

MISSION VALLEY REGIONAL OCCUPATION PROGRAM

Medical Occupations Course Outline

1. Course Title:

Medical Occupations

2. CTE Career Sector and Pathway:

Health Science and Medical Technology; Patient Care (pathway 198)

3. CALPADS Number:

7922

4. Job Titles:

NHCSS Clusters

O*NET Codes

Entry Level

Medical Laboratory Assistant	Diagnostic	31-9099.99
Electrocardiograph (ECG Technician)	Diagnostic	31-9099.99
Phlebotomist	Diagnostic	31-9099.99
Central Supply Technician	Environmental	29-2099.99
Dietetic Assistant	Therapeutic	31-9099.99
Veterinary Assistant	Therapeutic	31-9099.99

Technical Level

Medical Laboratory Technician (MLT)	Diagnostic	29-2012.00
Radiologic Technologist	Diagnostic	29-2034.01
Emergency Medical Technician (EMT 1-3)	Therapeutic	29-2041.00
Dental Laboratory Technician	Therapeutic	29-2011.00
Medical Assistant	Therapeutic	31-9092.00
Dietetic Technician (DTR)	Therapeutic	29-2051.00
Occupational Therapy Assistant (COTA)	Therapeutic	31-2011.00
Pharmacy Technician	Therapeutic	29-2052.00
Respiratory Therapy Technician (RTT)	Therapeutic	29-2054.00
Veterinary Technician (VTR)	Therapeutic	29-2056.00
Medical Records Technician	Information	29-2071.00

Professional Level

Medical Laboratory Technologist (MT)	Diagnostic	29-2011.00
Physician	Therapeutic	29-1069.99
Dietitian (RD)	Therapeutic	29-1031.00
Dentist (DMD or DDS)	Therapeutic	29-1021.00
Physical Therapist (PT)	Therapeutic	29-1123.00
Respiratory Therapist (RT)	Therapeutic	29-1126.00
Athletic Trainer (ATC)	Therapeutic	29-9091.00
Medical Librarian	Information	25-4021.00

5. Course Length:

This is a year-long course which meets 2 hours each day and is associated with ten credits each semester.

6. Course Description:

This competency-based course prepares students for entry-level employment opportunities in a variety of Health Careers. Included subjects in the course are physical therapy, emergency service, pharmacy, dental, radiology, dietary, and medical records. Classroom instruction includes professional ethics, medical terminology, infection control, vital signs, basic anatomy, dental anatomy, CPR, and special procedures.

After initial classroom instruction in the two-hour program, students are placed in a local hospital or other health care facility for Community Classroom training.

Integrated throughout the course are career preparation standards, which include workplace basic skills and behaviors, career technical skills, and job employment skills.

7. Hours:

Students enrolled in this two-hour course receive approximately 240 hours of class instruction and 120 hours of work-based learning at community classroom sites, which allows for 360 hours of training.

8. Prerequisite:

Second Semester Community Classroom (Internship) requirements: Students must successfully complete first semester class work at 80% or better, maintaining a minimum of 80% attendance (excused and unexcused) and have teacher recommendation. Students will be required to provide immunization records, proof of a negative TB test, and Covid Vaccinations. Students will also be responsible for their own transportation to and from their internship sites.

9. Articulation:

This course is articulated with Las Positas College. Students who earn a B or better in the Medical Occupations course and complete the Las Positas College application process will be eligible for 2.0 college credits for HSCI 55: Orientation to Health Care.

10. Academic Credit: 20 Units of High School Credit

11. UC/CSU A-G Eligibility: This course meets the UC/CSU A-G “g” requirement.

12. Instructional Materials

Textbook: Diversified Health Occupations, 9th Edition, Louise Simmers, 2022

Course Outline:

Upon successful completion of this course, students will be able to demonstrate the following skills necessary for entry-level employment.

