



Prepares Students for College and Careers

▲ Medical Core II (g)

COURSE CODES:

▲ROP 63002 ▲WUHSD 0000 ▲ERUSD 0000 ▲STATE (CALPADS) 7921

Course Leads to: Post-Secondary Education
Industry Sector: Health Science and Medical Technology
Career Pathway: Patient Care - 198 **Course Level:** Concentrator
Classroom Hours: 180
Work Based Learning: 180 (optional)

Approved Textbook/Curriculum: DHO Health Science, Menage Healthcare, 8th ed., Principles of ICD-10-CM, American Medical Association, Step by Step Medical Coding, Elsevier

POST-SECONDARY EDUCATION	INDUSTRY CERTIFICATIONS	EMPLOYMENT
Articulation with College Yes Dual Enrollment with College No UC Approved a-g elective credit Yes, g COLLEGE MAJORS Biology Optometry Chemistry Dentistry Nursing Sales-Medical Biochemistry Pharmacology Physical Therapy Physiotherapy	NONE NEXT STEPS ROP Nursing Assistant Pre-Cert ROP Dental Assistant ROP Sports Medicine ROP Emergency Medicine Anatomy and Physiology Bio Medical	Related Careers (O*NET) 29-2071.00 Medical Records and Health Information Technicians 29-2011.00 Medical and Clinical Laboratory Technologists 31-9092.00 Medical Assistants 21-1094.00 Community Health Workers

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.

Integrated throughout the course are standards for Career Ready Practice and Academic Content Standards which include: appropriate technical skills and academic knowledge; communication skills; career planning; applied technology; critical thinking and problem solving; personal health and financial literacy; citizenship, integrity, ethical leadership and effective management; work productively while integrating cultural and global competence; creativity and innovation; reliable research strategies, and environment, social and economic impacts of decisions.

COURSE OUTLINE

I. ORIENTATION

- A. Introduce course and facilities
- B. Discuss syllabus and major objectives
- C. Explain attendance, grading, classroom procedures, code of conduct
- D. Complete course safety requirements/test

II. CAREERS IN THE HEALTHCARE INDUSTRY

- A. Discuss career clusters, ladders, pathways
- B. Thoroughly investigate various occupations within the Health Science and Medical Technologies industry sector
- C. Discuss and research various healthcare occupations, including personal requirements, level of education and licensing requirements needed for employment
- D. Identify professional healthcare organizations
- E. Research salary and current labor market trends in various healthcare careers
- F. Identify essential personal characteristics of the healthcare worker (hair, jewelry, appearance, clothing, uniforms, shoes, nails, makeup)

III. PREPARING FOR COLLEGE AND CAREERS

- A. Review and Discuss California CTE Model Curriculum Standards for Career Ready Practice
- B. Create an Education Plan and a Career Plan aligned with personal goals
- C. Create a Resumé and practice a professional job interview
- D. Create a Career Portfolio
- E. Complete a handwritten/hand printed Job Application neatly, legibly and with no corrections or mistakes
- F. Evening of Excellence Essay

IV. INTRODUCTION TO BIOTECHNOLOGY

- A. Demonstrate understanding of the role of Biotechnology in society, including risk and benefits.
- B. Discuss the significance of biotechnology in pharmaceutical development, agriculture, forensic, genetic testing, industrial products, and scientific research.
- C. Discuss how biotechnology company's work.
- D. Understand the roles of its employees and how bioinformatics is used in research.

V. PATHOPHYSIOLOGY

- A. Research common disease conditions affecting human beings across the lifespan.
- B. Discuss basic anatomy, physiology, and microbiology.

VI. HEALTH COMMUNICATIONS

- A. Discuss how health communications refer to human interaction that influences health and wellness outcomes.
- B. Discuss the diverse communication from patient to provider.
- C. Explain doing class observations and detailed description of healthcare setting, critical analysis of news stories and drawing our own conclusion.

