# College of Health and Human Performance Department of Applied Physiology and Kinesiology University of Florida

## APK 4120 - Clinical Exercise Physiology Fall 2017

<u>Course Instructor</u>: Stephen Dodd, Ph.D.

Office: FLG 110

Office Hours: Monday 2:00-3:00; Wed. 11:00-12:30; and by appointment.

TA's (Sydney Weisman .....; Matthew Hey.....

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Phone: (352) 294-1711

Class Meeting: MWF Period 6 (**12:50 – 1:40pm**) FLG 220

<u>Class website</u>: Canvas at: <a href="http://elearning.ufl.edu">http://elearning.ufl.edu</a>

Required Textbooks: "Clinical Exercise Physiology", 3rd Edition, 2013

Authors: Ehrman, Gordon, Visich, Keteyain,

Human Kinetics Publishing.

<u>University Counseling Services and Mental Health Services</u>: 392-1575, http://www.counseling.ufl.edu/cwc/Default.aspx

University Police Department: 392-1111 or 9-1-1 for emergencies.

Rationale for Course: This course is required for the undergraduate specialization in Exercise Physiology offered by the Department of Applied Physiology and Kinesiology. Students completing this specialization usually seek placement in various health-related professions, medical school, or graduate school.

<u>Course Description</u>: This is an advanced undergraduate course in Clinical Exercise Physiology designed to provide students with an understanding of recent advances in exercise physiology for "clinical" populations. Particular emphasis is placed on the acute and chronic responses to exercise in patients at risk for or having cardiac, pulmonary, and metabolic diseases. Specific topics addressed include: pathophysiology of disease processes, clinical assessment of disease severity, diagnostic testing, and exercise rehabilitation in clinical populations. Students should have completed *APK 2105 Applied Human Physiology* or equivalent course in Human Physiology or Exercise Physiology before enrolling in this course.

## **Student Learning Outcomes:**

<u>Content</u>: Identify, describe, and explain the basic concepts, theories and terminology of natural science and the scientific method within the subject areas of cardiac, pulmonary, and metabolic diseases.

Identify, describe, and explain the major scientific developments within the subject area and the impacts on society and the environment. Identify, describe, and explain relevant processes that govern biological and physical systems within the subject area.

<u>Critical Thinking</u>: Formulate empirically-testable hypotheses derived from the study of physical processes or living things within the subject area of cardiac, pulmonary, and metabolic diseases. Apply logical reasoning skills effectively through scientific criticism and argument within the subject area. Apply techniques of discovery and critical thinking effectively to evaluate experimental outcomes. <u>Communication</u>: Communicate scientific findings clearly and effectively using written and/or graphic forms on examinations.

<u>Course Objectives</u>: Upon completion of this course, the student should have an understanding of the following topics in Clinical Exercise Physiology:

- a. Basic principles of health and exercise assessment
- b. Basic principles of endocrine and metabolic disorders and clinical management
- c. Basic principles of cardiovascular physiology and clinical management
- d. Basic principles of respiratory system disorders and management
- e. Basic principles of bone and joint disorders and clinical management
- f. Basic principles of neuromuscular disorders and clinical management
- g. Basic principles of exercise training and prescription in patients with cardiac, pulmonary, and metabolic diseases

## Grading and academic policies:

- 1. There will be four regular exams (100 points each). The exams will cover all lectures presented in class. Class projects will account for an additional 50 points. Thus, the final course grades will be determined solely by the four exams and the class projects.
- 2. Every effort will be made to adhere to the tentative exam dates listed on the course outline, but exam dates are subject to change by the instructor with advance notice to students.
- 3. All exams will consist of multiple choice and true/false questions. Students will be told the detailed format of each exam in advance during exam review sessions.
- 4. Students will be responsible for all material presented in class (lectures) in addition to the lecture material posted on the class website. Exam questions will be derived from lecture material as presented in class, assigned textbook readings, any class handouts posted on website and material presented in students projects.
- 5. Lecture notes will be made available on the class website no later than the day prior to class.
- 6. All students must be present at the scheduled exam prior to any student completing the exam and leaving the examination room. Once any student has completed the exam and left the exam room, no late-arriving students will be admitted to the exam. No make-ups will be allowed and zeros will be assigned.
- 7. Attendance will not be recorded for lectures. However, since students will be responsible for all material covered in lecture some of which may NOT be covered by the assigned reading <u>failure to attend class will almost certainly result in a significantly lowered grade</u>.
- 8. No extra-credit assignments will be offered in this course. There will be no exceptions.
- 9. Exams may be scaled but the final course grades will not be changed. There will be no exceptions.

## Make-Up Exam

There will be a make-up exam at the end of the term. It will cover any (and all) exam(s) that you miss. The score on the make-up exam will replace score(s) from the missed exam(s). If you know

ahead of time that you will miss an exam OR you have an emergency and cannot make it to an exam, DO NOT PANIC. There is no reason to contact your instructor or get a written excuse. Also, if you are not prepared on the day of the exam, do NOT come to take the exam. Just get ready for the make-up exam!

