Department of Applied Physiology and Kinesiology
College of Health and Human Performance
UNIVERSITY of FLORIDA

Anatomy & Physiology for Sport & Exercise Science

APK5121 | Class #28384 (K830) | 3 Credits | Fall 2025

Course Information:

INSTRUCTOR	**Paul A. Borsa, PhD, ATC** Office: 149 FLG Office Phone: 352-294-1726 Email: pborsa@ufl.edu (Preferred Method of Contact)
OFFICE HOURS	Office Hours: by appointment

Course Description: Study of human anatomy and physiology from an organ-systems approach with direct applications to exercise, sport, training, and clinical practice. This course will serve as a foundation for learning and applying more advanced principles and concepts related to biomechanics, exercise physiology and applied kinesiology. This course uses an integrated approach to discuss topics of cell, tissue and organ structure and function.

Prerequisite Knowledge and Skills: This course is for APK graduate students only.

Required and Recommended Materials:

Required Text: Essentials of Anatomy & Physiology   Edition: 8th   Authors: Scanlon and Sanders
Publisher: F.A. Davis   Year: 2019   ISBN: 978-0803669376

Recommended Text: Essentials of Strength and Conditioning   Edition: 4th   Author: National Strength and Conditioning Association   Publisher: Human Kinetics   Year: 2015   ISBN: 978-1492501626

All other reading materials will be available on CANVAS (eLearning)

Course Learning Objectives: After taking this course, students should be able to:

- Identify important structures of the organ-systems with emphasis on the musculoskeletal, neuromuscular, cardiovascular, and respiratory systems.
- Describe the relationship between structure and function at all levels of organization (cellular, tissue, organ, system, organism).
- Utilize correct anatomy and physiology terminology and language to describe the various structures and physiologic processes of the body.
- Relate anatomical and physiological knowledge to exercise, sport, strength and conditioning, and clinical practice.
- Compare and relate structural changes of the body from injury and disease with adaptive responses in function.

Course and University Policies:

"University policies are summarized here. This link will direct students to a separate webpage that will provide all required academic policies, such as attendance, grading, personal conduct, DRC and evaluation verbiage, as well as campus academic, health, and wellness resources."

Policy on Missed Assignments Due to Illness, Family Emergency or Death: If you have an illness, family emergency or death, please contact the Dean of Students Office (www.dso.ufl.edu) and follow the DSO Care

Team procedures for documentation and submission of a request for make-up assignment (https://care.dso.ufl.edu/instructor-notifications/). The DSO will contact the instructor. Do not provide any documentation to the instructor regarding illness or family emergency. This is your personal and protected information. The DSO is qualified to receive and verify the documents you provide. The instructor will follow the recommendations from the DSO. "Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx."

Exam/Quiz Make-up Policy: No makeup examinations or quizzes will be given without a serious and/or compelling reason.

Step 1: Get documentation of your illness or emergency. If you have an emergency (including but not limited to, a new medical diagnosis or death of a loved one), please contact the Dean of Students Office (www.dso.ufl.edu) and follow the DSO Care Team procedures for documentation and assistance (https://care.dso.ufl.edu/instructor-notifications/).

Step 2: Submit a make-up request to the instructor via CANVAS email. In the request provide reason for missing exam/quiz and availability for make-up. Make-ups will not be granted for personal travel/vacations. Additionally, many students will encounter multiple exams in one day. Only if another exam is scheduled for the same time as an exam in this course will a make-up request be considered.

Requirements for class attendance and make-ups, assignments, and other work are consistent with the university policies that can be found at https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

Tip: Always contact the instructor immediately or well ahead of the scheduled date if you need to miss a quiz or exam.

Communication: Students are responsible for getting a University of Florida email account (e.g., john.doe@ufl.edu) and should use this email for all university related correspondence – The instructor may not read emails from or send emails to any non-UF email addresses (e.g., john.doe@hotmail.com). Email subject should start with "PET 5936 – First name, Last name - …" Email use does not relieve students from the responsibility of confirming the communication with the instructor. Always sign your email – don't make the instructor guess from whom the email was sent. The instructor will answer your email within two business days, if possible. You are responsible for checking announcements and course postings on CANVAS. This is how your course instructor will communicate with you. All course grades (quizzes and examinations) will be posted on CANVAS. Any discrepancies should be pointed out to the instructor on or before the last day of finals week.

Honorlock Exam Proctoring Information:
Honorlock will proctor your quizzes and examinations this semester. Honorlock is an online proctoring service that allows you to take your exam from the comfort of your home. You DO NOT need to create an account, download software, or schedule an appointment in advance. Honorlock is available 24/7 and all that is needed is a computer, a working webam, and a stable internet connection.

