PTCE).



PUBLIC SERVICES

ADMINISTRATION OF JUSTICE ACADEMY (67031) FALL/SPRING

150 Hours

Students must be enrolled and complete both fall and spring semesters (annual program)

<u>Day / Time</u>	<u>Fall/Spring</u>	<u>Location</u>	<u>Instructor</u>
Saturday 8:00 a.m. – 1:00 p.m.	09/11/21 to 05/14/22	Whittier High School, Library <i>Classes do not meet on: 11/13/21, 11/27/21, 12/25/21, 1/1/2022, 1/8/2022, 3/26/11/22</i>	Mr. Todd

Learn about our legal system including penal and vehicle code laws, patrol, interview and arrest procedures, crime scene photography, evidence collection and courtroom testimony. Classroom instruction along with role-playing scenarios and academy style training in physical fitness and agility prepares students for a law enforcement academy, explorer program, or a career related to public services or the administration of justice system and for further training at post-secondary institutions in the public services area.

Tri-Cities ROP is committed to providing a working and learning environment free from discrimination, harassment, intimidation and bullying. For more afterschool information, please contact your ROP College & Career Pathway Advisor.

This schedule is subject to change. For verification of the most current course information, please call TCROP at (562) 698-9571. REV: 7/21/2021

California High School

Bill Schloss, Principal
Sean Steward, Assistant Principal of Curriculum
Shana Jones, Assistant Principal of Guidance



Arts, Media, and Entertainment

Course #	Design, Visual, and Media Arts Pathway (111)	Instructor	Period
TCROP: 61035 WUHSD: 8019	Digital Photography I (g)	Whetstone	1,2,3,4,5,6
TCROP: 61036 WUHSD: 8067	Digital Photography II	Whetstone	3



Building and Construction Trades

Course #	Residential and Commercial Construction Pathway (123)	Instructor	Period
TCROP: 69012 WUHSD:8104	Carpentry	Krause	1, 2 , 4, 6
TCROP: 69011 WUHSD: 8092	Construction Technology II	Krause	5



Health Science and Medical Technology

Course #	Patient Care Pathway (198)	Instructor	Period
TCROP: 63003 WUHSD: 8041	Foundations in Health Science (g)	Gould	3, 4, 5
TCROP: 63051 WUHSD: 8049	Emergency Medical Responder (g)	Staff	1, 2
TCROP: 63010 WUHSD:8027	Nurse Assistant Pre-Certification	Farol	3, 4
TCROP: 63060 WUHSD: 8013	Sports Medicine I (g)	Staff	0



Hospitality, Tourism, and Recreation

Course #	Food Service and Hospitality Pathway (201)	Instructor	Period
TCROP: 64030 WUHSD: 8050	Foods & Hospitality	Felix	2



Transportation

Course #	Systems Diagnostics and Service Pathway (221)	Instructor	Period
TCROP: 67027 WUHSD: 8040	ASE Certification	Buttinelli	Afterschool
TCROP: 67020 WUHSD: 8044	Automotive Technology I (g)	Buttinelli	1, 2, 3
TCROP: 67025 WUHSD: 8043A4 WUHSD: 8045A4	Automotive Technology II (g)	Buttinelli	4, 5, 6

College & Career Pathways Advisor

Ms. Jennifer Ha
jha@tricityrop.org • (562) 325-7290
Library



 Building and Construction Trades			
Course #	Residential and Commercial Construction Pathway (123)	Instructor	Period
TCROP: 69010 ERUSD: AT510	Construction Technology I	Staff	1, 4, 5
TCROP: 69011 ERUSD: AT511	Construction Technology II	Staff	3
 Health Science and Medical Technology			
Course #	Patient Care Pathway (198)	Instructor	Period
TCROP: 63003 ERUSD: SC447	Foundations in Health Science (g)	McCaw	2, 3, 4, 5, 6
TCROP: 63010 ERUSD: SC466B	Nurse Assistant Pre-Certification	Brooks	5, 6
TCROP: 63051 ERUSD: SC445	Emergency Medical Responder (g)	Ross	2
TCROP: 63060 ERUSD: AT418	Sports Medicine I (g)	Ross	1, 4, 5
TCROP: 63061 ERUSD: AT419	Sports Medicine II (g)	Ross	3
 Hospitality, Tourism, and Recreation			
Course #	Food Service and Hospitality Pathway (201)	Instructor	Period
TCROP: 64033 ERUSD: AT500	Culinary Arts I (g)	Luna	5, 6
TCROP: 64035 ERUSD: AT501	Culinary Arts II	Luna	2
TCROP: 64036 ERUSD: AT503	International Cuisine (g)	Luna	3, 4

College & Career Pathways Advisor

Ms. Mayra Campos
 mcampos@tricitierop.org • (562) 320-1761
 College & Career Center

Ellen Ochoa Prep Academy

Dr. Erin Andrade-Lopez, Principal

Erlene Espinoza, Counselor



Information and Communication Technologies

Course #	Software and Systems Development Pathway (174)	Instructor	Period
TCROP: 65074 ERUSD: AT402	Computer Science	Knott	1, 2
TCROP: 65071 ERUSD: AT420	Web Design	Knott	3

Frontier High School

Dr. Margie Moriarty, Principal

Richard Rodriguez, Assistant Principal of Curriculum



Arts, Media, and Entertainment

Course #	Design, Visual, and Media Arts Pathway (111)	Instructor	Period
TCROP: 67015 WUHSD: 8075	Digital Design I	Senar	2,3,4,5,6
TCROP: 67016 WUHSD: 8079	Digital Design II	Senar	TBD

Ruben Salazar High School

Zan Mason, Principal

Arianne Martinez, Counselor



Building and Construction Trades

Course #	Residential and Commercial Construction Pathway (123)	Instructor	Period
TCROP: 69010 ERUSD: AT510	Construction Technology I	Staff	8



Health Science and Medical Technology

Course #	Patient Care Pathway (198)	Instructor	Period
TCROP: 63003 WUHSD: 8042	Medical Core	Rojas	6, 7, 8

College & Career Pathways Advisor

Ms. Mayra Campos - Ochoa & Salazar

mcampos@tricitiepro.org • (562) 328-3723

College & Career Center

Ms. Jennifer Ha - Frontier

jha@tricitiepro.org • (562) 325-7290

College & Career Center

La Serna High School

Griselda Castro, Principal
Damaris Flores Donate, Assistant Principal of Curriculum
Marco Ramirez, Assistant Principal of Guidance



 Arts, Media, and Entertainment			
Course #	Production and Managerial Arts Pathway (113)	Instructor	Period
TCROP: 999902 WUHSD: 8084	Commercial Photography (f)	Fox	2
TCROP: 61030 WUHSD: 8012	Video Production I	Knaak	5
TCROP: 61031 WUHSD: 8011	Video Production II	Knaak	3
 Business and Finance			
Course #	Business Management Pathway (182)	Instructor	Period
TCROP: 65080 WUHSD: 8057	Computer Careers	Fitzgerald	3
TCROP: 999901 WUHSD: 8085	Business Photography	Fox	4
TCROP: 65073 WUHSD: 8065	Virtual Enterprise (g)	Fitzgerald	4
 Health Science and Medical Technology			
Course #	Patient Care Pathway (198)	Instructor	Period
TCROP: 63060 WUHSD: 8013	Sports Medicine I (g)	Abell	4
 Public Services			
Course #	Public Safety Pathway (232)	Instructor	Period
TCROP: 67030 WUHSD: 8035	Administration of Justice (g)	Drylie	2, 3
TCROP: 67032 WUHSD: 8055	Forensic Science (g)	Drylie	4, 5, 6

