

Course Description:

This course provides students with an introduction to healthcare, with emphasis on modern, clinical medicine. Students review basic human anatomy and physiology, then study major health concerns affecting people in the U.S. and the world. This comprehensive, 10-unit course examines such topics as infectious diseases, cancer, traumatic injuries, and healthcare career opportunities.

Major Concepts:

- Anatomy/Physiology
- Human Development
- Nutrition
- Medical Ethics
- Infectious Diseases
- Cancer
- Traumatic Injuries
- Mental Illnesses
- Medicine in Practice

Module	Lesson Title	Objectives
Module 1	Structure, Function, and Homeostasis	<ol style="list-style-type: none">1. Explain the relationship between structure and function in body systems.2. Define the hierarchy of units within the body: cell, tissue, organ, organ system, whole body.
	Cell Physiology in Brief	<ol style="list-style-type: none">1. Explain the basic structure of a cell and its role in the body.

Module	Lesson Title	Objectives
Module 1	Four Major Tissue Types	1. Define the four major types of tissues, where they are found in the body, and their major functions.
	The Skeletal System	1. Describe the structures comprising the skeletal system and their major functions.
	The Muscular System	1. Describe the structures comprising the muscular system and their major functions.
	The Integumentary System	1. Describe the structures comprising the integumentary system and their major functions.
	Circulatory System	1. Explain the structures comprising the circulatory system and their major functions.
	Nervous System	1. Describe the structures comprising the nervous system and their major functions. 2. Distinguish between the CNS, PNS, and ANS.

Module	Lesson Title	Objectives
Module 1	Digestive System	1. Describe the structures comprising the digestive system and their major functions.
	Respiratory System	1. Describe the structures comprising the respiratory system and their major functions.
Module 2	Urinary System	1. Describe the structures comprising the urinary system and their major functions.
	Endocrine System	1. Describe the structures comprising the endocrine system and their major functions.
	Reproductive System	1. Describe the structures comprising the reproductive system and their major functions.
	Prenatal Development	1. Describe the major phases of prenatal development.

Module	Lesson Title	Objectives
Module 2	Childhood	1. Explain the major phases of child development, including important milestones.
	Adolescence	1. Describe the major changes that take place during adolescence.
	Adulthood	1. Explain the changes that take place during pregnancy and the importance of prenatal care. 2. Explain how health in adulthood is tied to lifestyle choices.
	Geriatrics	1. Describe the major physical and mental changes associated with old age.
	Death	1. Describe what occurs at death.
	Introduction to Human Nutrition	1. Describe the major components of a healthy diet and their functions.

Module	Lesson Title	Objectives
Module 2	Carbohydrates	<ol style="list-style-type: none"> 1. Describe carbohydrates as a major component of a healthy diet. 2. Describe carbohydrates function in the body.
	Proteins	<ol style="list-style-type: none"> 1. Describe proteins as one of the major component of a healthy diet. 2. Explain the function of proteins.
Module 3	Fats	<ol style="list-style-type: none"> 1. Describe fats as a major component of a healthy diet. 2. Explain the function of fats.
	Fiber	<ol style="list-style-type: none"> 1. Describe fiber as a major component of a healthy diet. 2. Explain the function of fiber.
	Vitamins and Minerals	<ol style="list-style-type: none"> 1. Explain the role of vitamins and minerals in maintaining good health.
	Water	<ol style="list-style-type: none"> 1. Explain the role of water in maintaining good health.

Module	Lesson Title	Objectives
Module 3	Malnutrition and Associated Disorders	1. Explain the major causes and consequences of malnutrition.
	Obesity and Associated Disorders	1. Explain the major causes and consequences of obesity.
	History of Ethics and Medicine	1. Explain how medical ethics has developed in Western civilization.
	Core Values	1. Explain the core values of medical ethics: beneficence, non-maleficence, informed consent, autonomy, and justice.
	Euthanasia and Withdrawal of Care	1. Explain that there are differing views on euthanasia and assisted suicide and that "right" and "wrong" are not always clear.
	Cultural Sensitivity	1. Describe how cultural sensitivity applies to medical practice and why it is important.

Module	Lesson Title	Objectives
Module 4	Reproductive Rights	1. Explain that there are differing views on reproductive rights and that “right” and “wrong” are not always clear.
	Parental Rights	1. Explain that there are differing views on parental rights and that “right” and “wrong” are not always clear.
	Limited Resources	1. Explain that there are differing views on the allocation of resources and that “right” and “wrong” are not always clear.
	Overview of Infectious Diseases	1. Describe the concept of an infectious disease.
	Viruses	1. Describe viruses as one of the major types of infectious agents. 2. Explain what a virus does to the body. 3. Describe the causes, symptoms, and treatments for specific, commonly known viruses.
	Viral Case Studies: HIV and H1N1	1. Explain what happens to the human body with HIV and H1N1.