To get started, you will need Google Chrome and to download the Honorlock Chrome Extension. You can download the extension at **wwww.honorlock.com/extension/install**

When you are ready to take a test, log into Canvas/E-Learning, go to your course, and click on your exam. Clicking launch Proctoring will begin the Honorlock authentication process, where you will take a picture of yourself, show your ID, and complete a scan of your room. Honorlock will be recording your exam session by webcam as well as recording your screen. Honorlock also has an integrity algorithm that can detect search-engine use, so please do not attempt to search for answers, even if it's on a secondary device.

Honorlock support is available 24/7/365. If you encounter any issues, you may contact Honorlock by live chat, phone (844-243-2500), and/or email (**support@honorlock.com**)

Grading:

Evaluation Components	#	Points	Total Points
Examinations	6	50	300
Discussion Boards	6	5	30
Total Points			330

Written examinations will be completed on CANVAS and proctored by Honorlock. Each exam will be worth 50 points. Exams will contain multiple choice and true/false questions.

Discussion boards. There will be 5 Discussion Boards (5 points each = 25 points). Students are required to participate in all discussion board assignments. To receive full credit for each post, please write a minimum of 200 words (3-pt deduction if not sufficient), but feel free to write as much as you need-keep in mind, some topics take more explanation than others. Reference your sources, if possible. Also, respond to at least 2 peers with a minimum of 50 words each (1-pt deduction for each deficient peer response). Final post due by 11:59pm Sunday of the week that the board is posted in the syllabus.

Length of post: Discussion thread posts should be 200 words or more in length.	3 pts If post is 200 or more words in length.	0 pts If post is less than 200 words in length.
Number of replies: Each student should respond to at least 2 peers (50 words or more for each).	2 pts If you respond to at least 2 peers.	0 or 1 pt 0 pts if you do not respond to any peers, 1 pt if you respond to 1 peer, and 2 pts if you respond to 2 peers.

Weekly Course Schedule: (Tentative schedule – subject to change at the discretion of the instructor)

Week	Module	Assignments	Due Date	Point Value
1-2	Organization/General Plan for the Human Body & Anatomical Terminology	**Read Ch. 1** **Discussion Board 1**	**Friday, Aug 29**	5
3	Cellular and Tissue Level of Organization	**Read Ch. 3 & 4** **Exam 1 (Ch. 1,3,4)**	**Sunday, Sep 14**	50
4	Integumentary System; Skeletal System: Bone Tissue	**Read Ch. 5** **Discussion Board 2** **Read Ch. 6 (pgs. 110-116)**	**Friday, Sep 19**	5
5	Skeletal System: Axial & Appendicular Skeleton; Articulations	**Read Ch. 6 (pgs. 117-133)** **Exam 2 (Ch. 5-6)**	**Sunday, Sep 28**	50
6	Muscular System: Tissue; Skeletal Muscle Structure & Function	**Read Ch. 7** **Discussion Board 3**	**Friday, Oct 3**	5
7	Muscular System: Skeletal Muscle Structure & Function	**Read Ch. 7** **Exam 3 (Ch. 7)**	**Sunday, Oct 12**	50
8	Nervous System: Nervous Tissue; Brain & Spinal Cord	**Read Ch. 8 & 9** **Discussion Board 4**	**Sunday Oct 19**	5
9	Nervous System: Sensory/Motor Integration; Endocrine System	**Read Ch. 9 & 10** **Exam 4 (Ch. 8-10)**	**Sunday, Oct 19**	50
10	The Thorax: Heart & Vascular System & Blood	**Read Ch. 11, 12 & 13** **Discussion Board 5**	**Friday, Oct 31**	5
11	The Lungs: Pulmonary Tissue Respiratory System: Lung Function & Gas Exchange	**Read Ch. 15**		
12	Abdominal Region: Digestion, Fluid-Electrolyte and Acid / Base Balance	**Read Ch. 16 & 19** **Exam 5** **Discussion Board 6**	**Sunday, Nov 16** **Friday, Nov 21**	50 5
13	Endocrine System; Lymphatic System & Immunity	**Read Ch. 10 & 14**		
14	Thermoregulation & Metabolism; Human Genetics	**Read Ch. 17 & 21** **Exam 6**	**Wednesday, Dec 7**	50
15				

University Holidays: No classes will be held; Labor Day Sep 1st, Homecoming October 17th – 18th, Veterans Day Nov 11th, and Thanksgiving Nov 24th to 29th.