College & Career Pathways Advisor

Ms. Adele Cuevas
acuevas@tricitierop.org • (562) 320-1590
College & Career Center

Pioneer High School

Lilia Bozigian, Principal
Mary Chapman, Assistant Principal of Curriculum
Xaiver Diaz, Assistant Principal of Guidance



 Arts, Media, and Entertainment			
Course #	Design, Visual, and Media Arts Pathway (111)	Instructor	Period
TCROP: 67015 WUHSD: 8075	Digital Design I	Snyder	1, 3, 5
TCROP: 67016 WUHSD: 8079	Digital Design II	Snyder	2
TCROP: 67014 WUHSD: 8077	Digital Publishing	Snyder	6
Course #	Performing Arts Pathway (112)	Instructor	Period
TCROP: 68003 WUHSD: 8064	Advanced Dance & Choreography	Avila	2
TCROP: 68001 WUHSD: 8060	Professional Dance I	Avila	5
TCROP: 68002 WUHSD: 8059	Professional Dance II	Avila	4
 Building and Construction Trades			
Course #	Residential and Commercial Construction Pathway (123)	Instructor	Period
TCROP: 69010 WUHSD: 8039	Construction Technology I	Ortiz	3, 4, 5, 6
TCROP: 69011 WUHSD: 8092	Construction Technology II	Ortiz	1
 Health Science and Medical Technology			
Course #	Patient Care Pathway (198)	Instructor	Period
TCROP: 63003 WUHSD: 8042	Medical Core	Bedolla	2, 4, 6
TCROP: 63001 WUHSD: 8099	Medicore II Patient Care/Health Science and Medical Technology	Cotton	3, 4, 5
TCROP: 63005 WUHSD: 8101	Emergency Medical Responder (g)	Bedolla	1, 3
TCROP: 63100 WUHSD: 8005	Dental Assistant	Cotton	6
Multiple Industry Sectors (999)			
TCROP: 62060 WUHSD: 8066	Career Planning & Management	Avila	3, 6

College & Career Pathways Advisor

Ms. Audrey Lemke
alemke@tricityrop.org • (562) 328-3723
Horizons Center

Santa Fe High School

Craig Campbell, Principal

Lillia Vazquez, Assistant Principal of Curriculum

Paul Wise, Assistant Principal of Guidance



	Engineering and Architecture		
Course #	Architectural Design Pathway (150)	Instructor	Period
TCROP: 67080 WUHSD: 8095	Drafting and Design (g)	Griffie	2
TCROP: 67081 WUHSD: 8096	Advanced Drafting & Design (g)	Griffie	4, 5
	Health Science and Medical Technology		
Course #	Patient Care Pathway (198)	Instructor	Period
TCROP: 63001 WUHSD: 8042	Medical Core	Blake	1, 3, 4, 5
TCROP: 63051 WUHSD: 8049	Emergency Medical Responder (g)	Blake	2
	Public Services		
Course #	Public Safety Pathway (232)	Instructor	Period
TCROP: 67030 WUHSD: 8035	Administration of Justice (g)	Cabral	2, 6
TCROP: 67032 WUHSD: 8055	Forensic Science	Cabral	4, 5
Multiple Industry Sectors (999)			
Course #	Multiple Pathways (999)	Instructor	Period
TCROP: 62060 WUHSD: 8066	Career Planning & Management	Cabral	3
TCROP: 62060 WUHSD: 8066	Career Planning & Management	Vasquez	2, 4, 6

College & Career Pathways Advisor

Ms. Adele Cuevas

acuevas@tricitiecrop.org • (562) 320-1590

College & Career Center

Whittier High School

Timothy Liggett, Principal

Jennifer Medina, Assistant Principal of Curriculum

Allison Huntley, Assistant Principal of Guidance



Arts, Media, and Entertainment

Course #	Design, Visual, and Media Arts Pathway (111)	Instructor	Period
TCROP: 65078 WUHSD: 8017	Graphic Design I (f)	Fassbinder	1, 2, 3, 4, 5, 6
TCROP: 65079 WUHSD: 8020	Graphic Design II (g)	Fassbinder	2



Engineering and Architecture

Course #	Engineering Technology Pathway (153)	Instructor	Period
TCROP: 67086 WUHSD: 8109	H-PLTW: Digital Electronics (d)	Swanson	2, 5
TCROP: 67087 WUHSD: 8108	H-PLTW: Intro to Engineering Design (d)	Swanson	1



Health Science and Medical Technology

Course #	Patient Care Pathway (198)	Instructor	Period
TCROP: 63003 WUHSD: 8042	Medical Core	Caouette	1, 2, 4, 5
TCROP: 63060 WUHSD: 8013	Sports Medicine I (g)	Caouette	3



Transportation

Course #	Systems Diagnostics and Service Pathway (221)	Instructor	Period
TCROP: 67020 WUHSD: 8044	Automotive Technology I (g)	Mundo Berber	1, 3, 4, 5
TCROP: 67025 WUHSD: 8006	Automotive Technology II (g)	Mundo Berber	2

College & Career Pathways Advisor

Ms. Alyssa Cabral

acabral@tricitiecrop.org • (562) 781-9402

Horizons Center

Richard L. Graves Middle School

Dr. Angelica De La Rosa, Principal

Jeselle Mata, Assistant Principal



 Health Science and Medical Technology			
Course #	Patient Care Pathway (198)	Instructor	Period
TCROP: 63004 SWSD: 5912	Intro to Medical Careers	Rojas	1, 2
Multiple Industry Sectors (999)			
Course #	Multiple Pathways (999)	Instructor	Period
TCROP: 62061 SWSD: 5913	Intro to Career Exploration	Felix	5b, 6, 7

College & Career Pathways Advisor

Ms. Jennifer Ha

jha@tricityscrop.org • (562) 698-9571



2021—22 Tri-Cities ROP Course Index by Sector

	1. Arts, Media, and Entertainment							
Course #	Design, Visual, and Media Arts Pathway (111)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
Course #	Graphic Design (Sub-Pathway 111A)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
TCROP: 67015 WUHS: 8075	Digital Design I (111A)	7211		10	180	Con	N	
TCROP: 61035 WUHS: 8019	Digital Photography I (111A)	7211	g	10	180	Con	N	
TCROP: 65078 WUHS: 8017	Graphic Design I (111A)	7211	f	10	180	Con	N	Y
TCROP: 67016 WUHS: 8079	Digital Design II (111A)	7212		10	180	Cap	N	
TCROP: 61036 WUHS: 8067	Digital Photography II (111A)	7212		10	180	Cap	N	
TCROP: 67014 WUHS: 8077	Digital Publishing (111A)	7212		10	180	Cap	N	
TCROP: 65079 WUHS: 8020	Graphic Design II (111A)	7212	g	10	180	Cap	N	Y
Course #	Performing Arts Pathway (112)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
Course #	Dance/Choreography (Sub-Pathway 112A)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
TCROP: 68001 WUHS: 8060	Professional Dance I (112A)	7231		10	180	Con	N	Y
TCROP: 68002 WUHS: 8059	Professional Dance II (112A)	7232		10	180	Cap	N	Y
TCROP: 68003 WUHS: 8064	Advanced Dance & Choreography (112A)	7232		10	180	Cap	N	Y
Course #	Production and Managerial Arts Pathway (113)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
Course #	Film /Video Production (Sub-Pathway 113B)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
TCROP: 99902 WUHS: 8084	ROP Commercial Photography (113B)	7243	f	10	180	Intro	N	
TCROP: 68011 WUHS: Pending	Stage Technology 2: Production & Management (113B)	7241		10	180	Con	N	
TCROP: 68012 WUHS: Pending	Stage Technology 3: Design (113B)	7242	g	10	180	Cap	N	
TCROP: 61030 WUHS: 8012	Video Production I (113B)	7244		10	180	Con	N	
TCROP: 61031 WUHS: 8011	Video Production II (113B)	7245		10	180	Cap	N	
	2. Building and Construction Trades							
Course #	Residential and Commercial Construction Pathway (123)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
TCROP: 690012 WUHS: 8104 ERUSD: AT510	Carpentry	7311		10	180	Con	N	
TCROP: 69010 WUHS: 8039 ERUSD: AT510	Construction Technology I	7341		10	180	Con	N	
TCROP: 69011 WUHS: 8092 ERUSD: AT511A	Construction Technology II	7342		10	180	Cap	N	
TCROP: 690013 WUHS: 8105 ERUSD: AT510	Woodworking Machine Operation	7312		10	180	Cap	N	



