

# SYLLABUS

## Health Science 1: The Whole Individual

Will we ever find a cure for cancer? What treatments are best for conditions like diabetes and asthma? How are illnesses like meningitis, tuberculosis, and the measles identified and diagnosed? Health sciences provide the answers to questions such as these. In this course, students will be introduced to the various disciplines within the health sciences, including toxicology, clinical medicine, and biotechnology. They will explore the importance of diagnostics and research in the identification and treatment of diseases. The course presents information and terminology for the health sciences and examines the contributions of different health science areas.



## Unit 1: The World of Health Sciences

Since ancient times, people have tried to gain a better understanding of diseases and health. They have studied, experimented, and observed in an effort to learn what causes disease, what treatments work best, and how best to promote health. Although the methods of doing so may differ today, we are still applying scientific methods to learn more about health and wellness. In this unit, we will learn more about the field of health science, including some of the history of health sciences and trends in the field.

### What will you learn in this unit?

- Discuss the history of health sciences.
- Explain the different areas of the healthcare system.
- Examine different types of healthcare sites.
- Consider different payment options in the healthcare system.
- Discuss some of the trends affecting the health sciences.

## UNIT 1 Assignments

Assignment	Type
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Unit 1 Text Questions	Homework
Unit 1 Lab	Homework
Unit 1 Discussion 1	Discussion
Unit 1 Discussion 2	Discussion
Unit 1 Quiz	Discussion

## Unit 2: Careers in Health Science

The health sciences include a wide range of career options. Many people are attracted to health science careers in order to help others and to prevent disease and illness. In this unit, we will learn more about some of the career options available in the field of health sciences. We will also consider some of the different levels of patient care in the field and some of the common characteristics shared by health science professionals.

What will you learn in this unit?

- Discuss the different levels of service in the healthcare field.
- Learn about some of the common characteristics shared by healthcare professionals.
- Examine different health science professions and their contributions to the field.
- Discuss some of the responsibilities within health science professions.
- Learn more about licensing, certification, and educational requirements in health science careers.

## UNIT 2 Assignments

Assignment	Type
Unit 2 Text Questions	Homework
Unit 2 Lab	Homework
Unit 2 Discussion 1	Discussion
Unit 2 Discussion 2	Discussion

## Unit 3: The Life Span

Throughout our lives, we experience a number of changes physically, mentally, emotionally, and socially. These changes can have an impact on our overall health and wellness. In this unit, we will learn more about the different stages of the human life span and the development that occurs during each stage. In doing so, we will also learn more about health issues that may be related to people's development at each stage of the life span.

### What will you learn in this unit?

- Define and discuss human development and the different aspects of development.
- Identify the different stages of the human life span.
- Examine some of the physical development and changes that occur during each stage of the life span.
- Discuss some of the cognitive development and changes that occur during each stage of the life span.
- Consider some of the health issues that may affect people at each stage of the life span.

## UNIT 3 Assignments

Assignment	Type
Unit 3 Text Questions	Homework
Unit 3 Lab	Homework
Unit 3 Discussion 1	Discussion
Unit 3 Discussion 2	Discussion
Unit 3 Quiz	Discussion

## Unit 4: Technical Skills

Health science careers often require specialized knowledge and skills. These are important so that health science professionals can effectively help individuals care for their health. In this unit, we will learn more

about some of these skills, including checking vital signs, converting measurements, and performing emergency CPR and other actions.

### What will you learn in this unit?

- Identify vital signs and how vital signs are measured.
- Review the different systems of measurement that affect health science professions.
- Discuss the steps in performing CPR.
- Examine AEDs and how they are used.
- Discuss some common first aid practices.

## UNIT 4 Assignments

Assignment	Type
Unit 4 Text Questions	Homework
Unit 4 Lab	Homework
Unit 4 Activity	Homework
Unit 4 Discussion 1	Discussion
Unit 4 Discussion 2	Discussion
Unit 4 Quiz	Discussion

## Unit 5: Health and Wellness

Cancer, diabetes, HIV/AIDS, heart disease, stroke; our world sometimes seems like it is full of illness and disease. We spend billions of dollars each year in medical treatments and research into treating these diseases. However, we are not necessarily at the mercy of disease and illness. We can make choices in our lives that lower our risk of illness and disease and make us healthier. In this unit, we will learn more about the area of health and wellness. We'll discuss preventative medicine and examine some of the alternative and complementary practices that people use to stay healthier and treat conditions that they may encounter.

## What will you learn in this unit?

- Examine the different dimensions of health.
- Define preventative medicine.
- Discuss aspects of preventative medicine.
- Examine some alternative medical systems.
- Consider some alternative and complementary medical practices.

## UNIT 5 Assignments

<b>Assignment</b>	<b>Type</b>
Unit 5 Text Questions	Homework
Unit 5 Lab	Homework
Unit 5 Discussion 1	Discussion
Unit 5 Discussion 2	Discussion
Unit 5 Quiz	Discussion

## Health Science 1 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 (Note: You will be able to open this exam only one time.)

