

**EL DORADO UNION HIGH SCHOOL DISTRICT
Educational Services**

Course of Study Information Page

Course Title: Medical Arts and Science, Level II #284 (Equivalent to Core Class – ROP Health Occupations 101. One year course – Block schedule, semester long.)	
Rationale: This course is comprised of nine sections: vital signs; safe work plan; Infection control; medical terminology; legal responsibility; professionalism; communication; and familiarity with health professional organizations. Students will have access to knowledge and will learn skills necessary for health career employment. The course will serve as an equivalent to Health Occupations 101 (ROP's Core class) offering high school Health Careers Academy students an opportunity to advance to Health Occupations 102 for practical community classroom placement.	
Course Description: This course's eight sections fully prepare students for learning skills required for health care career procedures such as: checking vital signs associated with human anatomy; legal responsibilities associated with health careers; proper communication; understanding the process of infection control, its treatment and physiological response; advanced medical terminology; safe work place issues, professionalism and humanitarian philosophies. This course will serve as a catalyst for specific training for offering effective and competent career skills development necessary for students placement in the community health care classroom setting.	
Length of Course:	One Semester: 85 hours semesters or modified for a block schedule
Grade Level:	Grade 12
Credit: Number of units: 5 credits per semester <input type="checkbox"/> Meets graduation requirements <input type="checkbox"/> Request for UC "a-g" requirements <input type="checkbox"/> College Prep <input type="checkbox"/> Elective <input type="checkbox"/> Vocational	Units listed per semester on the following pages.
Prerequisites:	Medical Arts & Science
Department(s):	Health/Physical Education
District Sites:	El Dorado High School
Board of Trustees Adoption Date:	January 28, 2003
Textbook(s)/Instructional Materials:	None requested
Date Adopted by the Board of Trustees:	

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**Department: Health Education
Course Title: Medical Arts & Science, Level II**

UNIT #1: Professional Organization (3 hours semester – 6 hours block)

GOAL: Students will explore a variety of health care systems and settings to make well-informed career decisions and develop an awareness of how culture, ethnicity, and religious beliefs affect the delivery of health care. They will access and apply information through the use of technology.

OBJECTIVES	SUGGESTED ACTIVITIES
Students will become familiar with the health care field and basic health care processes and practices. Students will become aware of services in the community.	Recognize program information, organizations, career opportunities, service guidelines and service associations in the health care field through various sources.

National Health Science Career Path Model Standards
The students will demonstrate content proficiency by:
4. Understanding how to implement the career planning process necessary for making informed career decisions. Students will access and apply personal and career information to create, refine, and pursue their own career goals.
5. Aligning course work with career choice. Students will complete a coherent sequence of courses for a selected career path.
6. Understanding the importance of work readiness skills. Students will demonstrate proficiency as decision makers, team leaders, and team members in simulated and actual work place learning, and community, educational, and family settings.
7. Understanding the unique cultural, ethnic, and religious beliefs that affect the delivery of health care. Students will demonstrate sensitivity to the unique expectations of each ethnic group they may contact during workplace learning and classroom practice.
8. Becoming proficient in accessing information and health care procedures through electronic communication. Students will demonstrate proficiency during classroom practice and workplace learning experiences.
ACE Standards (Assessment in Career Education), Challenge, California Department of Education
1.0 Students will know the relationships of various health care systems. Students will understand by:
1.1 Explaining the various health care delivery systems.
1.2 Differentiating between health care systems.

National Health Science Career Path Model Standards
The students will demonstrate content proficiency by:
1.3 Analyzing the affect of these relationships on the quality of care.
California Health Education Standard 9.E.

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Professional Organizations – Unit 1 (3 hours semester – 6 hours block)

Upon completion of this unit of study, the student will:

- Recognize and define the following government agencies:
 - ▶ World Health Organization
 - ▶ Department of Health and Human Services
 - ▶ Center for Disease Control
 - ▶ National Institute of Health
 - ▶ Food and Drug Administration
 - ▶ Occupational Safety and Health Administration

- Describe and identify services offered by non-profit agencies

Resource book: *Diversified Health Occupations*

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UNIT #2: Professionalism (4 hours semester – 27 hours block)

GOAL: Students will demonstrate leadership and work place readiness skills.