2021—22 Tri-Cities ROP Course Index by Sector

 3. Business and Finance								
Course #	Multiple Pathways (999)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
TCROP: 62044 WUHSD: 8094	Business 101	7400		5	45	Intro	N	
TCROP: 65080 WUHSD: 8057	Computer Careers	7400		10	180	Intro	N	
Course #	Business Management Pathway (182)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
TCROP: 999901 WUHSD: 8085	Business Photography	7410		10	180	Con	N	
TCROP: 65073 WUHSD: 8065	Virtual Enterprise	7412	g	10	180	Cap	N	
 4. Engineering and Architecture								
Course #	Architectural Design Pathway (150)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
TCROP: 67080 WUHSD: 8095	Drafting and Design	7710	g	10	180	Con	N	
TCROP: 67081 WUHSD: 8096	Advanced Drafting & Design	7711	g	10	180	Cap	N	
Course #	Engineering Technology Pathway (153)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
TCROP: 67086 WUHSD: 8109	H-PLTW: Digital Electronics (d)	7721	d	10	180	Cap	N	
TCROP: 67085 WUHSD: 8097	H-PLTW: Principal of Engineering (d)	7720	d	10	180	Con	N	
TCROP: 67087 WUHSD: 8108	H-PLTW: Introduction of Engineering Design (d)	7720	d	10	180	Con	N	
 5. Health Science and Medical Technology								
Course #	Patient Care Pathway (198)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
TCROP: 63004 WUHSD: 5912	Intro to Medical Careers	7920		10	180	Intro	N	
TCROP: 63003 WUHSD: 8041A2 ERUSD: SC447	Foundations in Health Science	7921	g	10	180	Con	N	Y
TCROP: 63002 WUHSD: 8099	Medcore II Patient Care/Health Science and Medical Technology	7921	g	10	180	Con	N	
TCROP: 63001 WUHSD: 8042	Medical Core	7921		10	180	Con	N	
TCROP: Pending WUHSD: Pending	Medical Terminology	7921	g	10	180	Con	N	
TCROP: 63100 WUHSD: 8005	Dental Assisting	7922		10	180	Cap	Y	
TCROP: 63102 WUHSD: 8100	Dental Assistant II Career Preparation	7922	g	10	180	Cap	Y	
TCROP: 63051 WUHSD: 8049	Emergency Medical Responder	7922	g	10	180	Cap	Y	
TCROP: 63010 WUHSD: 8027 ERUSD: SC466	Nurse Assistant Pre-Certification	7922		10	180	Cap	Y	
TCROP: 63060 WUHSD: 8013 ERUSD: AT418	Sports Medicine I	7922	g	10	180	Cap	Y	Y
TCROP: 63061 WUHSD: 8068 ERUSD: AT419A	Sports Medicine II	7922	8	10	180	Cap	Y	



2021—22 Tri-Cities ROP Course Index by Sector

	6. Hospitality, Tourism, and Recreation								
Course #	Food Service and Hospitality Pathway (201)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.	
TCROP: 64033 ERUSD: AT500	Culinary Arts I	8020	g	10	180	Con	Y		
TCROP: 64035 ERUSD: AT501	Culinary Arts II	8021		10	180	Cap			
TCROP: 64030 WUHSD: 8050A5	Foods & Hospitality	8021		10	180	Cap	Y		
TCROP: 64036 ERUSD: AT503	International Cuisine	8021	g	10	180	Cap			
	7. Information and Communication Technologies								
Course #	Software and Systems Development Pathway (174)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.	
Course #	Systems Programming (Sub-Pathway 174A)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.	
TCROP: 65074 ERUSD: AT402	Computer Science (174A)	8131	c	10	180	Con	N		
TCROP: 67027 WUHSD: 8047	Small Unmanned Aircraft Drones (174A)	8131	g	10	180	Con	N	Y	
TCROP: 67028 WUHSD: 8093	Small Unmanned Aircraft Drones II (174A)	8132		10	180	Cap	N		
TCROP: 65071 ERUSD: AT420A	Web Design (174A)	8132		10	180	Cap	N		
	8. Marketing Sales and Services								
Course #	Professional Sales Pathway (243)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.	
TCROP: 62100 WUHSD: 8110	Retail Merchandising/1	8320		5	90	Con	N		
TCROP: 62101 WUHSD: 8111	Retail Merchandising/2	8320		5	90	Con	N		
	9. Public Services								
Course #	Emergency Response Pathway (233)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.	
TCROP: 67037 WUHSD: 8103	Emergency Medical Careers	8421		10	180	Con	N		
TCROP: 63005 WUHSD: 8101	Emergency Medicine	8422		10	180	Cap	Y		
Course #	Public Safety Pathway (232)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.	
TCROP: 67030 WUHSD: 8035	Administration of Justice	8411	g	10	180	Con	N	Y	
TCROP: 67031 WUHSD: 8051	Administration of Justice Academy	8412		10	180	Cap	N		
TCROP: 67032 WUHSD: 8055	Forensic Science	8412	g	10	180	Cap	N	Y	



2021—22 Tri-Cities ROP Course Index by Sector

 10. Transportation								
Course #	Systems Diagnostics and Service Pathway (221)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
TCROP: 67020 WUHSD: 8044/A4	Automotive Technology I	8531	g	10	180	Con	N	Y
TCROP: 67025 WUHSD: 8043A4 WUHSD: 8006	Automotive Technology II	8532	g	10	180	Cap	N	Y
TCROP: 67027 WUHSD: 8040	ASE Certification	8532		20	360	Cap	Y	
TCROP: 67024 WUHSD: 8107	Electronics in Automotive	8531		10	180	Con	N	
11. Multiple Industry Sectors								
Course #	Multiple Pathways (999)	CALPADS	UCOP	Credits	Hours	Des	Cert	Artic.
TCROP: 62052 WUHSD: 8081	Career Readiness	7000		5	45	Exp.	N	
TCROP: 62060 WUHSD: 8066	Career Planning & Management	7000		10	180	Exp.	N	
TCROP: 62061 SWSD: 5913	Introduction to Career Exploration	7000		10	180	Exp.	N	

2021—22 Tri-Cities ROP Course Descriptions



Arts, Media, and Entertainment



▲ Advanced Dance and Choreography

Prerequisites: Demonstration of basic knowledge. Successful completion of Professional Dance I with a 70% or better or previous dance experience.

Course Description: Advanced Dance/Choreography is the capstone class following successful completion of Professional Dance. This course builds on knowledge gained through Professional Dance and teaches additional competencies including advanced choreography. Also included in this course are advanced topics such as musicality, dance production, and professional practices. Live performances are required for course completion.

▲ Commercial Photography (f)

Prerequisites: None.

Course Description: Students will learn the world of Commercial Photography through lecture and guest speakers. Students will be exposed to photographers working in, and photographic works demonstrating, various strands of Commercial Photography such as: advertising; architectural and interior; event; fashion; food; journalism; portrait; product and sports photography. Students will discuss and evaluate, how history, culture, and technology have influenced Commercial Photography.

