

**Course Title:** Health Careers I

**Department:** Medical Academy

**Course Number:** 5400

**Grade Level(s):** 9-12

**Length of Course:** 1 Year

**Prerequisite(s):** None

**UC/CSU (A-G) Req:** Unknown

**Brief Course Description:** This introductory course investigates the health care delivery system, its services, occupations, and related sciences. Topics include the study of the language of medicine, introduction to microbiology concepts, anatomy and physiology, diseases/disorders, diagnoses, treatments, patient/ client care regimens, career development, medical math and present and future technological innovations. Skills in science, communications, social studies and health are reinforced in this course. Certification in Basic Life Support (BLS) Cardiopulmonary Resuscitation (CPR) For Health Care Professionals through the American Heart Association will be offered with frequent CPR refresher module activities. Successful completion of this course results in eligibility to continue in the next companion course; Health Careers II.

## **I Goals**

The student will:

- A. Learn the history and trends of Health Care from ancient times to present (B1.0 and B13.0)
- B. Examine the various health care careers (B12.0)
- C. Learn, understand and use proper medical terminology (B5.0)
- D. Learn how to take and interpret vital signs as it relates to various medical conditions and patient ages. (B3.0, B4.0 and B7.0)
- E. Understand how to use medical-navigational language to identify human anatomy. (B2.0)
- F. Identify and understand the function of the cells and microorganisms (B2.0)
- G. Identify and know the function of the tissues (B2.0)
- H. Understand the use of Basic Diagnostic Tests and the relation that abnormal results have with the disease process (B2.0 and B7.0)
- I. Understand and identify the Musculoskeletal System, the diseases and disorders in the Musculoskeletal System and the use proper body mechanics as it relates to the Musculoskeletal System (B2.0 and B8.0)
- J. Communicate procedures and goals to patients using various communication strategies with an understanding of HIPAA. (B6.0)
- K. Understand and identify the Cardiovascular System and the diseases and disorders of the Cardiovascular System (B2.0)

- L. Able to identify the normal PQRST in a 12-lead EKG (B2.0 and B3.0)
- M. Able to identify at least 10 abnormal EKG patterns, their diagnosis (B2.0 and B3.0)
- N. Apply observation techniques and assessment skills to detect changes in a patient's health status (B4.0 and B7.0)
- O. Two CapStone Projects:
  - 1. (1st Semester) Research project of a healthcare profession that will coincide with the student's integrated project.
  - 2. (2nd Semester) Able to use the above skills to complete their CapStone Project during Basic Life Support (BLS) Cardiopulmonary Resuscitation (CPR) For Health Care Professionals Certification through the American Heart Association.

## **II Outline of Content for Major Areas of Study**

### **Semester I**

- A. Unit 1: Chapter 1: History & Trends of Health Care/ Text 1
- B. Unit 2: Chapter 3: Careers in Health Care/ Text 1
- C. Unit 3: Chapter 1: Medical Terminology: Learning the Language/ Text 2
- D. Unit 4: Chapter 15: Vital Signs/ Text 1
- E. Unit 5: Chapter 2: The Human Body: Reading the Map/ Text 2
- F. Unit 6: Chapter 3: The Cells: The Raw Materials & Building Blocks/ Text 2
- G. Unit 7: Chapter 4: Tissues & Systems: The Inside Story/ Text 2
- H. Unit 8: Chapter 5: Basic Diagnostic Tests/ Text 2
- I. Unit 9: Chapter 6: The Skeletal System Text 2
- J. Unit 10: Chapter 7: The Muscular System/ Text 2

### **Semester II**

- K. Unit 11: The Circulatory System: Transport & Supply/Text 2
- L. Unit 12: Rapid Interpretation of EKGs Part I of II/ Text 4
- M. Unit 13: Capstone Project: CPR BLS Certification/ Text 3

## **III Accountability Determinants**

- A. Methods of Instruction:
  - 1. Review of Cornell Note Taking Skill Building
  - 2. Student/Instructor Led Socratic Seminar Activities
  - 3. Student-directed activities to review correct and build both academic and moral leadership characteristics critical in future Health Care providers.
  - 4. Ability to successfully achieve Professional Certification at the end of the semester Capstone Project: Basic Life Support ( BLS) Professional: Certification in Cardiopulmonary Resuscitation through the American Heart Association.
- B. Assessment Methods
  - 1. Classroom Participation
  - 2. Chapter Quizzes
  - 3. Chapter Comprehensive Exams
    - a. short answer
    - b. multiple choice
    - c. matching
  - 4. Individual student-led Health Careers Presentations (1st semester Capstone Project)

5. Second Semester-ending Capstone Project: BLS CPR Professional Certification.

#### **IV Instructional Materials and Methodologies**

##### **A. Required Textbook(s)**

Title: Diversified Health Occupations; 7th Edition

ISBN: 13:9781418030216

Author(s):

Publisher: Delmar Publishers

Title: Anatomy, Physiology & Disease: An Interactive Journey for Health Professionals

ISBN: 13: 978-0-13 135966-6

Author(s): Colbert, Ankney, Lee

Publisher: Pearson Publishers

Year: 2009

Title: BLS for Health Care Providers, Professional: American Heart Association.

ISBN:

Author(s):

Publisher:

Title: Rapid Interpretation of EKGs, 6th Edition

ISBN: 13: 9780912912066

Author(s): Dale Dubin, MD.

All 4 texts are used in both levels; Health Careers I and Health Careers II.

##### **B. Supplementary Materials**

To Be Determined as course progresses: The focus will be on

1. DVD videos
2. Emergency medical equipment
3. Human and animal anatomical Manikin models

##### **C. Instructional Methodologies**

1. PowerPoint Lectures
2. "Flight," group activities/cooperative learning/communicative activities such as: Student/Instructor Led Socratic Seminar Activities and Student-directed activities to review for major exams and preparation for the Semester 2 Capstone Project: BLS CPR Formal Certification through the American Heart Association.
3. Student-Led PowerPoint lectures
4. Various video documentation on the subject of Health, Emergency Medicine, Veterinary Medicine, Disease, and Trauma.
5. Professional In-class presentations by local community Health Care Providers such as; the City of Murrieta Fire Department, American Medical Response (AMR) ambulance service, local doctors, nurses, pharmacists, veterinarians, and the MMHS school nurse.
6. Student-Independent Topic Research Mini-Caps leading to the 1st Semester Capstone activity to be presented at the end of 1st semester.