

PHED 2603**HUMAN ANATOMY AND PHYSIOLOGY I**

Semester Hours: 3

Semester/Year:

Instructor:

Office Location:

Office Hours:

Telephone:

E-mail:

COURSE DESCRIPTION

Prerequisite: For physical education majors only

This course focuses on descriptive human anatomy and physiology with an emphasis on the skeletal, muscular, and nervous systems of the human body. The course provides in-depth analysis of the major bones, muscles, and nerves used in a variety of movement activities.

CONCEPTUAL FRAMEWORK

The conceptual framework of the College of Education at the University of West Georgia forms the basis on which programs, courses, experiences, and outcomes are created. By incorporating the theme “Developing Educators for School Improvement”, the College assumes responsibility for preparing educators who can positively influence school improvement through altering classrooms, schools, and school systems (transformational systemic change). Ten descriptors (decision makers, leaders, lifelong learners, adaptive, collaborative, culturally sensitive, empathetic, knowledgeable, proactive, and reflective) are integral components of the conceptual framework and provide the basis for developing educators who are prepared to improve schools through strategic change. National principles (INTASC), propositions (NBPTS), and standards (Learned Societies) are also incorporated as criteria against which candidates are measured.

The mission of the College of Education is to develop educators who are prepared to function effectively in diverse educational settings with competencies that are instrumental to planning, implementing, assessing, and re-evaluating existing or proposed practices. This course’s objectives are related directly to the conceptual framework and appropriate descriptors, principles or propositions, and Learned Society standards are

identified for each objective. Class activities and assessments that align with course objectives, course content, and the conceptual framework are identified in a separate section of the course syllabus.

COURSE OBJECTIVES

Students will:

1. define and use the basic terminology related to anatomy and physiology
(*Lifelong Learning; Knowledgeable; Reflective; INTASC 1,5; PSC 4,14*)
(Marieab, 2003; Seeley, Stephens, & Tate, 2008; Thibodeau, & Patton, 2006);
2. identify the major bones and bony landmarks of the trunk, upper limb, and lower limb and their relationship with movement activities
(*Decision Making; Leadership; Lifelong Learning; Knowledgeable; Reflective; INTASC 1,5; PSC 4,14*)
(Enoka, 2002; Marieab, 2003; Seeley, Stephens, & Tate, 2008);
3. identify the major muscles of the trunk, upper limb, and lower limb and their relationship with movement activities
(*Decision Making; Leadership; Lifelong Learning; Knowledgeable; Reflective; INTASC 1,5; PSC 4,14*)
(Hall, 2007; Marieab, 2003; Seeley, Stephens, & Tate, 2008);
4. identify the major nerves of the trunk, upper limb, and lower limb and their relationship with movement activities
(*Decision Making; Leadership; Lifelong Learning; Knowledgeable; Reflective; INTASC 1,5; PSC 4,14*)
(Enoka, 2002; Hall, 2007; Marieab, 2003; Seeley, Stephens, & Tate, 2008);
5. define and properly use the descriptive and directional terms that are used with reference to the body
(*Decision Making; Leadership; Lifelong Learning; Knowledgeable; Reflective; INTASC 1,5; PSC 4,14*)
(Enoka, 2002; Hall, 2007; Seeley, Stephens, & Tate, 2008); and
6. identify the anatomical planes of reference used to locate structures and identify movements of the human body
(*Decision Making; Leadership; Lifelong Learning; Knowledgeable; Reflective; INTASC 1,5; PSC 4,14*)
(Hall, 2007; Marieab, 2003; Seeley, Stephens, & Tate, 2008).

TEXTS, READINGS, AND INSTRUCTIONAL RESOURCES

Required Texts

Seeley, R. R., Stephens, T. D., and Tate, P. (2008). *Anatomy & physiology* (8th ed.). New York: McGraw-Hill.

