

UNIVERSITY OF FLORIDA
Department of Applied Physiology & Kinesiology
Athletic Training/Sports Medicine
ATR 6145 – Fall 2018

COURSE TITLE: HUMAN PATHOPHYSIOLOGY FOR THE EXERCISE SCIENCES (3-CR)

I. Course Instructor

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II. Course Description

Class Meeting Days/Times: R; periods 3-5 (9:35am – 12:35pm)
Location: FLG, Room 235

In-depth study of current concepts and theories related to macrotraumatic and microtraumatic injuries; including the factors affecting inflammation and healing, and the role of therapeutic intervention, exercise and rehabilitation in managing injuries and illnesses.

III. Course Objectives

At the conclusion of this course, the student is expected to:

1. Demonstrate an understanding of the patho-anatomical and physiological mechanisms of acute and chronic inflammation, healing, and repair of connective tissues and other related conditions.
2. Demonstrate a comprehension of the biomechanical and neuromuscular processes related to the development of bone, cartilage, ligament, muscle, tendon, and nerve injuries commonly seen in athletes and physically active individuals.
3. Identify and describe selected therapeutic agents and intervention methods used in the clinical management of sports related injuries and illnesses.
4. Demonstrate an understanding of the clinical implications therapeutic agents have on the healing process.
5. Demonstrate an understanding of the role of proprioception and neuromuscular control in the management and rehabilitation of athletic injuries.

NOTE: A background in human anatomy and physiology is expected and will be helpful.

IV. Delivery of Course Material

A hybrid or flipped class method will be used as a means of presenting course material. Lectures have been pre-recorded and made available to students on Canvas. Students will be able to download lecture modules to various media sources (smartphone, ipod, ipad, MP3 player, laptop, etc.), and view/listen to them during the week/days before class. Class periods will be used for in-depth follow-up discussions led by the instructor and students.

V. Required Textbook

There will be no required textbook for this course, however lecture notes will be posted to Canvas in .pdf format. In addition, recommended and supplemental readings will be available for students to download or photocopy.

VI. Evaluation Procedures

1. Weekly quizzes/mini-examinations will be given during the semester. Each worth 50 points. Format will be multiple choice, True/False, fill in the blank, matching and short answer.

VII. Grading Procedures

A+ = \geq 97%	B+ = 87-89	C+ = 77-79	D = 60-69
A = 93-96	B = 83-86	C = 73-76	E = <60
A- = 90-92	B- = 80-82	C- = 70-72	

Additional information on UF grading policies can be found on the undergraduate catalog web page: <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html> or <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

VIII. CLASSROOM POLICIES AND PROCEDURES:

1. It is the University of Florida's policy to provide reasonable accommodation to students with disabilities under the ADA. Students requesting class accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.
2. **Excused absences:** Notification and documentation for excused absences is required!! Students with excused absences have 7 days to make-up exams. Documentation is required for excused absences. If you have an extended absence you must have it on file in the office of the Vice President of Student Development. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.
3. **Attendance and make-up exams/quizzes:** Attendance and punctuality is expected and highly recommended. No makeup examinations or quizzes will be given without a serious and/or compelling reason. 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>.
4. **Course evaluation:** Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary of results of these assessments are available to students at <https://evaluations.ufl.edu>.
5. **Quizzes** are given at the beginning of class (first 15 minutes) with no exceptions. If you miss a quiz due to lateness or absenteeism, you will not be allowed to make-up the quiz.
6. **Missed classes:** If you are to miss a class for whatever reason you MUST contact the instructor prior to class in order to be eligible to make-up the quiz.
7. **Electronic devices:** Cell phones and other personal electronic devices must be off and out of sight in the classroom and lab. **No text messaging during lecture.**

8. **Appeals** on quizzes & examination grades can only be made by appointment with instructor and will be considered only with a written request describing justification and/or scoring error.
9. **Academic misconduct:** Any student found guilty of academic misconduct will receive an "E" grade for this course. Academic misconduct includes cheating on exams, using notes, copying another's work, etc. There will be no deviation from this policy.
10. **The Honor Code Pledge:** We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class.
11. The phone number and contact site for university counseling services and mental health services: 392-1575, <http://www.counseling.ufl.edu/cwc/Default.aspx>. University Police Department: 392-1111 or 9-1-1 for emergencies.

IX. Course Topics

Date	Topic
8/23	Course Overview
8/30	Introduction to Pathophysiology
9/06	Soft Tissue Injury, Inflammation & Repair
9/13	Bone & Joint Pathology/Fracture Healing
9/20	Pain & Placebo Intervention
9/27	Impaired Proprioception & Neuromuscular Control
10/4	Skeletal Muscle & Tendon-related Injuries
10/11	Spine Conditions: Cervical and Lumbar Regions
10/18	Intracranial: Concussion
10/25	Internal Injuries Abdominal/Thoracic
11/1	Exertional (Hyperthermia, Hyponatremia, Rhabdomyolysis, Sickling)
11/8	Sudden Cardiac Arrest
11/15	Dermatological & Other Medical Conditions
11/22	Thanksgiving Holiday – no class
11/29	Open