Unit	Content Area Skills	Hours
Integrated Throughout the course	<p><u>Workplace Basic Skills & Behaviors</u> (Necessary skills for any occupation – MVROP SLO #1) Learner Outcomes:</p> <ul style="list-style-type: none"> A. Apply skills learned in class. B. Analyze information and make decisions. C. Communicate verbally and in writing. D. Work independently and as a team member in a diverse workplace. E. Work reliably, responsibly, and ethically. <ul style="list-style-type: none"> a. Identify types of harassment and complaints b. Describe laws related to harassment c. Understand and apply the HIPAA act (<i>certification</i>) 	Integrated Throughout the course
Integrated throughout the course	<p><u>Career Technical Skills</u> Learner Outcomes (Occupational competencies – MVROP SLO #2)</p> <ul style="list-style-type: none"> A. Use appropriate technology. B. Understand and practice occupational safety standards. <ul style="list-style-type: none"> a. Use correct body mechanics while performing procedures in the laboratory or clinical area. b. Observe all safety standards established by the Occupational Safety and Health Administration (OSHA), especially the Occupational Exposure to Hazardous Chemicals Standards & the Blood borne Pathogen Standard (<i>certification</i>). c. Observe all regulations for patient safety while performing procedures in any area. d. List the main classes of fire extinguishers e. Locate and describe the operation of the nearest fire alarm f. Describe the evacuation plan according to school policy 	Integrated throughout the course
Final Unit or any best fit within the course MANDATORY FOR ALL ROP COURSES	<p><u>Job Employment Skills</u> (Occupational competencies – MVROP SLO #3) Learner Outcomes:</p> <ul style="list-style-type: none"> A. Develop a plan to achieve career goals. <ul style="list-style-type: none"> a. Create a Career Portfolio <ul style="list-style-type: none"> i. Cover letter ii. Application iii. Resume iv. Thank you letter 	16

	Health Careers-Content Area Skills	
Unit	Content Area Skills	Hours
1	<p><u>Careers in Health Care</u> Learner Outcomes:</p> <ul style="list-style-type: none"> A. Compare the educational requirements for associates, bachelors, and master's degrees. B. Contrast certification, registration, and licensure. C. Describe different health careers by including a definition, duties, educational requirements, and employment opportunities. <ul style="list-style-type: none"> a. Dental Careers b. Diagnostic Services c. Emergency Medical Services d. Health Information & Communication Services e. Hospital/Health Care Facility Services f. Medical Careers g. Mental & Social Services h. Mortuary Careers i. Nursing Careers j. Nutrition & Dietary Services k. Therapeutic Services l. Veterinary Careers m. Vision Services D. Define, pronounce, and spell all the key terms. <p><i>Potential Assignments/Assessments:</i></p> <ul style="list-style-type: none"> a. <i>Choose a Medical Career</i> b. <i>Identify educational requirements and skills.</i> c. <i>Develop a career brochure or presentation</i> 	10
2	<p><u>Personal Qualities of a Health Care Worker</u> Learner Outcomes:</p> <ul style="list-style-type: none"> A. Explain how diet, rest, exercise, and good posture contribute to good health B. Demonstrate the standards of professional appearance. C. <i>Create a characteristic profile of a healthcare worker that includes personal/professional traits or attitudes.</i> D. Identify why teamwork & leadership are beneficial in health care. E. Identify emotional responses to stressors, and ways to eliminate or decrease stress. F. Explain how time management, problem solving, and goal setting contribute to reducing stress. G. Define, pronounce, and spell all key terms. 	4

3	<u>Legal & Ethical Responsibilities</u> Learner Outcomes: <ul style="list-style-type: none"> A. Provide an example of a situation that might result in legal action. B. Define privileged communications and explain how they apply to health care. C. State the legal regulations that apply to health care. D. List basic rules of ethics for healthcare personnel. E. List the rights of the patient who is receiving health care. F. Justify professional standards by explaining how they help meet legal/ethical requirements. G. Define, pronounce, and spell all key terms. 	16
4	<u>Medical Terminology</u> Learner Outcomes: <ul style="list-style-type: none"> A. Identify basic medical abbreviations. B. Define prefixes, suffixes, and word roots selected. C. Create medical terms by putting together the word parts. 	10
5	<u>Anatomy and Physiology</u> Learner Outcomes: <ul style="list-style-type: none"> A. Apply the appropriate terminology to major organs and systems of the human body including: Integumentary, Skeletal, Muscular, Nervous, Special Senses, Circulatory, Lymphatic, Respiratory, Digestive, Urinary, Endocrine, and Reproductive. B. Identify the major functions of body systems. C. Compare interrelationships of body systems. D. Describe basic diseases affecting each of the body systems. E. Define, pronounce, and spell all key terms. 	70
6	<u>Human Growth and Development</u> Learner Outcomes: <ul style="list-style-type: none"> A. Identify physical, mental, emotional, & social developments that occur during each of the seven main life stages. B. Create examples for each of Maslow's Hierarchy of Needs. C. Describe situations that show the use of defense mechanisms. D. Explain the importance of listening, nonverbal behavior, reporting, and recording in the communication process. E. Define, pronounce, and spell all key terms. 	4