▲ Digital Design I

Prerequisites: None. This course fulfills district "Digital Literacy" requirements.

Course Description: Digital Design I students learn the skills needed to develop a broad perspective of art, design, communication theory, processes and tools and their applications in Digital Design. Students will apply design elements and principles to projects such as print media publications and digital media. Students will also explore the trends in the global field of design and its application in print, product, and environmental realms. Students will understand the impact of the arts and design throughout history, various cultures and theory such as elements and principles of design to enhance their artistic vision and style. Through design projects, students will develop problem-solving skills, artistic perception, critical thinking, and self-reflection. Learning and using current versions of industry-standard software and programs will provide students with a professional environment and the associated responsibilities as graphic designers. Digital Design I also includes the history and developments of major industry processes, printing, application, layout, and design as it pertains to a variety of substrates; environmental considerations and restrictions.

▲ Digital Design II

Prerequisites: Successful completion of Digital Design I with a 70% or better is required. This course fulfills district "Digital Literacy" requirements

Course Description: Digital Design II builds on the knowledge and skills gained in Digital Design I. Students will participate in groups, think analytically, and create digital design products. Through hands-on and performance-based assignments and strategies, students develop industry-related foundational and advanced concepts and skills such as understanding the processes and systems common to careers in visual and image analysis, publishing, printing, and other forms of media distribution as well as the pathway to pursue employment, certification, or post-secondary degree in the field of digital arts, advertising design, and marketing. Students will engage in contemporary and historical practices in the creative field through a series of personal and creative activities, as well as develop an understanding of the cognitive marketing and branding solution for a given product, whether it is a commodity, a political idea, an instrument of social change, or an effort to recruit patronage or participation.

▲ Digital Photography I (g)

Prerequisites: None. This course fulfills district "Digital Literacy" requirements.

Course Description: Digital Photography I students will study the sensory, formal, expressive and aesthetic properties of photographic art and will closely examine the history and development of photography. Students will be able to link photography to other art forms and disciplines and will understand its applications to industry-related careers. Students will learn the terminologies and techniques of black and white and color photographic production with digital cameras, as well as the making of photographic prints and enlargements and the mounting and display of finished work. The course teaches students to work with more technically-advanced photographic equipment including specialized lighting, digital processes and professional software. Students will concentrate on the development of a distinctive personal style, will pursue individual interests, and learn to critically evaluate their work. Throughout the course, the students will study the history of photography and analyses of notable photographers. Students will be able to link photography to diverse disciplines and professions.

▲ Digital Photography II (g)

Prerequisites: Successful completion of Digital Photography I with a 70% or better is required.

Course Description: The Digital Photography II course picks up where Digital Photography I left off, by utilizing similar but advanced photo skills and software for graphic and image manipulation to create commercial graphic products and aesthetic fine art images, while promoting technological and visual literacy. Students will create advanced products geared towards non-profit clients, using image and text strategies for projects such as graphic and poster design, manipulating found and created imagery, and to work with visual narrative strategies using photojournalist techniques that address both personal as well as public themes of identity, place, and community.

The first semester will focus on creating and developing photographic imagery through advanced photographic techniques to be used in a variety of ways from pure aesthetic images to commercial production. The second semester will further develop these skills by combining photographic imagery with graphic design and textual elements for a variety of authentic, real-world projects.



Arts, Media, and Entertainment—Cont.



▲ Digital Publishing

Prerequisites: Successful completion of Digital Printing or Digital Design I with a 70% or better is required.

This course fulfills district “Digital Literacy” requirements.

Course Description: Digital Publishing builds on students’ knowledge of Graphic Design and Digital Printing and provides hands-on skills in publishing. Digital Publication prepares students to deal with the changing landscape of publishing. Students will develop advanced competencies in industry standard computer programs and software, layout design, image editing and formatting, content manipulation, current printing technology, basic digital photography, caption, and copy writing. This is a capstone course culminating in various types of professionally completed digital projects.

▲ Graphic Design I (f)

Prerequisites: This course fulfills district “Digital Literacy” requirements.

Course Description: Graphic Design I will explore trends in the global field of design and its application in print, product, and environment. Students will understand the impact of the arts and design throughout history and various cultures. They will learn methods and theory such as elements and principles of design to enhance their artistic vision and style. Through design projects students will develop problem-solving skills, artistic perception, critical thinking, and self-reflection. Art critiques and presentations will provide opportunities for students to grow as artists. Learning and using current versions of industry standard software and programs will provide students with a professional environment and the associated responsibilities as graphic designers. Graphic Design I also includes the history and developments of major industry processes, printing, application, layout, and design as it pertains to a variety of substrates; environmental considerations and restrictions; as well as the legal restrictions as they relate to the field of Graphic Design and intellectual property as a whole.

▲ Graphic Design II (g)

Prerequisites: Successful completion of Graphic Design I with a 70% or better is required.

Course Description: Graphic Design II provides students with an in-depth understanding of principles, theories, and elements of design. Students will be committed to lifelong learning as they grow individually, participating in groups, think analytically, create artistic products, and contribute to the production of a major project. Through repeated assignments and strategies, students develop and reinforce academic and industry-related foundational and advanced concepts and skills such as understanding the processes and systems common to careers in visual and image analysis, publishing, printing, and other forms of media distribution as well as the pathway to pursue a post-secondary degree in the field of graphic arts, advertising design, and marketing. Students will engage in contemporary and historical practices in the creative field through a series of personal and creative activities, as well as develop an understanding of the cognitive marketing and branding solution for a given product, whether it is a commodity, a political idea, and instrument of social change, or an effort to recruit patronage or participation.

▲ Professional Dance I

Prerequisites: None

Course Description: Professional Dance I is designed to prepare students for a career in dance. This course requires that students already have the basic knowledge of dance. Students will be exposed to many different aspects of the industry, including auditions, portfolios, agents, negotiating salary, competitions, performing, etc. Students will be introduced to ballet, jazz, modern, hip-hop, ballroom, among other styles of dance. The course will also include at least one required live performance.

▲ Professional Dance II

Prerequisites: Demonstration of basic knowledge. Successful completion of Professional Dance I with a 70% or better or previous dance experience.

Course Description: Professional Dance II is designed to prepare students for a career in dance. This course requires that students already have the basic knowledge of dance. Students will be exposed to many different aspects of the industry, including auditions, portfolios, agents, negotiating salary, competitions, performing, etc. Students will be introduced to ballet, jazz, modern, hip-hop, ballroom, among other styles of dance. The course will also include at least one required live performance.

▲ Stage Technology 2

Prerequisites: None

Course Description: This competency-based course provides students with project-based learning (PBL) and work-based learning (WBL) opportunities in stage production and management. Instructional emphasis is placed on the history/architecture/components of stage design, the creation and evaluation of scenic, costume, makeup, lighting, and sound designs as well as the policies and practices of effective stage and house management. Topic also include an orientation, trade mathematics, resource management, and internship.

▲ Stage Technology 3

Prerequisites: Successful completion of Stage Technology 2

Course Descriptions: This competency-based course provided students with project-based learning (PBL) and work-based learning (WBL) opportunities in stage design. Instructional emphasis is placed on the creation, evaluation, adaptation, and interpretation of costume, makeup, scenic, lighting, and sound design ranging from the Greek period on contemporary productions.



Arts, Media, and Entertainment—Cont.



▲ Video Production I

Prerequisites: None. This course fulfills district “Digital Literacy” requirements.