OBJECTIVES	SUGGESTED ACTIVITIES
The student will:	
Become aware of elements necessary for personal career development known as the <i>Six Pillars of Character Counts</i> as it relates to the health care profession.	Identify what constitutes characteristics associated with professionals, secure a career in health care and ethical behavior in day-to-day activity.

National Health Science Career Path Model Standards
6. Students will understand the importance of work readiness skills. Students will demonstrate proficiency as decision makers, team leaders, and team members in simulated and actual work place learning, and community, educational, and family settings.
ACE Standards (Assessment in Career Education), Challenge, California Department of Education
4.0 Communication and Decision-Making: Students will know how to use critical and creative thinking, logical reasoning, and problem-solving skills using various methods. Students will understand by:
4.1 Demonstrating the use of critical and creative thinking skills and logical reasoning for problem resolution.
4.2 Identifying, locating, organizing and retrieving information and data from a variety of sources.
California Health Education Standard 1d, 2e, 32, 5abd, 6e

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Professionalism – Unit 2 (4 hours semester – 27 hours block)

Upon completing this unit of study, the student will:

- Identify the Six Pillars of Character Counts.
- Identify how the Six Pillars of Character Counts relate to a health care worker
- Phone Skills
- Identify 12 traits of employer needs
- Lessons on 9th Grade Health Education Standards and SCANS standards (12 traits employers need), and National and State Core Skill Standards

Activities:

- Health Care Workers values and behaviors meet English Language Arts and Science standards, evaluation rubric group observation checklist.
- Ethnic diversity in health care delivery meets Health Science, English and Math Standards
- Getting a job and keeping it.

Resource book: *Diversified Health Occupations*

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UNIT #3: Legal Responsibilities (4 hours semester – 9 hours block)

GOAL: Students will demonstrate leadership and workplace readiness skills.

OBJECTIVES	SUGGESTED ACTIVITIES
The student will:	
Demonstrate an understanding of legal and ethical behavior in written form as the law relates to patient rights and health career personnel's responsibilities for patient care.	Students will review, examine, and explore patient cases involving patient rights. They will apply the six basic rules of the health care professional and the six basic rights of patients to incidences and make recommendations for the avoidance of situation(s) and/or resolution of the problem(s) for patient care improvement.

National Health Science Career Path Model Standards
The students will demonstrate content proficiency by:
2. Understanding the importance of maintaining and promoting optimum health and treating illness. They will identify strategies for health promotion within health care settings and their community.
3. Understanding various health care systems, settings, and the variety of consumers served by each. They will describe differences and similarities between processes and procedures unique to the various health care systems and settings.
National Health Care (Core) Skill Standards
Academic Foundation (1.01) Communication (1.08) Specialized area of integration, English and Science
ACE Standards (Assessment in Career Education), Challenge, California Department of Education
5.0 Ethical and Legal Responsibilities: Students will know ethical considerations, legal constraints, and professional codes affecting health care delivery systems. Students will understand by:
5.1 Describing patients' rights as related to professional conduct of the health care worker.
5.2 Demonstrating professionalism with emphasis on confidentiality.
5.3 Discussing legal constraints associated with health care.
CSS - 5f

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Legal Responsibilities – Unit 3 (4 hours semester – 9 hours block)

Upon completing this unit of study, the student will:

- Provide one example of a situation that might result in legal action for each of the following: malpractice; negligence; assault and battery; invasion of privacy; false imprisonment; abuse and defamation.
- Describe how contract laws affect health care.
- Define *privileged communications* and explain how they apply to health care.
- State the legal regulations that apply to health care records.
- List at least six basic rules of the ethics for health care personnel.
- List at least six rights of the patient who is receiving health care.
- Justify at least eight professional standards by explaining how they help meet legal/ethical requirements.

Activity: *Organ Farm* (2 hour film), followed by class organizational debate.

Standards: Critical thinking, evaluation – self and group assessment rubric and problem solving rubric.

Reference books:

Diversified Health Occupations
Introduction to Clinical Allied Health Care
Maslow's Humanitarian Philosophies, Death and Dying

Resource books:

Diversified Health Occupations

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UNIT #4: Communications (5 hours semester – 21 hours block)

GOAL: Demonstrate leadership and workplace readiness.