7	<u>Geriatric Care</u> Learner Outcomes: <ul style="list-style-type: none"> A. Differentiate between the myths and facts of aspects of aging. B. Demonstrate methods of providing care to the elderly. C. List factors that cause psychosocial changes. D. Recognize the causes & effects of confusion & disorientation in the elderly. E. Define, pronounce, and spell all key terms. 	6
8	<u>Cultural Diversity</u> Learner Outcomes: <ul style="list-style-type: none"> A. List basic characteristics of culture and identify some of the major ethnic groups in the U.S. (Specifically in the Bay Area) B. Differentiate between culture, ethnicity, and race. C. Describe ways to avoid bias, prejudice, and stereotyping. D. Identify ways in which language (verbal and nonverbal) is affected by cultural diversity. E. Compare diverse health beliefs of different ethnic/cultural groups. F. Identify methods to show respect for religious beliefs and cultural diversity. G. Define, pronounce, and spell all key terms. 	4
9	<u>Nutrition and Diets</u> Learner Outcomes: <ul style="list-style-type: none"> A. List the effects of good and bad nutrition. B. Name the groups of essential nutrients and their functions and sources. C. Differentiate between the processes of digestion, absorption, and metabolism. D. Name, describe, and explain the purposes of therapeutic diets. E. Define, pronounce, and spell all key terms. 	6
10	<u>Infection Control</u> Learner Outcomes: <ul style="list-style-type: none"> A. List the components of the chain of infection. B. Differentiate between antisepsis, disinfection, and sterilization. C. Wash hands according to the recommended aseptic technique. D. Wash, wrap, and autoclave instruments, linen, & equipment. E. Operate an autoclave with accuracy and safety. F. Clean instruments with an ultrasonic unit. G. Prepare sterile packages, gloves, and dressing tray without contaminating the materials. H. Don and remove a transmission-based isolation mask, gloves, and gown. Relate basic tasks to the care of a patient in isolation. I. Define, pronounce, and spell all key terms. 	12

11	<u>Vital Signs</u> Learner Outcomes: <ul style="list-style-type: none"> A. Measure and record temperature accurately, including oral, rectal, axillary, and tympanic. B. Measure and record radial pulse with accuracy. C. Count and record respirations with accuracy. D. Measure and record apical pulse with accuracy. E. Measure and record blood pressure with accuracy. F. State the normal range for temperatures, pulse, respirations, systolic pressure, and diastolic pressure. G. Define, pronounce, and spell all key terms. 	16
12	<u>First Aid</u> Learner Outcomes: <ul style="list-style-type: none"> A. Demonstrate cardiopulmonary resuscitation (CPR) for one-person rescue, two-person rescue, infants, children, and obstructed-airway victims. (CPR Certification) B. Describe first aid for: <ul style="list-style-type: none"> a. Bleeding and wounds b. Shock c. Poisoning d. Burns e. Heat & cold exposure f. Bone & joint injuries, including fractures g. Specific injuries h. Sudden illness C. Apply dressings and bandages, observing all safety precautions. D. Define, pronounce, and spell all key terms. 	16
	*Special Health Careers-Content Area Skills	
	<u>Dental Assistant Skills</u> Learner Outcomes: <ul style="list-style-type: none"> A. Identify the structures and tissues of a tooth. B. Identify the teeth by using the Universal Numbering System & the Federation Dentaire International System. C. Identify the surfaces of the teeth. D. Chart conditions of the teeth. E. Operate and maintain dental equipment F. Identify dental instruments and prepare dental trays. G. Position a patient in the dental chair. H. Demonstrate brushing and flossing techniques using teeth models I. Take impressions and pour models. J. Make custom trays. K. Mix dental cements and bases. L. Prepare restorative materials-amalgam and composite. 	6 hours*

	<p><u>Laboratory Assistant Skills</u></p> <p>Learner Outcomes:</p> <ul style="list-style-type: none"> A. Operate a microscope. B. Obtain and handle cultures. <ul style="list-style-type: none"> a. Culture specimen b. Direct smear c. Agar plate d. Transfer from plate to slide e. Gram's stain C. Puncture the skin to obtain capillary blood. D. Perform a micro hematocrit. E. Measure hemoglobin. F. Count blood cells. <ul style="list-style-type: none"> a. Erythrocytes b. Leukocytes G. Prepare and stain a blood film or smear. H. Test for blood types. I. Perform an erythrocyte sedimentation rate. J. Measure blood-sugar (glucose) level. K. Test urine using the dipstick method L. Use reagent strips to test urine. M. Prepare urine for microscopic examination. 	10 hours*
	<p><u>Medical Assistant Skills</u></p> <p>Learner Outcomes:</p> <ul style="list-style-type: none"> A. Measure and record height and weight (adults and infants). B. Position a patient. C. Screen for vision problems. D. Assist with physical examinations. <ul style="list-style-type: none"> a. Eye, ear, nose, throat b. Gynecological c. General physical E. Assist with minor surgery and suture removal. F. Record and mount an electrocardiogram. G. Use the Physicians' Desk Reference (PDR) H. Work with math and medications. 	10 hours*
	<p><u>Nurse Assistant Skills</u></p> <p>Learner Outcomes:</p> <ul style="list-style-type: none"> A. Admit, transfer, or discharge a patient. Demonstrate care of patient's belongings. B. Position a patient in correct alignment. C. Move and turn a patient in bed. D. Perform the following transfer techniques <ul style="list-style-type: none"> a. Dangling b. Wheelchair 	10 hours*