VII. PSYCHOLOGY EPDEMIOLOGY

- A. Study systematic collection, analysis and interpretation of data, exploring quantitative science, focus will be placed on distribution of diseases and their determinants.
- B. Determine the factors in Physiological and social factors influencing disease.
- C. Evaluate the growing concern and define the etiology of mental disorders in our society.
- D. Explore the manifestations of mental illness and review basics of diagnosis and the elements of assessment through case assessment.

VIII. MEDICAL EMERGENCIES

- A. Discuss preparing for medical emergencies, prevention, recognition and management of various emergencies.

COURSE OUTLINE

- B. Present case scenarios and mock “hands-on” drills related to Syncope, Cardiac Arrest, Asthma, Insulin shock, Stroke, Poisoning, Angina, Epileptic seizures and CPR instruction utilizing American Heart guidelines of instruction.

IX. INFORMATION TECHNOLOGY

- A. Discuss the necessary written and verbal communication skills to enable others to transfer information as related to computing and non-computing matters.
- B. Understand medical terminology, anatomy and pharmacology from a coding perspective.
- C. Review code sites used to practice billing and generating reports through healthcare delivery systems

ESSENTIAL STANDARDS AND KEY ASSIGNMENTS

INDUSTRY SECTOR: Health, Science & Medical Technology

ESSENTIAL PATHWAY STANDARD – A2.0

Understand the basic structure and function of the human body and relate normal function to common disorders.

KEY ASSIGNMENT

ESSENTIAL PATHWAY STANDARD – A5.0

Know the definition, spelling, pronunciation, and use of appropriate terminology in the health care setting.

KEY ASSIGNMENT

ESSENTIAL PATHWAY STANDARD – A6.0

Communicate procedures and goals to patients using various communication strategies to respond to questions and concerns.

KEY ASSIGNMENT

ESSENTIAL PATHWAY STANDARD – A9.0

Implement wellness strategies for the prevention of injury and disease.

KEY ASSIGNMENT

ESSENTIAL PATHWAY STANDARD – A10.0

Comply with protocols and preventative health practices necessary to maintain a safe and healthy environment for patients, health care workers, coworkers, and self within the health care setting.

KEY ASSIGNMENT

ESSENTIAL PATHWAY STANDARD – A12.0

Adhere to the roles and responsibilities, within the scope of practice, that contribute to the design and implementation of treatment planning.

KEY ASSIGNMENT

ESSENTIAL PATHWAY STANDARD – A13.0

Research factors that define cultural differences between and among different ethnic, racial, and cultural groups and special populations.