Course Description: Video Production I provides students with a project-based learning. Students will be provided with technical instruction and practical experiences for aspiring video and film makers in the production of film, video, and new media projects for business and entertainment. Students experience both the creative and technical aspects of filmmaking in conjunction with learning about historical and contemporary traditions and conventions. Students are instructed on the three stages of project creation. In pre-production, students learn the basic principles of story development, screenplay writing, storyboarding, scheduling, and budget planning. Instruction in the production stage includes basic visual composition, color theory, set up and operation of a camera, sound and lighting equipment. Students learn to use cutting-edge software applications for video and audio post-production. Mastering and delivery methods, in both traditional and new media, are explored.

▲ Video Production II

Prerequisites: Successful completion of Video Production I with a 70% or better is required. This course fulfills district “Digital Literacy” requirements.

Course Description: Video Production II further builds on the knowledge gained in Video Production I. Students will complete hands-on training in filmmaking and advanced digital video skills. Emphasis will be placed on refining advanced skills and techniques including planning, producing, directing, editing, and performing for video. Team and individual productions will be created. Additionally, students will have opportunities to work with school teams, clubs, and industry professionals in order to produce work to specifications.



Building and Construction Trades



▲ Carpentry

Prerequisites: None

Course Description:

This competency-based course is the second in a sequence of three designed for carpentry. It provides students with technical instruction and practical experience in construction carpentry using sustainable and green technology. Instruction includes an introduction, workplace safety, reviews of resource management and employability skills, trade mathematics, the use/maintenance/storage of tools, and construction materials. Emphasis is placed on reading and interpreting plans, sketches, and blueprints, construction layout, floor and wall construction, exterior and interior finishes, and stair construction.

▲ Construction Technology I

Prerequisites: None

Course Description: Construction Technology I provides instruction and training in construction and construction-related occupations, including construction, remodeling, and maintenance and repair of buildings and structures. Instructional and practical experience includes blueprint reading, basic plumbing, electrical, masonry, concrete, flooring, drywall, carpentry, insulation, exterior design, and roofing. Course instruction also includes the safe use of hand and power tools, installation of plumbing and electrical fixtures, the use of squaring and leveling tools, and safety and job-readiness training for entrance into the construction and construction-related occupations.

▲ Construction Technology II

Prerequisites: Successful completion of Construction Technology I with a 70% or better is required.

Course Description: Construction Technology II provides further instruction and training in construction and construction-related occupations, remodeling, and maintenance and repair of buildings and structures. Instructional and practical experience includes blueprint reading, basic plumbing, electrical, masonry, concrete, flooring, drywall, carpentry, insulation, exterior design, and roofing. Course instruction also includes the safe use of hand and power tools, installation of plumbing and electrical fixtures, the use of squaring and leveling tools, and safety and job-readiness training for entrance into the construction and construction-related occupations.

▲ Woodworking/Machine Operation

Prerequisites: None

Course Description: This competency-based course is the last in a sequence of three designed for carpentry. It provides students with technical instruction and practical experience in woodworking machine operation using sustainable and green technology. Instruction includes an introduction, workplace safety, reviews of resource management and employability skills, trade mathematics, the use/maintenance/storage of woodworking tools, machines, and equipment, an overview of the apprenticeship program, and basic entrepreneurial skills. Emphasis is placed on surface preparation, lacquer application, lamination construction, high-pressure laminations, estimation, and production techniques.



Business and Finance



▲ Business 101

Prerequisites: None

Course Description: This course explores the foundations of business and consumer decision making in a dynamic economy. Units of study will include organizing a business, understanding economic principles, recognizing the informed consumer and exploring business careers. This course will incorporate technology for research as well as applying authentic and relevant business skills in real world applications.

▲ Business Photography

Prerequisites: Completion of Introduction to Photography is recommended.

Course Description: Students will learn the world of Business Photography through lecture and guest speakers. Students will be exposed to photographers working in, and photographic works demonstrating, various strands of Business Photography such as advertising; architectural and interior; event; fashion; food; journalism; portrait; product; and sports photography. Students will discuss and research how the strands have changed over time and what has influenced these changes. Students will discuss and evaluate, how history, culture, and technology have influenced Business Photography.

▲ Computer Careers

Prerequisites: None

Course Description: Computer Careers prepares students for entry-level jobs in information and communication technology careers. Students will be introduced to all, and be able to explore two, of the following careers: Administrative Assistant, Internet/Web Support Technician, Technology Support Technician, Graphic Designer, Computer Programming Assistant, and/or Network Technician. Instruction includes lecture, demonstrations and hands-on work. Evaluation is competency based. Students may have an opportunity to gain exposure of a computer career through workplace learning.

▲ Virtual Enterprise (g)

Prerequisites: Teacher approval required to enroll.

Course Description: Virtual Enterprise is a simulated business that is set up and run by students to prepare them for working in a real business environment. Students determine the nature of their business, its products and services, its management and structure, and learn the daily operations of a business under the guidance of a consultant and a real business partner. Emphasis is on use of current business software and the Internet for business transactions. Principles of economics as applied to business organization are evident throughout the course. Students learn the principles of micro and macroeconomics in preparation for working in a real business environment. Students study supply and demand, the Federal Reserve System, taxation by federal, state and local entities, the stock market and international transactions. Students determine the nature of a business, its products and services, the organizational structure, and practice the daily operations of a business. They use current business software and the Internet for business transactions. The focus is on basic economic principles, and business operations. Students compete against other schools across California and the nation with their business plan, marketing plan, catalogue, Human Resources, and other aspects of running their virtual business.



Engineering and Architecture



▲ Advanced Drafting and Design (g)

Prerequisites: Drafting and Design

Course Description: This course is the capstone course in a 3-level program of architectural design and drawing. Students use their prior knowledge and research skills to first design, draw, and build a model inspired by ancient Roman architecture. Next, they will produce a residential project of their own creation. Implementing the design process, students start with programming for a "client" and then using sketching skills and ultimately 3-D computer program based drawing skills to develop and present their final designs for critique.

▲ Drafting and Design (g)

Prerequisites: None

Course Description: Computer Aided Design and Drafting is a year course designed to train students to think like an engineer, to improve upon the basic designs of others, to develop 3D prototypes, to develop critical thinking skills, to learn the basic commands of various CAD software programs (Auto CAD, solid works, 3D studio Max, sketch up and others), to visualize 2-dimensional drawings as 3-dimensional Max, sketch objects and to take 3 dimensional objects and render them as 2 dimensional drawings, to design a full set of architectural plans for a personal residence in accordance with the UBC (Universal Building Code).



Engineering and Architecture—Cont.



▲ H—PLTW: Digital Electronics (d)

Prerequisites: Elementary Algebra or Equivalent

Course Description: Students investigate the digital circuit design process to create circuits and present solutions that can improve people's lives. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras, high definition televisions, etc. Students learn how advancements in foundational electronic components and digital circuit design processes have transformed the world around them. In contrast to analog electronics, where information is represented by a continuously varying voltage, digital signals are represented by two discrete voltages or logic levels.

▲ H—PLTW: Principles of Engineering (d)

Prerequisites: Elementary Algebra or Equivalent

Course Description: Students in Principles of Engineering explore a broad range of engineering topics, including mechanisms, energy and power, materials and structures, automation, statistics, and kinematics. Students investigate thermal energy and alternative energy applications and explore solar hydrogen systems. They use analysis of beam deflection as a context for learning about material properties and calculating the internal and external forces on an object. Students learn to control mechanical systems by investigating computer inputs and outputs and understanding hydraulic and pneumatic fluid power. Students design a projectile motion device to use as a basis for data collection, organization, and interpretation of results.