Module	Lesson Title	Objectives
Module 4	Bacteria	<ol style="list-style-type: none"> 1. Describe bacteria as one of the major types of infectious diseases. 2. Explain what bacteria do to the human body.
	Bacterial Case Studies: Tuberculosis and Salmonella	<ol style="list-style-type: none"> 1. Describe the causes, symptoms, and treatments for specific, commonly known bacteria.
	Parasites and Fungi	<ol style="list-style-type: none"> 1. Distinguish between parasites and fungi. 2. Describe parasites and fungi as major types of infectious agents. 3. Describe the causes, symptoms, and treatments for specific, commonly known parasites and fungi.
	Parasitic Infection Case Studies: Malaria and Tapeworms	<ol style="list-style-type: none"> 1. Describe the causes, symptoms, and treatments for specific, commonly known parasitic infections.
	Overview of Cancer and How it Spreads	<ol style="list-style-type: none"> 1. Describe how cancer spreads at the cellular level and organism level.
	Environmental Causes of Cancer	<ol style="list-style-type: none"> 1. Describe some of the known causes of cancer.

Module	Lesson Title	Objectives
Module 4	Hereditary causes and other cancer risk factors	1. Explain how heredity and genetics might increase your risk for cancer.
	Types of Tumors	1. Describe the different types of tumors and the tissues from which they arise.
Module 5	Most Common Forms of Cancers	1. Describe the most common types of cancers and the cancers with the highest mortality rates in the United States.
	Cancer Treatments	1. Describe the basics of the most common types of cancer treatments, including chemotherapy, radiation therapy, and surgery.
	Overview of Injuries	1. Explain the prevalence of traumatic injuries in the United States as well as major causes.
	Penetrating and Blunt Trauma	1. Define the major types of traumatic injuries.

Module	Lesson Title	Objectives
Module 5	Open and Closed Wounds	1. Define the major types of traumatic injuries.
	Burn Injuries	1. Identify the different types of burns and describe their severity.
	Head Trauma	1. Explain the types of head trauma and understand the potential signs and symptoms.
	Trauma and First Aid	1. Explain how to behave in an emergency and when to call 911.
	EMS, Emergency Rooms, and Trauma Surgeons	1. Describe the chain of providers involved in emergency care.
	Overview of Mental Illnesses	1. Describe the prevalence of mental illnesses in the United States. 2. Explain the role of healthcare professionals in treating mental illnesses.
	Causes of Mental Illness	1. Describe what is known about the causes of mental illnesses and the limitations in that knowledge.

Module	Lesson Title	Objectives
Module 6	Anxiety Disorders	1. Describe the symptoms of several anxiety disorders.
	Impulse Control and Addiction Disorders	1. Describe the basic symptoms of impulse control and addiction disorders.
	Eating Disorders	1. Explain the basic symptoms associated with eating disorders.
	Mood Disorders	1. Describe the basic symptoms of mood disorders such as depression and bipolar disorder.
	Personality Disorders, Psychotic Disorders, and other Recognized Disorders	1. Describe the basic symptoms associated with personality, psychotic, and other recognized disorders.
	Medical Assistants, Nurse Assistants, Nurses, and Mid-level Providers	<ol style="list-style-type: none"> 1. Describe the hierarchy of conventional medical practitioners in the healthcare setting, from medical assistants to registered nurses. 2. Explain the educational levels required for specific careers in healthcare. 3. Describe the differences in job descriptions between different types of healthcare providers.
	Medical School, Residencies, MDs and DOs	1. Explain the educational levels required for specific careers in healthcare.

Module	Lesson Title	Objectives
Module 6	Primary Care Providers and Specialty Physicians	1. Describe the differences in job descriptions between different types of health-care providers.
	Physical therapists and Occupational Therapists	1. Explain the role of different types of therapists in providing healthcare.
	Social Workers, Psychologists, Counselors, and More	1. Explain the role of different types of therapists in providing healthcare.
	Pharmacists	1. Describe what a pharmacists do.
	Complementary and Alternative Medicine Practitioners	1. Describe some of the most common alternative medical practices and career paths leading to professions in these fields.
Semester Exam		