OBJECTIVES	SUGGESTED ACTIVITIES
The student will:	
Learn written and verbal communication skills necessary for sharing information on patient care and program process.	Written and verbal exchange of information on patient data, incident reporting, and interpretation of medical information.

National Health Science Career Path Model Standards
The students will demonstrate content proficiency by:
2. Understanding the importance of maintaining and promoting optimum health and treating illness. They will identify strategies for health promotion within health care settings and their community.
3. Understanding various health care systems, settings, and the variety of consumers served by each. They will describe differences and similarities between processes and procedures unique to the various health care systems and settings.
National Health Careers (Core) Skill Standards
Academic Foundation (1.01) Communication (1.02) Ethics (1.06) Primary Area of Integration Language Arts
ACE standards (Assessment in Career Education), Challenge, California Department of Education
6.0 Career Planning: Students will know the importance of comparing personal profiles to various health career requirements. Students will understand by:
6.1 Comparing personal profiles with various health career opportunities, including educational requirements, job expectations, and environmental factors.
6.2 Reviewing and revising career plans and portfolio.
6.3 Participating in personal and organized leadership activities.
6.4 Completing documents and demonstrating job search skills.
CSS – 1d; 2e; 4a; 6e; 8e

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Communication – Unit 4 (5 hours semester – 21 hours block)

After completing this unit of study, the student will:

- List the three main factors required for the communication process.
- Identify at least four factors that can interfere with the communication process.
- Explain the importance of listening, nonverbal behavior, reporting, and recording in the communication process.

Activity:

- Health Care Teams (meets Health Care Standards State and National)
- Journal items
- Problem solving log, learning and communicating about difficult situations.
- Role Playing – observation checklist on Health Care Teams (Collaborative Learning Team Chart)

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UNIT #5: Humanitarian Philosophies (6 hours semester – 15 hours block)

GOAL: Students will enhance knowledge and skills for leading a healthy life, and develop an awareness of how culture, ethnicity, and religious beliefs affect the delivery of care.

OBJECTIVES	SUGGESTED ACTIVITIES
The student will:	
Identify the stages of the grieving process, the purpose and services of hospice care, the legal ramifications of the patients right to die and euthanasia.	Team up to interpret case management issues on terminal patient issues through class discussions, video review, speakers and historical prospective.

National Health Science Career Path Model Standards
The students will demonstrate content proficiency by:
1. Understanding the importance of continuing to implement a healthy life style. They will demonstrate healthy living concepts at school, work, and home.
7. Understanding the unique cultural, ethnic, and religious beliefs that affect the delivery of health care. They will demonstrate sensitivity to the unique expectations of each ethnic group they may contact during workplace learning and classroom practice.
National Health Career (Core) Skill Standards Academic Foundation (1.01) Communication (1.02) Ethics (1.06) Teamwork (1.08) Primary Area of Integration Social Science
ACE Standards (Assessment in Career Education), Challenge, California Department of Education
2.0 Growth and Development: Students will know the concepts and principles of human body system structure and function in relation to human growth and development. Students will understand by:
2.1 Explaining structure and function of the human body systems.
2.2 Differentiating between normal and abnormal human structure.
2.3 Contrasting normal and abnormal human physiology.
CSS – 5a, b, & f

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Humanitarian Philosophies – Unit 5 (6 hours semester – 15 hours block)

After completing this unit of study, the student will:

- Describe the five stages of grieving that occur in the dying patient and the role of the health care worker in each stage.
- List at least two purposes of Hospice Care.
- Justify what is meant by the “right to die”
- Create examples for each of the five groups of needs in Maslow’s hierarchy of needs.

The *High Price of Health* film and study curriculum regarding American Health Care Systems.

Evaluation essay rubric and objective check list on questions and answers by teams.

Resource book: *Diversified Health Occupations*

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UNIT #6: Advanced Medical Terminology (20 hours semester – 27 hours block)

GOAL: Students will enhance knowledge and skills for leading a healthy life. Demonstrate leadership and workplace readiness skills.