KEY ASSIGNMENT

STANDARDS FOR CAREER READY PRACTICE

- 1. Apply appropriate technical skills and academic knowledge.** Career-ready individuals readily access and use the knowledge and skills acquired through experience and education. They make connections between abstract concepts with real-world applications and recognize the value of academic preparation for solving problems, communicating with others, calculating measures, and performing other work-related practices.
- 2. Communicate clearly, effectively, and with reason.** Career-ready individuals communicate thoughts, ideas, and action plans with clarity, using written, verbal, electronic, and/or visual methods. They are skilled at interacting with others: they are active listeners who speak clearly and with purpose, and they are comfortable with terminology that is common to workplace environments. Career-ready individuals consider the audience for their communication and prepare accordingly to ensure the desired outcome.
- 3. Develop an education and career plan aligned with personal goals.** Career-ready individuals take personal ownership of their educational and career goals and manage their individual plan to attain these goals. They recognize the value of each step in the educational and experiential process, and they understand that nearly all career paths require ongoing education and experience to adapt to practices, procedures, and expectations of an ever-changing work environment. They seek counselors, mentors, and other experts to assist in the planning and execution of education and career plans.
- 4. Apply technology to enhance productivity.** Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring and using new technology. They understand the inherent risks—personal and organizational—of technology applications, and they take actions to prevent or mitigate these risks.
- 5. Utilize critical thinking to make sense of problems and persevere in solving them.** Career-ready individuals recognize problems in the workplace, understand the nature of the problems, and devise effective plans to solve the problems. They thoughtfully investigate the root cause of a problem prior to introducing solutions. They carefully consider options to solve a problem and, once agreed upon, follow through to ensure the problem is resolved.
- 6. Practice personal health and understand financial literacy.** Career-ready individuals understand the relationship between personal health and workplace performance. They contribute to their personal well-being through a healthy diet, regular exercise, and mental health activities. Career-ready individuals also understand that financial literacy leads to a secure future that enables career success.
- 7. Act as a responsible citizen in the workplace and the community.** Career-ready individuals understand the obligations and responsibilities of being a member of a community and demonstrate this understanding every day through their interactions with others. They are aware of the impacts of their decisions on others and the environment around them, and they think about the short-term and long-term consequences of their actions. They are reliable and consistent in going beyond minimum expectations and in participating in activities that serve the greater good.
- 8. Model integrity, ethical leadership, and effective management.** Career-ready individuals consistently act in ways that align with personal and community-held ideals and principles. They employ ethical behaviors and actions that positively influence others. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the direction and actions of a team or organization, and they recognize the short-term and long-term effects that management's actions and attitudes can have on productivity, morale, and organizational culture.
- 9. Work productively in teams while integrating cultural and global competence.** Career-ready individuals contribute positively to every team, as both team leaders and team members. To avoid barriers to productive and positive interaction, they apply an awareness of cultural differences. They interact effectively and sensitively with all members of the team and find ways to increase the engagement and contribution of other members.
- 10. Demonstrate creativity and innovation.** Career-ready individuals recommend ideas that solve problems in new and different ways and contribute to the improvement of the organization. They consider unconventional ideas and suggestions by others as solutions to issues, tasks, or problems. They discern which ideas and suggestions may have the greatest value. They seek new methods, practices, and ideas from a variety of sources and apply those ideas to their own workplace practices.
- 11. Employ valid and reliable research strategies.** Career-ready individuals employ research practices to plan and carry out investigations, create solutions, and keep abreast of the most current findings related to workplace environments and practices. They use a reliable research process to search for new information and confirm the validity of sources when considering the use and adoption of external information or practices.
- 12. Understand the environmental, social, and economic impacts of decisions.** Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact other people, organizations, the workplace, and the environment. They are aware of and utilize new technologies, understandings, procedures, and materials and adhere to regulations affecting the nature of their work. They are cognizant of impacts on the social condition, environment, workplace, and profitability of the organization.

CTE ANCHOR STANDARDS—Common Core English Language Arts Alignment

1: Academics

Analyze and apply appropriate academic standards required for successful industry sector pathway completion leading to postsecondary education and employment. Refer to the industry sector alignment matrix for identification of standards. Note: alignment listed within each sector Anchor Standard

2: Communications Language Standard

Acquire and accurately use general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the (career and college) readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. LS 9-10, 11-12.6 Anchor Standard

3: Career Planning and Management Speaking and Listening Standard

Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. SLS 11-12.2 Anchor Standard

4: Technology Writing Standard

Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments and information. WS 11-12.6 Anchor Standard

5: Problem Solving and Critical Thinking Writing Standard

Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem, narrow or broaden the inquiry when appropriate, and synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. WS 11-12.7 Anchor Standard

6: Health and Safety Reading Standards for Science and Technical Subjects

Determine the meaning of symbols, key words, and other domain-specific words and phrases as they are used in a specific scientific or technical context. RSTS 9-10 11-12.4 Anchor Standard

7: Responsibility and Flexibility Speaking and Listening Standard

Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners, building on others' ideas and expressing their own clearly and persuasively. SLS 9-10 11-12.1 Anchor Standard

8: Ethics and Legal Responsibilities Speaking and Listening Standard

Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the work. SLS 11-12.1d Anchor Standard

9: Leadership and Teamwork Speaking and Listening Standard

Work with peers to promote civil, democratic discussions and decision making; set clear goals and deadlines; and establish individual roles as needed. SLS 11-12.1b Anchor Standard

10: Technical Knowledge and Skills Writing Standard

Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. WS 11-12.6 Anchor Standard

11: Demonstration and Application

Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and the career technical student organization.