#### **Grade Determination:**

EXAMS (4) @100 points each	400
Class Project (50 points)	50
TOTAL POINTS	450

### **Grading Scale:**

A	90.0 - 100	C	70.0 - 76.9
B+	87.0 - 89.9	D+	67.0 - 69.9
В	80.0 - 86.9	D	60.0 - 66.9
C+	77.0 - 79.9	E	Below 60.0

## Additional course policies:

- 1. Phones must be turned to silent or off during all lectures and exams. Vibrate and quiet settings are not acceptable.
- 2. Students will be expected to show respect to the instructors and all students in the class. Students behaving disrespectfully (talking during lectures, making inappropriate or threatening statements to instructor or students, using phones in class, etc.) will be dismissed from the lecture or exam at hand. All university regulations governing student behavior will be enforced.
- 3. Lectures will begin at the scheduled times. Students will be expected to arrive on-time, and in the event of tardiness, to enter the room from the rear with as little disruption as possible.
- 4. No audio or video recordings may be made of any part of this course without written consent by the instructor who is administering that part of the course.
- 5. Lecture notes posted on the class website are the property of the instructor. They are posted solely for students in this course and solely to facilitate note-taking and studying. No part of the materials may be re-distributed, reproduced, or used for any purpose other than note-taking and studying.

#### Students requiring special accommodations:

"Students requesting special 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." And, per the disability resource center: for optimal consideration, you must see the professor within the first three (3) days of class.

#### Academic Honesty:

Cheating on exams in any way will not be tolerated. Cheating includes, but is not limited to: attempting to look or looking at another student's exam or answers; allowing another student to look at one's exam or answers; and attempting to obtain exam questions in advance of the exam. If a student is made aware of cheating, approached by another student to conspire to cheat, or concerned that another student may be attempting to look at his/her exam or answers, it is that student's responsibility to notify the instructor to avoid implication in cheating incidents.

Any student caught cheating on any exam will receive a zero for that exam. There will be no exceptions. Additionally, the instructor may assign a failing grade for the course. In all cases,

students will be subject to the regulations and consequences, which can include probation or expulsion from the University, outlined in the Student Handbook.

Students are expected to adhere to UF student honor code: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <a href="https://evaluations.ufl.edu">https://evaluations.ufl.edu</a>. 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 results of these assessments are available to students at <a href="https://evaluations.ufl.edu">https://evaluations.ufl.edu</a>

	APK 4120 CLASS SCHEDULE	
	Fall 2017	
	Notes: Lecture topic dates are approximate.  Exam dates are subject to postponement with notice.	
<u>DATE</u>	<u>TOPIC</u>	Text Chapter
Aug. 21	Introduction to Course. Syllabus & Outline Dr. Dodd	1
Aug. 23 - 25	Behavioral Approaches to Physical Activity Promotion -Dr. Beatty	2
Aug. 28 - 30	General Interview and Examination Skills - Dr. V.Dodd	4
Sept. 1	Pharmacology – Drs. Borsa/Dodd	3
Sept. 4	HOLIDAY	
Sept. 6	Pharmacology	3
Sept. 8 - 15	GXT and Exercise Prescription – Drs. Dodd	5
Sept. 18	EXAM 1	
Sept. 20 - 22	Hypertension – Dr. Dodd	8
Sept. 25 - 27	Diabetes, Obesity, Metabolic Syndrome – Dr. Christou	6, 7, 10
Sept. 29	Presentations	
Oct. 2 - 4	Hyperlipidemia and Dyslipidemia - Dr. Dodd	9
Oct. 6	Homecoming	

e Renal Disease – Dr. Dodd EXAM 2	9
EXAM 2	11
Acute Coronary Syndromes – Angina/Myocardial Infarction Dr. Handberg	
ation of the Heart - Dr. Ferreira	13
Heart Failure – Dr. Ferreira	14
l Artery Disease – Dr. Dodd	15
Presentations	
End-Stage Renal Disease (Cont'd from Oct. 5) - Dr. Dodd	
Cardiac Electrical Pathophysiology Dr. Mark Mckillop - UF Medicine/Cardiology	
EXAM 3	
ctive Pulmonary Disease - Dr. Reid	17
Asthma - Dr. Reid	
Holiday	
Arthritis - Dr. Borsa	
Osteoporosis - Dr. Hass	
ack Pain - Dr. Borsa	24
Presentations	
Tresentations	
HOLIDAY	26 & 27
	25
HOLIDAY	28
HOLIDAY rosis / Cerebral Palsy - Dr. Hass	30
HOLIDAY  rosis / Cerebral Palsy - Dr. Hass  Cord Injury - Dr. Barton	
	Aging - Dr. Chrisou