	<ul style="list-style-type: none"> c. Chair d. Stretcher E. Transfer a patient by way of a mechanical lift and observe all safety points. F. Make closed, open, and occupied beds. G. Administer routine, denture, and special oral hygiene. H. Administer hair care and nail care. I. Administer backrub, using the five major movements. J. Shave a patient, using a safety or electric razor. K. Change a patient's bedclothes. L. Administer a partial bed bath and a complete bed bath. M. Help a patient take a tub bath or shower. N. Measure and record intake and output charts. O. Assist a patient with eating; feed a patient. P. Administer a bedpan or urinal. Q. Provide catheter care. R. Empty a urinary-drainage unit without contamination. S. Provide ostomy care. 	
	<p><u>Physical Therapy Assistant Skills</u></p> <p>Learner Outcomes:</p> <ul style="list-style-type: none"> A. Perform range-of-motion (ROM) exercises on all body joints. B. Ambulate a patient using a transfer (gait) belt. C. Check the correct measurements of patients for canes, crutches, and walkers. D. Ambulate a patient using the following crutch gaits: <ul style="list-style-type: none"> a. Four point b. Three point c. Two point d. Swing to e. Swing through E. Ambulate a patient using a cane and a walker. F. Apply an ice bag or ice collar. G. Apply a warm-water bag. H. Apply an aquamatic pad. I. Apply a moist compress. J. Administer a sitz bath. K. Define, pronounce, and spell all the key terms. 	10 hours*
	<p><u>Business and Accounting Skills</u></p> <p>Learner Outcomes:</p> <ul style="list-style-type: none"> A. File records using both the alphabetical and numerical systems. B. Utilize correct telephone techniques when using a business telephone. C. Schedule appointments using a standards appointment ledger of a computer program. D. Complete registration and history records. 	6 hours*

	<p>E. Compose and print letters of consultation, collection, appointment, recall, and inquiry.</p> <p>F. Complete basic insurance forms accurately, neatly, & thoroughly.</p> <p>G. Maintain a bookkeeping system and be able to maintain electronic health record systems Maintain confidentiality and privacy under HIPAA</p> <p>H. Define, pronounce, and spell all the key terms.</p>	
	Total Approved Hours of Classroom Instruction	240
	<p><u>Community Classroom/Internship</u> (Unpaid, on-the-job, training experience at business sites)</p> <p>Community Classroom experiences may occur during the second semester of the course. During this time, students meet in the classroom for 2 hours a week on their Control Day. The other 8 required hours of class are completed at the community classroom/internship site.</p> <p>Learner Outcomes:</p> <p>A. Apply skills learned in class.</p> <p>B. Analyze information and make decisions.</p> <p>C. Communicate verbally and in writing.</p> <p>D. Work independently and as a team member in a diverse workplace.</p> <p>E. Work reliably, responsibly, and ethically.</p>	<p>Hours Spent in internship are determined by the number of days students are able to spend at their sites.</p> <p><i>The ideal is to have students spend 120 or more hours in internship.</i></p>
	Total Hours	360

15. Instructional Strategies

lecture
group discussion
brainstorming
projects
reading assignments

Multimedia
Guided practice
Demonstration
Role-playing
Job-shadowing

Cooperative groups
Guest speakers
Work-based learning
Simulation
Oral reports

16. Assessments

Written Tests After Each Unit
Presentations
Skill Practical Assessments
Performance Exams
Portfolio

17. Certificate Competency List:

Career Technical Skills:

- Describe anatomy and physiology functions of the human body systems
- Demonstrate appointment scheduling, telephone techniques and message taking
- State cultural diversity areas of concern
- Record growth charts based on age and weight for male and female children
- Recognize methods of geriatric care and related symptoms
- Identify appropriate nutrition and related diets
- Demonstrate proper infection control techniques
- Demonstrate methods for checking basic vital signs and graph TPR charts
- Get certified in CPR by AHA BLS and describe the components of emergency crash cart
- Demonstrate HIPAA awareness; provide privacy, respect and dignity to the patient
- Demonstrate electronic medical record keeping
- Identify health care systems and facilities
- Describe various health careers and qualifying requirements
- Demonstrate professional qualities of a health care worker
- State basic legal and ethical responsibilities in health care
- Identify basic medical terminology

Application of Skills:

- Describe dental assistant skills
- Describe laboratory assistant skills
- Describe medical assistant skills
- Describe nurse assistant skills
- Describe physical therapy skills
- Describe business & accounting skills