OBJECTIVES	SUGGESTED ACTIVITIES
The student will:	
Understand and demonstrate the use and application of medical terminology when describing patient's anatomy, diagnosis, treatments, procedures and chart information noted in medical literary journals.	Learn the medical terminology through practical application and use of the language by tests, situational, translation and patient assessment.

National Health Science Career Path Model Standards
The students will demonstrate content proficiency by:
1. Understanding the importance of continuing to implement a healthy life style. They will demonstrate healthy living concepts at school, work, and home.
2. Understanding the importance of maintaining and promoting optimum health and treating illness. They will identify strategies for health promotion within health care settings and their community.
6. Understanding the importance of work readiness skills. They will demonstrate proficiency as decision makers, team leaders, and team members in simulated and actual work place learning, and community, educational, and family settings.
National Health Career (Core) Skill Standards
Academic Foundation (1.01) Communication (1.02) Ethics (1.06) Teamwork (1.08) Primary Area of Integration – Social Science and Language Arts
ACE Standards (Assessment in Career Education), Challenge, California Department of Education
2.0 Growth and Development: Students will know the concepts and principles of human body system structure and function in relation to human growth and development. Students will understand by:
2.1 Explaining structure and function of the human body systems.
2.2 Differentiating between normal and abnormal human structure.
2.3 Contrasting normal and abnormal human physiology.
CSS – Standard 2e, 6a, b, & d

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Medical Terminology – Unit 6 (20 hours semester – 27 hours block)

After completing this unit of study, the student will:

- Identify basic medical abbreviations selected from a standard list
- Define prefixes, suffixes, and word roots selected from a list of words
- Spell and pronounce medical terms correctly

Activity: Lessons in the textbook *The Language of Medicine*, 5th edition

- Chapter 10, Nervous System
- Chapter 11, Cardiovascular System
- Chapter 13, Blood System – Respiratory System
- Chapter 14, Lymphatic and Immune System
- Chapter 15, Musculoskeletal System

In depth study of:

- Chapter 16, Skin
- Chapter 17, Sense Organs
- Chapter 18, Endocrine System
- Chapter 19, Cancer Medicine
- Chapter 20, Radiology
- Chapter 21, Pharmacology
- Chapter 22, Psychiatry

Activity: Advanced Medicine at the Crossroads and corresponding films

Reference book: *Diversified Health Occupations*

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UNIT #7: Infection Control (13 hours semester – 21 hours block)

GOAL: Students will enhance knowledge and skills for leading a healthy life.

OBJECTIVES	SUGGESTED ACTIVITIES
The student will:	
Be able to identify illness causative factors including micro-organisms, process of infectious agents, treatment modalities, precautions and treatment, and disease outcomes.	Clearly and cohesively reiterate chain of infection, discuss recommended treatments and body responses to illness in writing and multiple-choice exam.

National Health Science Career Path Model Standards
The students will demonstrate content proficiency by:
1. Understanding the importance of continuing to implement a healthy life style. They will demonstrate healthy living concepts at school, work, and home.
National Health Career (Core) Skill Standards
Academic Foundation (1.01) Specialized Area of Integration – Science, Health, and Mathematics
ACE Standards (Assessment in career Education, Challenge, California Department of Education)
7.0 Health Maintenance: Students will know how disease processes affect the maintenance of optimum health. Students will understand by:
7.1 Recognizing the relationship between health promotion and disease prevention.
7.2 Describing the strategies used to achieve and maintain optimum health.
CSS – 2a, 3b

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Infection Control – Unit 7 (13 hours semester – 21 hours block)

After completing this unit of study, the student will:

- Identify five classes of micro-organisms by describing the characteristics of each class.
- List the six components of the chain of infection
- Differentiate between antisepsis, and disinfection and sterilization.
- Wash hands according to recommended aseptic techniques
- Don sterile gloves without contaminating the gloves
- Don and remove an isolation mask, gloves, and gown
- Define, pronounce, and spell all the key terms

Activity:

- Microbiological foundation of disease exercise evaluation tool. What, So What, Now What.
- Predicting Pulse and Respiration
- Textbook *Wound Care*, 2nd edition
 - Wound Diagnosis
 - Management of Wound Characteristics
 - Management of Wound Etiology
 - Management of Wound healing physical therapy technologies
- Film *Paramedics* – series of health care professional's response for health care delivery to a variety of life's situations
- ACID BASE Balance – learning to deal with body fluids
- Controlling Heart Disease in the 21st Century, Part I & II
- CPR and Basic First Aid
- How to use observation checklist for ill persons
- National Health Science Career Path Model, Activity Tracking Form, Section A, B, and C

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UNIT #8: Vital Signs (25 hours semester – 45 hours block)

GOAL: Students will enhance knowledge and skills leading a healthy life and access and apply information through the use of technology.