References

- Enoka, R. M. (2002). *Neuromechanics of human motion* (3rd ed.). Champaign, IL: Human Kinetics.
- Floyd, R. T. (2007). *Manual of structural kinesiology* (16th ed.). New York: McGraw-Hill.
- Gilbert, H. F. (1992). *Basic concepts in biochemistry: A student's survival guide*. New York: McGraw-Hill.
- Guyton, A. C. (1990). *Textbook of medical physiology* (8th ed.). Philadelphia: W. B. Saunders.
- Hall, S. (2007). *Basic biomechanics* (5th ed.). New York: McGraw-Hill.
- Houston, M. E. (1995). *Biochemistry primer for exercise science*. Champaign, IL: Human Kinetics.
- Marieab, E. N. (2003). *Human anatomy and physiology* (6th ed.). Redwood City, CA: The Benjamin/Cummings.
- McArdle, W. D., Katch, F. I., & Katch, V. L. (2007). *Exercise physiology: Energy, nutrition and human performance* (6th ed.). Baltimore: Williams and Wilkins.
- McComas, A. J. (1996). *Skeletal muscle: Form and function*. Champaign, IL: Human Kinetics.
- Saladin, K. S. (2008). *Human anatomy* (2nd ed.). New York: McGraw-Hill.
- Shier, D., Butler, J., & Lewis, R. (2009). *Hole's human anatomy & physiology* (10th ed.). New York: McGraw-Hill.
- Thibodeau, G. A., & Patton, K. T. (2006). *Anatomy and physiology* (6th ed.). St. Louis: Mosby.
- Thompson, C. W., & Floyd, R. T. (2004). *Manual of structural kinesiology* (15th ed.). New York: McGraw-Hill.

Tortora, G. J., & Grabowdki, S. R. (1993). *Principles of anatomy and physiology* (7th ed.). New York: Harper Collins.

Van de Graaff, K. M. (1995). *Human anatomy* (4th ed.). Dubuque, IA: Wm. C. Brown.

Watkins, J. (1999). *Structure and function of the musculoskeletal system*. Champaign, IL: Human Kinetics.

Wilmore, J. H., & Costill, D. L. (1999). *Physiology of sport and exercise* (2nd ed.). Champaign, IL: Human Kinetics.

ASSIGNMENTS, EVALUATION PROCEDURES, AND GRADING POLICY

Link to Conceptual Framework: The focus of this course is on examining the structure of the human body with emphasis on the skeletal, muscular, and nervous systems. The primary goals are as follows: 1) Develop an understanding of the field of anatomy and physiology; 2) Develop a knowledge base of the terminology of anatomy and physiology; and 3) Investigate the structure of the human body and its relationship to physical education. At the conclusion of this course, students will have demonstrated achievement in the areas of *decision making*: choosing an activity to analyze (**Assignment 2**) *leadership*: taking responsibility for integrating knowledge into their practical experiences (**All Assignments**), performing an analysis of muscle actions for a specific sport or exercise motion (**Assignment 2**); *lifelong learning*: studying the various components and applications of anatomy and physiology (**Assignments 1 and 2**); *knowledgeable*: drawing on content and professional knowledge (**All Assignments**), and *reflective*: engaging in ongoing, continuous reflection of the primary principles and philosophies of anatomy and physiology (**All Assignments**).

Assignments

1. Exams (100 points each)

Students will take four exams throughout the semester. Exams will cover class lecture/discussion and assigned readings of topics covered during that section of the course. Questions will consist of multiple choice, true or false, or short answer.

Course objectives: 1, 2, 3, 4

2. Analysis Project (100 points)

Students will analyze an exercise or sport skill. The analysis will cover the primary plane of the activity, the major phases/subphases of the activity, the muscles used during the activity, and the types of muscle contractions used during the activity.

Course objectives: 2, 3, 4

3. Quizzes and Other Assignments (10 points each)

There will be ten quizzes (some announced and some unannounced) and other activities throughout the semester. These activities will be directly related to the current topics covered during that section of the semester.

Course objectives: 1, 2, 3, 4

GRADING POLICY

A = 90-100%	540-600 Points
B = 80-89%	480-539 Points
C = 70-79%	420-479 Points
D = 60-69%	360-419 Points
F = below 60%	below 360 Points

CLASS POLICIES

Attendance

Students are expected to attend and fully participate in all class meetings, arrive on time and remain until the discussion for that class period is complete. Absences will be excused with appropriate written documentation for the following reasons:

- a. Death or major illness in a student's immediate family;
- b. Participation in legal proceedings or administrative procedures that require a student's presence;
- c. Religious holy day;
- d. Illness that is too severe or contagious for the student to attend class (as determined by a physician);
- e. Required participation in military duties;
- f. Mandatory admission interviews for professional or graduate school which cannot be rescheduled; or
- g. Official representation of the University of West Georgia (athletic team, debate team, etc.).