## MIDTERM Assignments

<b>Assignment</b>	<b>Type</b>
Midterm Exam	Exam
Midterm Discussion	Discussion

## Unit 6: Leadership and Teamwork

For the health sciences to work effectively and efficiently, strong leadership and teamwork needs to be present. In this unit, we will learn more about these two areas, including discussing what makes a person a good leader and what characteristics are shared by effective teams. We'll also learn more about some of the theories and explanations for why certain people become leaders and the ways in which they lead others.

What will you learn in this unit?

- Discuss some theories of leadership and leadership styles.
- Identify some of the characteristics that leaders often have.
- Discuss the characteristics of effective healthcare teams.
- Examine steps in building an effective healthcare team.
- Consider some conflict styles and approaches to conflict resolution that people often use.

### UNIT 6 Assignments

Assignment	Type
Unit 6 Text Questions	Homework
Unit 6 Lab	Homework
Unit 6 Discussion 1	Discussion
Unit 6 Discussion 2	Discussion
Unit 6 Quiz	Discussion

## Unit 7: Health Communication

Communication is a vital aspect of the health sciences. By communicating, health science professionals exchange ideas, discuss treatments with patients, and give instructions to other healthcare professionals. In this unit, we will explore health communication and how to make this communication more effective. We'll learn more about barriers to communication and techniques that healthcare professionals can use to improve communication with patients and other healthcare professionals.

## What will you learn in this unit?

- Define communication and health communication.
- Discuss some of the characteristics of health communication.
- Examine barriers to effective communication.
- Learn about active listening techniques.
- Explore aspects of body language in healthcare settings.

## UNIT 7 Assignments

Assignment	Type
Unit 7 Text Questions	Homework
Unit 7 Lab	Homework
Unit 7 Discussion 1	Discussion
Unit 7 Discussion 2	Discussion
Unit 7 Quiz	Discussion

## Unit 8: Ethics and Legal Issues

The health science field often involves complex situations and decisions. It is also a field where simple mistakes can have devastating consequences. As such, the health sciences intersect with both legal and ethical issues on a regular basis. In this unit, we'll learn more about some of the legal responsibilities that healthcare professionals have and some of the ethical issues that exist in the health sciences today.

## What will you learn in this unit?

- Define medical legal terms such as medical malpractice and negligence.
- Discuss the legal responsibilities of health science professionals.
- Identify laws and practices that protect patients in the healthcare system.
- Consider how medical ethics affect the health sciences.
- Explore the legal and ethical issues of medical confidentiality and end-of-life care.

## UNIT 8 Assignments

Assignment	Type
Unit 8 Text Questions	Homework
Unit 8 Lab	Homework
Unit 8 Discussion 1	Discussion
Unit 8 Discussion 2	Discussion
Unit 8 Quiz	Discussion

## Unit 9: Safety

What would you do if a fire started in a hospital? What if you were exposed to bloodborne pathogens? In this unit, we will learn about some of the common risks in the health sciences and how health science professionals can reduce their risks when dealing with these potential dangers. In particular, we will discuss common healthcare risks such as bloodborne pathogens, fires, falls and trips, injuries, infections, and stress.

What will you learn in this unit?

- Discuss bloodborne pathogens and how the risk of exposure can be reduced.
- Understand the actions that a healthcare professional should take if a fire breaks out in a setting with patients.
- Examine how ergonomics help to reduce the risk of pain and injuries for healthcare workers.
- Discuss how to reduce the risk of infections.
- Consider the effects of stress and how stress can be reduced for healthcare professionals.

## UNIT 9 Assignments

Assignment	Type
Unit 9 Text Questions	Homework
Unit 9 Lab	Homework



Unit 9 Discussion 1	Discussion
Unit 9 Discussion 2	Discussion
Unit 9 Quiz	Discussion

## Unit 10: Informatics and Technology

Technology is having a great impact on the world today, including in the health sciences. In this unit, we will consider some of the ways that technology impacts health informatics. We will discuss some of the advantages and disadvantages of electronic health data and records and learn about some of the ways in which technology is changing health communication. We will also discuss the effects that intercultural communication can have on communication and informatics.

### What will you learn in this unit?

- Define medical technology and informatics.
- Examine the advantages and disadvantages of electronic data records.
- Consider some of the ways that technology is affecting health communication and informatics.
- Discuss how to write an effective health e-mail.
- Examine how intercultural differences can affect health communication.

## UNIT 10 Assignments

Assignment	Type
Unit 10 Text Questions	Homework
Unit 10 Lab	Homework
Unit 10 Activity	Homework
Unit 10 Discussion 1	Discussion
Unit 10 Discussion 2	Discussion

Unit 10 Quiz	Discussion
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## Health Science 1 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. (Note: You will be able to open this exam only one time.)

## FINAL Assignments

Assignment	Type
Final Exam	Exam
Class Reflection Discussion	Discussion