OBJECTIVES	SUGGESTED ACTIVITIES
The student will:	
Be able to list basic vital signs, check vital signs, and translate verbally and in writing the significance of the information revealed concerning the state of body processes.	Lecture, active historical research correlated with practice. Video about temperature, pulse, respiration, blood pressure, and basic body health assessment.

National Health Science Career Path Model Standards
The students will demonstrate content proficiency by:
8. Accessing information and health care procedures through electronic communication. They will demonstrate proficiency during classroom practice and workplace learning experiences.
National health Career (Core) Skill Standards
Academic Foundation (1.01) Communication (1.02) Safety Practice (1.07) Teamwork (1.08)
ACE Standards (Assessment in Career Education, Challenge, California Department of Education
7.0 Health Maintenance: Students will know how disease processes affect the maintenance of optimum health. Students will understand by:
7.1 Recognizing the relationship between health promotion and disease prevention.
7.2 Describing the strategies used to achieve and maintain optimum health.
CSS – 1a, b; 2d

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Vital Signs and Medical Computations – Unit 8 (25 hours semester – 45 hours block)

After completing this unit of study, the student should be able to:

- *List the four basic vital signs
- *Explain three methods of heat loss
- *Describe the two different temperature scales
- *Explain the term “core temperature”
- *Identify five locations on the body where a pulse can be felt
- State the normal range of oral temperature, axillary temperature, rectal temperature, pulse, respirations, systolic pressure, and diastolic pressure
- CPR
- Basic First Aid
- Portfolio – check off sheet for classroom achievements

Resource books: *Diversified Health Occupation*
 **Introduction to Clinical Allied Healthcare*

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UNIT #9: The Safe Workplace (6 hours semester – 9 hours block)

GOAL: Students will enhance knowledge and skills for leading a healthy life.

OBJECTIVES	SUGGESTED ACTIVITIES
The student will:	
Be able to define four basic guidelines for proper body mechanics; identify hazards that inhibit a healthy life style; avoid risk and hazards in the health care workplace.	Demonstrate their understanding of hazards in the workplace, review and assessment, resolution of hazards and mechanisms to employ for a safety program.

National Health Science Career Path Model Standards
The students will demonstrate content proficiency by:
1. Understanding the importance of continuing to implement a healthy life style. They will demonstrate healthy living concepts at school, work, and home.
National Health Career (Core) Skill Standards
Academic Foundation (1.01) Safety Practice (1.02) Primary Area of Integration – Science and Health
ACE Standards (Assessment in career Education, Challenge, California Department of Education
3.0 Safety – students will know the principles of asepsis, body mechanics, and protective safety measures. Students will understand by:
3.1 Describing and demonstrating the principles of asepsis.
3.2 Using correct body mechanics and utilizing protective safety measures.
3.3 Describing the relationship of micro-organisms and the health care setting.
3.4 Examining the health risks associated with hazardous and biomedical waste materials.
3.5 Explaining behavioral problems inherent in the health care setting.
3.6 Responding to fire and other disasters using safety protocols.
CSS – 1a, c, e, 2a, 3b, 5c

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The Safe Workplace – Unit 9 (6 hours semester – 9 hours block)

After completing this unit of study, the student will:

- Name at least four basic guidelines for proper body mechanics and explain why using them is important.
- Identify at least five hazards that may contribute to a person falling.
- Name at least two restrictions for patients who smoke.
- List at least five ways to reduce the risk of electrical shock.
- Describe the steps that should be taken if a fire occurs.
- Explain how to use a fire extinguisher.

Curriculum: Teens, Work and Safety, A curriculum for Students (supports Health Skill Standards and legal issues of safety).

Reference book: *Introduction to Clinical Allied Health Care*