

Healthcare Fundamentals 2

Course Description

In this course, students will expand their understanding of human anatomy and physiology by studying additional body systems, including skeletal, muscular, neurological, hematological, immunological, urinary, reproductive, and sensory systems. Students will develop medical vocabulary to describe structures, functions, diseases, diagnostic procedures, and treatments related to these systems. Emphasis is placed on connecting terminology to real-world healthcare contexts through the study of conditions, diagnostic testing, and clinical procedures. Students will also explore core concepts of chemistry, cells, and tissues at an introductory level, gaining exposure to skills and ideas that support more advanced healthcare study.

Prerequisites

Principles of Biomedical Sciences; Human Body Systems or Anatomy and Physiology; Medical Interventions

Course Materials

Required

- Microsoft Office or Google Docs (See the Minimum Technical Skills and Special Technology Utilized by Students)
- Reliable Internet Access
- Laptop or Desktop
- Adobe Acrobat Reader

Recommended

None

Course Goals

Upon completion of the course, students will...

- locate and identify the organs and major structures of the skeletal, muscular, neurological, hematological, immunological, urinary, reproductive, and sensory systems, and define their primary functions.
- define common diseases and conditions affecting these body systems, and apply medical terminology to describe symptoms and disease processes.
- identify and interpret diagnostic tests, procedures, and treatments associated with these systems.
- apply basic chemistry concepts to the human body and connect them to physiological functions.
- develop a basic understanding of cells and tissues, with introductory practice in observing their structures and functions.
- adapt knowledge of cell structure and function to understand their role in the organization of body systems.

- integrate knowledge of anatomy, physiology, and medical terminology to discuss disease states and healthcare practices in relation to each system studied.

Indiana Standards

- 5274.D1.4: Locate and identify the organs within body systems and define their basic functions.
- 5274.D1.6: Define common diseases and conditions.
- 5274.D1.7: Identify selected procedures, treatments, and diagnostic tests.
- 5274.D2.1: Apply basic knowledge of chemistry as pertinent to the human body.
- 5274.D2.4: Demonstrate the ability to utilize a microscope to examine prepared slides and apply to physiological conditions and body systems.
- 5274.D2.5: Adapt the structural and functional aspects of cell organization to the body systems.
- 5274.D2.6: Classify the types and composition of the four basic types of body tissues.
- 5274.D2.7: Discuss and identify disease states in relation to body systems.

Units of Instruction

- Unit 1: Orthopedics - The Skeletal System
- Unit 2: Orthopedics - The Muscular System
- Unit 3: Neurology
- Unit 4: Hematology and Immunology
- Unit 5: Urology
- Unit 6: Ophthalmology and Otolaryngology
- Unit 7: Reproductive System

Assessments

The course includes the following assessments:

- 3 Discussions
- 9 Assignments
- 24 Quizzes

Grading / Evaluation

The final score will be shown as a percentage in Canvas and Genius. The student's school of record will determine the letter grade based on their specific grading scale.

Assessments Descriptions and Weightings

The assessments for this course are weighted as follows:

Assessments	Percentage of Final Grade
Course Work (Discussions, Assignments, and Quizzes)	80%
Final Exam	20%
Total	100%

Instructor Contact Response Time

Contact information for the Indiana Online Instructor can be found by clicking on the Home link in the navigation menu.

The instructor will respond to student inquiries (email, text, call) **within 24 hours**. Assignments will be graded **within 48 hours (school year)** and **within 24 hours (summer)** grades will be posted.

Information about Final Exam

Coursework and the Final Exam will determine the Final Grade.

Expectations for Academic Conduct

Student Handbook

It is your responsibility to read the [student handbook](#) and contact your instructor if you have any questions.

Acceptable Use & Netiquette Policy

The [Acceptable Use Policy](#) outlines the guidelines and behaviors that all users (administrators, teachers, students and parents) are expected to follow when participating in the Indiana Online program.

Academic Integrity

Honesty is the [Indiana Online policy](#)!

CIPA

The [Children's Internet Protection Act](#) (CIPA) is a federal law enacted by Congress to address concerns about access to offensive content over the Internet on school and library computers.

Assistance for Students with Accommodations

Indiana Online supports an inclusive learning environment for all students. If there are aspects of the instruction or design of this course that hinder your full participation, such as inaccessible web content, or the use of non-captioned videos and podcasts, reasonable accommodations can be arranged.

Suggested Assistive Technologies

- Screen Readers: [VoiceOver](#) and [NVDA](#)
- Chrome Extensions: [ChromeVox](#) and [Speakit!](#)

Minimum Technical Skills and Special Technology Utilized by Students

This course is completely online. All instructional content and interaction takes place over the internet. Students should be comfortable:

- using word processing skills
- sending/receiving email with attachments
- search the internet

- upload / download files

Students should have access to Microsoft Office or have an established Google account to work on course documents.

Vendor Accessibility Statements

- [Canvas](#)
- [Genius](#)
- [H5P](#)
- [Zoom](#)
- [Adobe](#)
- [Storyline 360](#)

Canvas strives for WCAG 2.1 Level A/AA and Section 508 conformance. Regular testing (both internal and by a third party) is conducted to identify conformance issues, with processes in place for timely remediation of accessibility issues that are identified. Canvas has been evaluated by Instructure and WebAIM according to WCAG 2.1 standards and has been found to be largely conformant. Testing is regularly conducted using automated tools, assistive technology (such as screen readers, keyboard testing, etc.), and coding best practices. Third-party accessibility evaluation occurs semi-annually with internal audits conducted with each release. Mechanisms are in place for logging and fixing accessibility defects. Please see [Instructure's Voluntary Product Accessibility Template \(VPAT\)](#) for full details.

Technical Questions? Please contact the [Indiana Online Helpdesk](#).