

**Northwest Arkansas Community College**  
(Science and Mathematics Division)

**Discipline Code**

BIOL

**Course Number**

2224

**Course Title**

Human Anatomy and Physiology II

**Catalog Description**

The second of two courses examining basic human anatomy and fundamentals of human physiology. Topics discussed include circulation, the immune response, gas exchange, digestion, excretion and reproduction. NOTE: Typically, both Anatomy and Physiology I and II should be taken at NWACC to transfer to institutions who offer Human Anatomy as a separate course from Human Physiology. Three hours lecture and 3 hours lab weekly

**Prerequisites**

BIOL 2214 (A & P I) with a grade of C or better or its equivalent.

**Credit Hours**

4 credit hours

**Contact hours**

45 lecture contact hours; 45 lab contact hours

**Load hours**

5 load hours

**Semesters Offered**

Fall, Spring & Summer

**ACTS Equivalent**

BIOL2414 Human Anatomy and Physiology II

**Grade Mode**

A-F

**Learning Outcomes**

Students completing this course will:

- Recall and apply facts, vocabulary and relationships consistent with courses taught nationally for the cardiovascular system, the lymphatic system, the immune system, the respiratory system, the digestive system, the urinary system, and the reproductive system.
- Use scientific reasoning to comprehend, evaluate and solve problems pertaining to course content.
- Locate and use information sources to further their knowledge of anatomy, physiology and health.
- Identify select anatomical structures on laboratory specimens.
- Properly use microscopes, lab instrumentation and techniques to study human structure and function.

## **General Education Outcomes Supported**

- Students develop higher order thinking skills.
- Students can employ a variety of sources to locate, evaluate, and use information.

## **Standard Practices**

### **Topics list**

- Cardiovascular system
- Lymphatic System and Immunity
- Respiratory System
- Digestive System
- Metabolism
- Urinary System
- Fluid and Electrolyte Balance
- Reproduction & Development
- Inheritance (as time allows)

### **Learning activities**

- Courses must, at a minimum, cover the core learning objectives for each topic. Faculty may add to these objectives, but may not omit any of them.
- Laboratory exercises should average between 2-3 hours a week and include histology, whole mammal dissection, and sheep heart dissection
- Lab safety orientation and enforcement of safety protocols is the responsibility of each faculty. A standard lab safety PowerPoint will be provided for training. Scoring 100% on a mandatory department-provided lab safety quiz is required before students may participate in lab.
- Since developing student higher order thinking skills and information literacy are essential outcomes of this course. The learning activities that develop these outcomes should be in course syllabus. Instructors should describe how these activities will be evaluated in their course syllabi and/or reflected in their gradebooks.

### **Assessments**

- The final is a departmental comprehensive exam. Results of the departmental finals will be submitted to the coordinator as part of course outcome assessment. The test will cover a select number of the core learning objectives, which will be provided as a study guide.
- A required information literacy assessment will be given with results submitted to the coordinator. Results will be used as part of the college's process to assess mastery of the general education outcomes.

**Grading guidelines**

- At least 50% of the class points need to be proctored either in person or using a video monitoring system, where the student responds without referring to others or external resources.
- Lab activities/exams should comprise approximately 25% of the overall grade.
- For lab practical exams, over 50% of the lab stations should include exhibits, dissections, and physiology tests performed in lab. Any images used on practical exams should be of lab exhibits or test results.

**Revision date**

November 29, 2021