E-mail

University of West Georgia students are provided a MyUWG e-mail account. The University considers this account to be an official means of communication between the University and the student. The purpose of the official use of the student e-mail account is to provide an effective means of communicating important University related information to UWG students in a timely manner. It is the student's responsibility to check his or her email.

Professional Disposition

The student is expected to demonstrate professional dispositions in all courses, field experiences, and other settings in which the student represents the university. Professional dispositions include but are not limited to attitude, dress, language, collegiality, preparedness, and punctuality. Professional disposition assessments are a

significant part of the student's permanent file and will be used to determine the student's progress and continuation in the program. In addition, disposition assessments will help determine whether a student is ready to enter the internship experience.

All students seeking teaching certification through the Department of Physical Education and Recreation will be reviewed by all instructional faculty members during the thirteenth (13th) week of fall and spring semesters regarding their professional dispositions. Additional reviews will be conducted as needed. This holistic evaluation will determine students' continuation in the certification program.

Foliotek

This course will require students to save course assignments. The course assignments will be uploaded to the student's electronic portfolio (foliotek).

Work Credit

No material prepared to meet requirements in one course may be used to fulfill the requirements in another course without prior permission of the instructor.

Americans with Disabilities Statement (ADA)

The ADA is a federal anti-discrimination statute that provides comprehensive civil rights for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of his/her disabilities. If you believe you have a disability requiring an accommodation, please contact the Disability Services Office in Room 272 of the Student Development Center located in Parker Hall. The phone number is (678) 839-6428, and the fax number is (678) 839-6429.

Academic Integrity and Honor Code Pledge

At the University of West Georgia we believe that academic and personal integrity are based upon honesty, trust, fairness, respect, and responsibility. Students at West Georgia assume responsibility for upholding the honor code. West Georgia students pledge to refrain from engaging in acts that do not maintain academic and personal integrity. These include, but are not limited to, plagiarism, cheating, fabrication, aid of academic dishonesty, lying, bribery, or threats, and stealing.

Pledge:

Having read the Honor Code for UWG, I understand and accept my responsibility to uphold the values and beliefs described and to conduct myself in a manner that will reflect the values of the institution in such a way as to respect the rights of all UWG community members. As a West Georgia student, I will represent myself truthfully and complete all academic assignments honestly. I understand that if I violate this code, I will accept the penalties imposed, should I be found guilty of violations through processes due me as a university community member. These penalties may include expulsion from the University. I also recognize that my responsibility includes willingness to confront members of the University community if I feel there has been a violation of the Honor Code.

**If plagiarism or another act of academic dishonesty occurs, a grade of zero will be given for the course assignment and, if further actions are warranted, the misconduct will be dealt with in accordance with the academic misconduct policy as stated in *The Student Handbook*, the *Undergraduate Catalog* and *Graduate Catalog*.

CLASS OUTLINE

Week	Topic	Chapter
1	Bone and Bone Tissue	6
2	Bone and Bone Tissue	6
3	Skeletal Gross Anatomy and Skeletal Movement, Exam 1	7 & 8
4	Bony Landmarks: Axial Skeleton	7
5	Bony Landmarks: Appendicular Skeleton and Joint Movement	7 & 8
6	Bony Landmarks: Appendicular Skeleton and Joint Movement	7 & 8
7	Muscular System: Histology and Physiology, Exam 2	9
8	Muscular System: Histology and Physiology	9
9	Muscles of the Trunk	10
10	Muscles of the Upper and Lower Limbs	10
11	Muscles of the Upper and Lower Limbs, Exam 3	10
12	Function and Organization of Nervous Tissue	11
13	Nervous System: Central Nervous System	12 & 13
14	Nervous System: Peripheral Nervous System	12
15	Nervous System: Peripheral Nervous System	12
16	Final Exam	