▲ H—PLTW: Introduction of Engineering and Design (d)

Prerequisites: Elementary Algebra or Equivalent

Course Description: Introduction to Engineering Design (IED) is a high school engineering course in the PLTW Engineering Program. In IED, students explore engineering tools and apply a common approach to the solution of engineering problems, an engineering design process. Utilizing the activity-project-problem-based (APB) teaching and learning pedagogy, students progress from completing structured activities to solving open-ended projects and problems that require them to plan, document, communicate, and develop other professional skills.



Health Science and Medical Technology



▲ Dental Assisting

Prerequisites: Successful completion of Medical Core with a 75% or better is recommended.

Course Description: Dental Assisting is a foundation course that prepares individuals to assist the dentist in the delivery of dental treatment and to function as an integral member of the dental healthcare team while performing chairside assisting and related office and laboratory procedures. The course will combine classroom theory with lab and clinical practice to teach dental terminology, dental science, chairside procedures, and radiology. Students who successfully complete the program will earn a Radiation Safety Certificate and an Infection Control Certificate recognized by the Dental Board of California. Course includes American Heart Association CPR training.

▲ Dental Assistant II Career Preparation (g)

Prerequisites: Successful completion of Medical Core II Patient Care/Medical Technology with a 75% or better is required.

Course Description: This course is the second in sequence of two, this course continues to expand the student's clinical development with project-based experience in chairside clinical skills and Public Health. Dental Assistant II is designed to integrate cognitive knowledge with practical applications of dental procedures. The primary focus of this course is to prepare the Dental Assistant for the appropriate protocols and techniques required in the dental industry. Clinical instruction includes review of workplace safety policies and compliance, dental mathematics, patient vital signs, dental charting with the implementation of software, manipulation of dental materials and the usage of instrumentation for all dental procedures as well as Radiologic science computations to produce digital x-rays. Radiology certification and Infection Control certification are transferable to Hygiene and D.D.S. programs accredited by the Dental Board of California.

▲ Emergency Medical Responder (g)

Prerequisites: Successful completion of Medical Core with 80% or better is required.

Course Description: The Emergency Medical Responder course will train students how to recognize emergency situations, maintain personal safety, and provide basic emergency care including CPR and First Aid, prevention of disease transmission, along with an understanding of ethical and legal considerations. An Emergency Responder is the first medically-trained person to arrive on a scene of an emergency. The Emergency Responder provides care to injured persons, and assists other emergency medical service providers. This course will prepare students who are interested in a career as a firefighter, law enforcement officer, emergency medical technician, or paramedic.

▲ Foundations in Health Science (g)

Prerequisites: This is the prerequisite course to all Medical Capstone classes.

Course Description: Foundations in Health Science is designed to give students an overview into the health science and medical technologies industry and the various careers within the industry. Students will gain strong foundational knowledge in body systems, anatomy, physiology, medical math, and terminology. Other topics covered include infection control, nutrition, legal and ethical principles, and safety/first aid. This is a required introductory course that can lead to other medical pathway courses offered.



Health Science and Medical Technology—Cont.



▲ Intro to Medical Careers

Prerequisites: None

Course Description: This course is designed to assist students to explore career options in the health field by building a strong foundation in medical terminology. Other topics include CPR and first aid, anatomy and physiology, and career exploration.

▲ Medical Core

Prerequisites: This is the prerequisite course to all Medical Capstone classes.

Course Description: Medical Core is designed to give students an overview into the health science and medical technologies industry and the various careers within the industry. Students will gain strong foundational knowledge in body systems, anatomy, physiology, medical math, and terminology. Other topics covered include infection control, nutrition, legal and ethical principles, and safety/first aid. This is a required introductory course that can lead to other medical pathway courses offered.

▲ Medcore II Patient Care/Health Science and Medical Technology

Prerequisites: Appropriate for grade levels 11 and 12. This is the prerequisite course to Dental Assistant II Career Preparation.

Course Description: This course exposes students to the Healthcare industry by surveying the wide spectrum of Healthcare occupations, equipping students with the knowledge and skills that apply to a variety of health occupations. Students will study in length epidemiology, infection control, medical terminology, anatomy with emphasis placed on providing a pathway of coursework in the study of Biotechnology, Pathophysiology, Epidemiology, Patient Communication, Psychological disorders and Pharmacology.

▲ Medical Terminology

Prerequisites: This course is a prerequisite for Emergency Medicine Sports Medicine, Dental Assisting, and Nurse Assistant Pre-Certification.

Medical Terminology is the language used to describe the body systems, anatomy, physiology, medical processes and procedures, and a variety of diseases in a science-based manner. It provides students with the specialized language used by the health care team, which enables health care workers to communicate in an accurate, articulate, and concise manner. This course is designed to give the students a step-by-step comprehensive knowledge of word construction, definition, and use of terms related to all areas of medical science. The course includes terms related to anatomy and physiology of the human body, disease, medical procedures, and the use of language in all areas of healthcare.

▲ Nurse Assistant Pre-Certification

Prerequisites: Approval to enroll is required. Successful completion of Medical Core with a 70% or better is required. Prior to Clinical Training: Social Security card, Negative TB tests (2), Flu vaccination, Health Exam form, and a clear background history (no convictions).

Course Description: The Nursing Assistant course prepares students to take the California Department of Public Health State Exam. Students will learn patient care, infection control, observation, and communication skills with an emphasis on caring for the geriatric resident in a long-term care facility. Integrated throughout the course are career preparation standards that include basic academic skills, interpersonal skills, problem solving, safety, and technology. Clinical site training is a requirement of this class and is available to eligible students.

▲ Sports Medicine I (g)

Prerequisites: Successful completion of Medical Core with a 70% or better is required.

Course Description: Sports Medicine I will engage students in an in-depth study of whole body anatomy and physiology as a basis for understanding the processes involved in injury treatment, management, and healing. Technical instruction includes orientation, safety and infection control, communication and interpersonal skills, academic proficiency, and employability skills. Emphasis is placed on: ethical and legal considerations, pharmacology, sports and therapeutic equipment, nutrition and weight management, physical fitness assessment, physical conditioning, emergency preparedness and assessment, infection control, vital signs assessment, basic life support, injuries to the tissues, injuries to the head and spine, injuries to the chest and abdomen, environmental conditions, medical conditions, taping and wrapping, therapeutic modalities and physical rehabilitation. Hands-on laboratory experiences are an integral part of the course. This course provides students with an opportunity to learn the human anatomy and physiology through the eyes of a sports medicine professional. By using sports and athletics as a vehicle to teach the structure and function of the human body students are better able to identify with the material being taught.

▲ Sports Medicine II (g)

Prerequisites: Successful completion of Medical Core with a 70% or better is required. Successful completion of Sports Medicine I with a 70% or better is required.

Course Description: Sports Medicine II builds on the knowledge and skills gained through Sports Medicine I and prepares the student for entry-level employment or further post-secondary training in the field of Sports Medicine. Students acquire advanced practical concepts of training room development, risk management, administrative and legal issues, and prevention, care, and treatment of athletic injuries. Further knowledge and skills related to body conditioning, nutrition, use of protective equipment, and awareness of environmental issues are incorporated. On-the-field and off-the-field assessment, prevention, and treatment of acute and non-acute injuries following standard precautions build students' experience during practical application.



Hospitality, Tourism, and Recreation



▲ Culinary Arts I (g)

Prerequisites: None

Course Description: Culinary Arts I is a course designed to introduce students to fundamental food preparation terms, concepts and methods in Culinary Arts where laboratory practice will parallel class work. Fundamental techniques, skills and terminology are covered and mastered with an emphasis on basic kitchen and safety, sanitation, equipment maintenance and operation procedures. Course also provides an overview of the professionalism in the culinary industry and career opportunities leading into a career pathway to Culinary Arts. **Obtaining a CA Food Handler's Permit will be required.**

▲ Culinary Arts II

Prerequisites: Successful completion of ROP Culinary Arts I with 80% or better and have a CA Food Handler's Card is required.

