

Health Science II: Patient Care & Medical Services

Course Description

Challenging. Variable. Rewarding. These three words can be used to describe many careers in the health sciences. In this course, you will learn more about what it takes to be a successful health science professional, including how to communicate with patients. You'll explore the rights and responsibilities of both patients and health science professionals in patient care and learn more about how to promote wellness among patients and health care staff. Finally, you'll learn more about safety in health science settings and the challenges and procedures of emergency care, infection control, and blood-borne pathogens.

A Note About Certification: While this course does not offer industry certification directly, it can support students' career and academic goals. Students are encouraged to have conversations with their local school counselors regarding individual career exploration opportunities.

Materials

This course does not have additional required materials. Please see the [WVS Materials List](#) for any other courses as needed.

Course Outline

Health Science 2 Certification Project

Learning Objectives:

- Acquire a certificate in cardio pulmonary respiration (CPR) by completing a training program
- Acquire a certificate for using an automated external defibrillator (AED) by completing a training program
- Acquire a certificate in removing foreign body airway obstructions (FBOA) by completing a training program
- Acquire a certificate in basic first aid by completing a training program

Unit 1: Healthcare Systems

Health services is one of the fastest-growing industries in the United States, and this unit explores the ways in which these services are delivered. Health insurance is an important part of the industry, and there are several types to meet patients' needs. Taking care of patients is not just up to doctors; it

requires a team of healthcare professionals to ensure patients' needs are met. For this team to be effective, the patient needs to work with the team and do their part to help the team deliver the most effective care. As with all industries, health science adapts with the times, including responding to new legislation, using technology to improve services, and responding to pressing health issues.

What will you learn in this unit?

- Identify the basic components of the health care delivery system, including public, private, government, and nonprofit sectors
- Discuss common methods of payment for health care services
- Describe the composition and functions of a health care team
- Explain factors that influence the current delivery system of health care
- Interpret the impact of emerging issues—including technology, epidemiology, bioethics, and socioeconomics—on health care delivery systems

Unit 2: Communication in Healthcare

This unit explores the importance of communication skills in health science. One of the first steps is using the specific language of the medical profession. This shared language helps health care workers communicate with each other. Furthermore, many professionals will spend a lot of time communicating with patients. Understanding the basics of effective communication can help health care professionals get the information they need to best serve their patients. In addition, recognizing some of the reasons that communication breaks down lets health science professionals avoid some common pitfalls.

What will you learn in this unit?

- Correctly use appropriate medical terminology and abbreviations
- Explain the importance of patient/client education regarding health care
- Develop basic speaking and active listening skills
- Analyze elements of communication using a sender–receiver model
- Identify subjective and objective information

Unit 3: Legal Responsibilities and Patients' Rights

This unit explores the various ways in which health care is regulated and the obligations these requirements create for the members of the healthcare team. The standard for patient care is defined at many levels, ranging from federal law to the rules of an individual healthcare facility. Healthcare professionals need to know all relevant laws and how to inform patients of their rights while undergoing medical treatment.

What will you learn in this unit?

- Discuss the legal framework of the health care occupations, including scope-of-practice legislation
- Recognize practices that could result in malpractice, liability, negligence, abandonment, false imprisonment, and fraud

- Identify standards of the Health Insurance Portability and Accountability Act (HIPAA)
- Explain the Patient's Bill of Rights
- Describe advance directives

Unit 4: Healthcare Workers' Responsibilities in the Workplace

This unit explores the laws designed to protect employees in health care, including their right to a safe workplace free of harassment. At the same time, employees in health care need to be particularly mindful of the professional ethics that define how they perform their duties. Those in health care will face a variety of ethical issues in the course of their work since life or death choices are part of the job. Legal and ethical obligations work together to provide guidelines for those in the field to effectively care for patients. These ethics also help shape employee behavior, particularly in such sensitive areas as the handling of controlled substances, where accountability is key.

What will you learn in this unit?

- Explain the laws governing harassment, labor, and employment
- Differentiate between legal and ethical issues in healthcare
- Identify illegal or unethical practices of health care workers
- Identify and compare personal, professional, and organizational ethics
- Distinguish among the five schedules of controlled substances

Unit 5: Wellness

This unit explores the principle of wellness and what it takes to be physically and mentally healthy. Regular screening and examinations are an essential part of the equation, as is attention to diet and exercise. These health habits make a difference over the course of a lifetime. Avoiding high-risk behavior—such as smoking, consuming alcohol, and taking illegal drugs—also makes for a longer and healthier life. Managing stress, even in extreme circumstances, such as after the death of a loved one, is also an important skill. When individuals take these steps to maintain wellness, they are paving the way for a long and healthy life. In addition to traditional medical practice, for an increasing number of Americans, personal wellness depends on using alternative medicine to promote health and wellness.

What will you learn in this unit?