Course Description: Culinary Arts II is the next course following Culinary I. The focus is centered on Management skills, marketing, advance presentations, menu development, hospitality. The student advances training in kitchen safety and sanitation practices, food terminology and proper measuring while demonstrating more advanced food preparation techniques. Students demonstrate the ability to create a recipe and adjust the yield, also able to explain the benefits of eating a variety of foods from each recommended food group. Students will participate in the planning, costing, preparation, serving, storage and critique of meals in project based learning.

▲ Foods and Hospitality

Prerequisites: WUHS: Participation in the Hospitality House Academy at California High School. Negative TB test.

Course Description: Foods and Hospitality is designed to prepare students for entry level employment in hospitality and food service careers through exploring industry and its relationship to travel and tourism. Students will learn laws and regulations; safety and emergency procedures; sanitation and food handling; banquet operations, facilities management; event planning, customer service and guest relations; food and beverage production, preparation and service; sales and marketing strategies; costing and cost analysis; and entrepreneurship.

▲ International Cuisine (g)

Prerequisites: Successful completion of ROP Culinary Arts I with 80% or better and CA Food Handler's Card is required.

Course Description: International Cuisine is the advanced course in a comprehensive standards-based culinary arts sequence. This course focuses on understanding the differences and commonalities we have with other cultures around the world. A common denominator in studying world cultures is cuisine. In studying the cuisines of a people or a region, we learn about a country's geography and climate, traditions, taboos, and social mores, unique conditions caused by environment of a food supply, pressures on a population to trade, export, import, permit a closed or open society, and cultural values. Students will acquire a greater understanding of their world and the cultural diversity that exists in their own community.



Information and Communication Technologies



▲ Computer Science (c)

Prerequisites: None

Course Description: Computer Science is a comprehensive curriculum, providing extensive instructional materials and supplemental teaching resources you will need to implement the course while still allowing you the flexibility to customize the content and pacing if you choose to. The course uses an online platform for content delivery, making it easy for students to navigate and use in the classroom while providing the opportunity for anytime, anywhere learning outside the classroom as well.

▲ Small Unmanned Aircraft Systems (UAS) I (g)

Prerequisites: Must have an overall minimum GPA of 2.5. Must be a sophomore, junior or senior to enroll.

Course Description: This course is designed to provide a foundation into Unmanned Aircraft Systems introducing students to unmanned aircraft systems philosophy, history of civil aviation, functions of UAS services, laws and regulations affecting UAS operations, and the role of technology in the development of this industry. Students will experience hands-on activities including flight simulation, sUAS piloting, mission planning, and creating usable work product for photography/cinematography purposes. Students will learn to follow procedures established through the aviation standard operating procedures and best practices.

▲ Small Unmanned Aircraft Systems (UAS) II

Prerequisites: Must have an overall minimum GPA of 2.5. Completion of Unmanned Aircraft Systems (UAS) I with a 70% or better.

Course Description: This course will build upon UAS 1 to expand understanding of the Unmanned Aircraft Systems and their technologies. This course focuses on the pilot and how a team concept is critical to safe operations in the field. This course will include the start of a "Flight Mission Project," which will encompass all the knowledge gained in the classroom and outside resources. The emphasis of this course is on system operations and communication technologies for supporting and piloting unmanned aerial vehicles (drones). Students will have many opportunities to pilot and support flying operations of a professional UAS, while preparing for the Small UAS Safety Certification exam from USI.

▲ Web Design

Prerequisites: Students should have successfully completed at least one semester of a basic computing class or have equivalent proficiency in basic computer use and Windows operating systems.

Course Description: This course is designed to develop competency in building and maintaining web sites including critical comparison of web sites, web site development, connectivity, legal issues, and multimedia files. Integrated throughout the course are career preparation standards, which include basic academic skills, communication, interpersonal skills, problem solving, safety, technology, and other employment skills.



Marketing, Sales, and Services



▲ Retail Merchandising/1

Prerequisites: Enrollment requires permission from the student's high school counselor.

Course Description: This competency-based course is the first in a sequence of two designed for retail merchandising. It provides students with project-based learning experiences in retail sales. Technical instruction includes an orientation, workplace safety policies and procedures, and employability skills. Emphasis is placed on retail math, communication and critical thinking skills, business ethics, sales strategies, handling the cashiering and inventory systems, and advertising strategies.

▲ Retail Merchandising/2

Prerequisites: Enrollment requires permission from the student's high school counselor and successful completion of the Retail Merchandising/1.

Course Description: This competency-based course is the second in a sequence of two designed for retail merchandising. It provides students with project-based learning experiences in retail sales. Technical instruction includes an introduction and a review of workplace safety policies and procedures. Emphasis is placed on the retail operations of buying, merchandising and inventory, pricing, security and safety as well as marketing and sales, customer service, retail organization, warehousing and logistics, management and planning, and entrepreneurship.



Public Services



▲ Administration of Justice (g)

Prerequisites: None.

Course Description: Administration of Justice is designed to expose students to occupations within the criminal justice system and prepare students for college-level criminal justice coursework. Students will explore the criminal justice system through the study of the causes of crime, the U.S. legal system, the organization and role of law enforcement, the judicial system, corrections, and juvenile justice.

▲ Administration of Justice Academy

Prerequisites: Completed or Currently enrolled in an Administration of Justice or Forensic Science class. Completion of physical fitness exam signed by medical doctor with no restrictions (by week two).

Course Description: This Administration of Justice Academy course is designed to provide the student classroom instruction, role-playing scenarios, and physical fitness training to prepare them for a law enforcement academy, explorer program, or a career in/or relating to public services or the administration of justice system. This course also prepares students for further training at post-secondary institutions in the public services areas.

▲ Emergency Medical Careers

Prerequisites: Appropriate for all grade levels.

Course Description: Emergency Medical Careers is designed to give students an overview of the fields of EMR, EMT, and Paramedics. Students will gain strong foundational knowledge in body systems, anatomy, physiology, medical math, and terminology. Other topics covered include infection control, nutrition, legal and ethical principles, and safety/first aid. This is a required course that leads to Emergency Medical Responder Capstone Course.

▲ Emergency Medicine

Prerequisites: Successful completion of Medical Core with 80% or better is required.

Course Description: This course introduces students to the emergency medical system and dives into the ethics and legal aspects of emergency medicine. This course provides students with a comprehensive understanding of anatomy, physiology, and pathophysiology of the human body. This course also gives students a genuine context for the application of knowledge used to help patients in the field.

▲ Forensic Science (g)

Prerequisites: None

Recommended: 11th or 12th grade, ROP Administration of Justice

Course Description: Forensic Science is designed to give students both theory and hands-on experience in the skills and knowledge required of a forensic crime scene investigator. Included will be an introduction to crime scene investigation, crime scene photography and diagrams as they are used in a criminal investigation. Also included is the importance of physical evidence in solving crimes, dusting and lifting fingerprints, rolling a 10-print fingerprint card, how to perform a gunshot residue test, methods for collecting and processing various types of evidence and the use of forensic light source technology in crime scene investigations. Emphasized throughout the course is the importance of effective communication and interpersonal skills, professional development, strong academic skills, problem-solving, safety and the use of technology. Academics is an integral part of this course, English, writing and higher level mathematics is emphasized. Integrated throughout the course are Common Core State Standards and Career Technical Education Standards, which include safety, communication, technology, ethics, career planning and other employability skills.



Transportation



▲ ASE Certification

Prerequisites: Successful completion of Automotive Technology I and/or Automotive Technology II. Instructor approval needed to enroll.

Course Description: The ASE Student Certification program is specially designed to evaluate and certify students who are near the end of their studies in the areas of Automotive Technology. The National Institute for Automotive Service Excellence (ASE) developed the exams in partnership with Automotive Youth Educational Systems (AYES), National Automotive Technicians Education Foundation (NATEF), and SkillsUSA. The testing program's independent assessment is a particularly valuable tool for instructors and administrators who are working to respond to today's increasing demands for measurable outcomes and accountability. For students, ASE Student Certification can be thought of as the first step in building a career as a service professional by providing them with their first industry-recognized certification through ASE.

▲ Automotive Technology I (g)

Prerequisites: None

Course Description: Automotive Technology I prepares students for employment where a broad skill set and general understanding of all automotive systems are required. Students will identify commonly used tools and equipment, know a variety of sources of service information, and perform basic vehicle service and maintenance related to engine performance, transmissions, suspension and steering, brakes, electrical/electronic systems, heating and air conditioning, and customer service procedures. There is an emphasis on safety in the workplace related to use of protective eye wear/clothing, general lab procedures, use of equipment and ventilation. Worksite learning is an optional component of this class and is available to eligible students.

▲ Automotive Technology II (g)

Prerequisites: Successful completion of Automotive Technology I at 70% or better is required.

Course Description: Automotive Technology II builds on the student's knowledge gained in Automotive Technology I and further enhances their entry-level skill training in suspension and steering, electrical/electronic systems, brakes, and engine performance. Learning areas also include engine tune-up, tires, auto cooling, and operation of special electronic testing equipment. Students who complete the additional 2-years of Automotive Academy are eligible to participate in community classroom and may be placed with an Automotive Dealership as an intern.

▲ Electronics in Automotive

Prerequisites: Successful completion of Automotive Technology I at 70% or better is required or approval by the instructor.

Course Description: Electronics in Automotive builds on the student's knowledge gained in Automotive Technology I and further enhances their entry-level skill training in electrical/electronic systems, related to engine performance. Learning areas also include safety, electrical tools, electrical circuits and diagrams, electrical systems and troubleshooting, computerized engine controls and Hybrid EV systems and operation of special electronic testing equipment. Students who complete the additional 2-years of Automotive Academy are eligible to participate in community classroom and may be placed with an Automotive Dealership as an intern.

Multiple Industry Sectors

▲ Career Planning and Management

Prerequisites: None

Course Description: Career Planning and Management is designed to assist student's transition from middle school to high school to post-secondary to career, explore education and career options and create SMART goals for their future. This class prepares students for a successful career by learning the skills needed, academically and socially, to succeed in high school and post-secondary education. Students will assess their personal learning styles and interests while exploring college and careers. The focus is to engage students and provide relevance in academics by covering topics such as: Communication Skills, Technology Literacy, Leadership, People Skills (choices & consequences), Study Skills, Achieving Goals and Time Management. In addition, the development of keyboarding and/or technological skills are covered. Students will leave the class with a college and career plan.

▲ Career Readiness

Prerequisites: None

Course Description: Career Readiness is designed to assist student's transition from middle school to high school to post-secondary to career, explore education and career options and create SMART goals for their future. This class prepares students for a successful career by learning the skills needed, academically and socially, to succeed in high school and post-secondary education. Students will assess their personal learning styles and interests while exploring college and careers.

▲ Introduction to Career Exploration

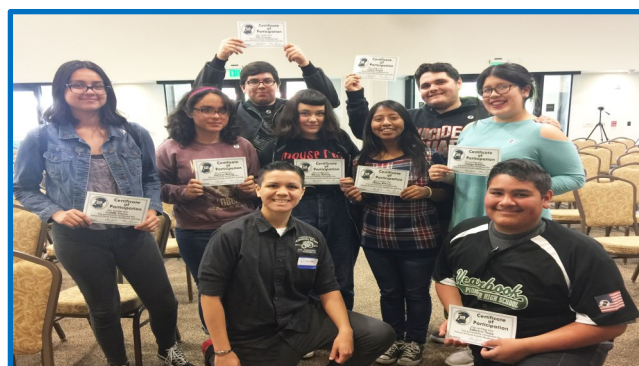
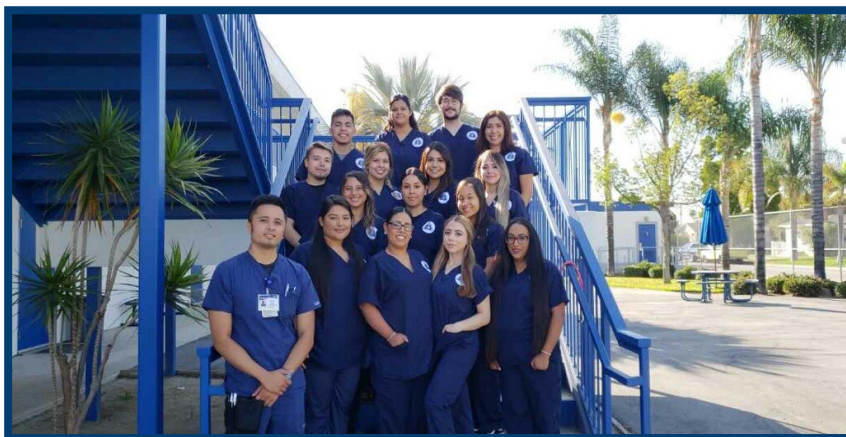
Prerequisites: None

Course Description: The College & Career Readiness course provides a student experience that develops career ready practices through career exploration in the context of project-based learning. All knowledge and skills are based on industry sector and pathway standards to promote college and career readiness. This is especially important in grades 7-9 because without a robust experience at this level many students enter high school unaware of what careers may be best for them.

The 15 Industry Sectors and Pathways

INDUSTRY SECTOR	PATHWAYS
Agriculture and Natural Resources	• Agricultural Business • Agricultural Mechanics • Agriscience • Animal Science • Forestry and Natural Resources • Ornamental Horticulture • Plant and Soil Science
Arts, Media, and Entertainment	• Design, Visual, and Media Arts • Performing Arts • Production and Managerial Arts • Game Design and Integration
Building and Construction Trades	• Cabinetry, Millwork, and Woodworking • Engineering and Heavy Construction • Mechanical Systems Installation and Repair • Residential and Commercial Construction
Business and Finance	• Business Management • Financial Services • International Business
Education, Child Development, and Family Services	• Child Development • Consumer Services • Education • Family and Human Services
Energy, Environment, and Utilities	• Environmental Resources • Energy and Power Technology • Telecommunications
Engineering and Architecture	• Architectural Design • Engineering Technology • Engineering Design • Environmental Engineering
Fashion and Interior Design	• Fashion Design and Merchandising • Interior Design • Personal Services
Health Science and Medical Technology	• Biotechnology • Patient Care • Healthcare Administrative Services • Healthcare Operational Support Services • Public and Community Health • Mental and Behavioral Health
Hospitality, Tourism, and Recreation	• Food Science, Dietetics, and Nutrition • Food Service and Hospitality • Hospitality, Tourism, and Recreation
Information and Communication Technologies	• Information Support and Services • Networking • Software and Systems Development • Games and Simulation
Manufacturing and Product Development	• Graphic Production Technologies • Machining and Forming Technologies • Welding and Materials Joining • Product Innovation and Design
Marketing Sales and Service	• Marketing • Professional Sales • Entrepreneurship/Self Employment
Public Services	• Public Safety • Legal Practices • Emergency Response
Transportation	• Operations • Structural Repair and Refinishing • Systems Diagnostics and Service

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