- Describe strategies for prevention of diseases, including health screenings and examinations
- Discuss the adverse effects of the use of alcohol, tobacco, and both legal and illegal drugs on the human body, and apply safety practices related to these and other high-risk behaviors
- Explain the basic concepts of positive self-image, wellness, and stress
- Develop a wellness and stress-control plan that can be used in personal and professional life
- Recognize the steps in the grief process

Midterm Exam

- Review information acquired and mastered from this course up to this point.
- Take a course exam based on material from the first five units in this course.

Unit 6: Workplace Safety

This unit explores the many safety practices put into place by the Occupational Safety and Health Administration (OSHA) and the Centers for Disease Control (CDC) to protect those working in health care on the job. Safety comes through proper training on managing common hazards in the workplace, such as working with chemicals and moving heavy objects or patients. Creating a safe environment is not just for employees; health care workers need to keep their own, their coworkers', and their patients' safety in mind as well. Making sure that they avoid common medical errors and follow recommended guidelines for identifying patients help make patients safer while they are in medical facilities. Guidelines for moving patients also benefit employees and patients since they eliminate the chance of injury for both. In the event of an emergency, health care workers need to be able to take care of themselves and their patients, so knowing emergency procedures is also part of a successful career in the health sciences.

What will you learn in this unit?

- Determine safe and unsafe working conditions and safety-hazard reporting strategies.
- Identify and describe methods in medical error reduction and prevention in various health care settings
- Follow Materials Data Safety sheets (MSDS) and comply with safety signs, symbols, and labels
- Demonstrate proper body mechanics and ergonomics
- Identify fire, safety, disaster, and evacuation procedures

Unit 7: Emergency Care and Infection Control

This unit explores the basic procedures for administering first aid and when it is appropriate to offer emergency treatment to a stranger in public. It also defines the body's vital signs and provides basic instructions for taking and recording them. Understanding the role of microbes and how they move through the environment allows those in health care to limit their spread through sterilization processes, hand-washing, and appropriate disposal of biohazardous materials. When these steps are taken, the environment is safer for everyone. When problems emerge in a health care setting, turning to root-cause analysis offers valuable insight into the core issues creating the problems. Only when these are identified can productive solutions be put in place.

What will you learn in this unit?

- Describe legal parameters relating to the administration of emergency care
- Identify vital signs and measuring procedures.
- Define principles of infection control, including standard and transmission-based precautions
- Demonstrate knowledge of medical asepsis and practice procedures, such as hand-washing and isolation
- Identify the steps of root-cause analysis

Unit 8: Technology in Healthcare and Medical Math

This unit explores the role of technology in health care, particularly the kinds of computers and medical devices that health care professionals use to perform the basic duties of their jobs. Computers are used for everything, from recording information to diagnosing medical problems, so those working in health care need to know how to use them effectively. One of the most common uses of technology is for communication, whether it's researchers sharing medical breakthroughs around the world or patients communicating more effectively with their doctors. As valuable as technology is, those in health care still need to use their basic math skills. Understanding basic principles, like ratios or how to convert pounds to kilograms, ensures that medical professionals have the skills that they need to get the job done.

What will you learn in this unit?

- Describe technology applications in health care
- Measure time, temperature, distance, capacity, and mass/weight
- Analyze data to draw conclusions
- Construct viable arguments and critique the reasoning of others
- Organize and communicate the results obtained by observation and experimentation

Unit 9: Blood-Borne Illnesses

This unit examines the most common blood-borne illnesses, including HIV/AIDS, and hepatitis B and C. Understanding how these viruses are transmitted is one of the most important steps in preventing their spread. Specific behaviors encourage the spread of these diseases, and health care professionals are obligated to educate patients about what they need to do to reduce risk. In addition, specific processes must be followed when testing patients for blood-borne illnesses. Because these diseases pose a risk to health care workers, they also need to know how to protect themselves and the actions to take should they be in danger of infection.

What will you learn in this unit?

- Demonstrate knowledge of the legal aspects of HIV/AIDS, including testing
- Identify community resources and services available to individuals with diseases caused by blood-borne pathogens
- Recognize at-risk behaviors that promote the spread of diseases caused by blood-borne pathogens, and the public health education necessary to combat the spread of these diseases
- Apply infection control techniques designed to prevent the spread of diseases caused by blood-borne pathogens to the care of all patients following CDC guidelines
- Recognize emerging diseases and disorders

Unit 10: Getting a Job in the Healthcare Industry

This unit explores expectations of professional conduct in the healthcare industry, including personal qualities of health care workers and attention to personal presentation. It also emphasizes the

importance of teamwork and the components of effective leadership. You will get an overview of the multiple career paths available in health care and learn the process of looking and applying for a job. This includes an overview of the education and credentialing requirements in health care and how to navigate the application process.

What will you learn in this unit?

- Demonstrate the personal traits or attitudes desirable in a member of the health care team
- Discuss levels of education; credentialing requirements, including licensure and certification; employment opportunities; workplace environments; and career growth potential
- Compare careers within the health science career pathways (diagnostic services, therapeutic services, health informatics, support services, biotechnology research and development)
- Develop a job-specific résumé
- Identify characteristics of effective teams

Final Exam

- Review information acquired and mastered from this course up to this point.
- Take a course exam based on material from units six to ten in this course – the last five units.