

Clinical Exercise Physiology

APK4120 | Class # 18809 | 3 Credits | Fall 2022

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Course Info

INSTRUCTOR	Max Adolphs, PhD Office: 106G Office Phone: (352) 294-1731 Email: madolphs@ufl.edu Preferred Method of Contact: email
OFFICE HOURS	MW 9:30 am – 10:30 am or by appointment
MEETING TIME/LOCATION	MWF Period 1 7:25– 8:15 am FLG 210

COURSE DESCRIPTION

Provides an understanding of recent advances in exercise physiology and exercise prescription for clinical populations. Particular attention is placed upon the study of acute and chronic responses to exercise in patients with cardiac, pulmonary, metabolic and musculoskeletal diseases.

PREREQUISITE KNOWLEDGE AND SKILLS

APK 3110C with minimum grade of C

REQUIRED AND RECOMMENDED MATERIALS

There is no required/recommended textbook for this course. Additional materials such as handouts, lectures, and worksheets will be provided on the course website via Canvas.

COURSE FORMAT

Students will attend live lectures three times each week. Lecture slides will be available to students to print **before** coming to lecture.

COURSE LEARNING OBJECTIVES:

Content: 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. Identify, describe, and explain relevant processes that govern biological and physical systems within the subject area.

Critical Thinking: 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.

Communication: Communicate concepts clearly and effectively using written and/or graphic forms on examinations.

Course Objectives: 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 cardiovascular physiology and clinical management
- c. Basic principles of respiratory system disorders and management
- d. Basic principles of endocrine and metabolic disorders and clinical management
- e. Basic principles of neuromuscular disorders and clinical management
- f. Basic principles of exercise training and prescription in patients with the above listed disorders
- g. Novel concepts involving exercise-based strategies as therapy for clinical conditions

Course & University Policies

ATTENDANCE POLICY

Attendance is not required; however, students will be responsible for all material presented in class in addition to any material posted on the class website. **If students miss any in-class assignment due an unexcused absence, they will receive a zero on that assignment.**

PERSONAL CONDUCT POLICY

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor 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 (<http://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 the instructor in this class.

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; or allowing another student to look at one's exam or answers. 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.

In addition:

1. Phones must be turned to silent or off during all lectures and exams. Vibrate and quiet settings are not acceptable. They should never be visible during an exam and, if seen, will be looked upon as an attempt to use it resulting in the consequences shown below in "Academic Honesty".

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 with as little disruption as possible.
4. 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.

EXAM MAKE-UP POLICY

Unexcused absences/availability for exams will result in a zero on the exam. Students who are ill or have an emergency that prevents them from taking the exam during the time available are responsible for contacting the instructor as soon as possible. **Make-up exams are offered at the discretion of the instructor given that there is a medical, family, or other emergency that deems the need for a make-up.** Requirements for class attendance and make-up exams, assignments, and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

A student experiencing an illness should visit the UF Student Health Care Center to seek medical advice and obtain documentation. 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 requesting a make-up assignment (<https://www.dso.ufl.edu/care/courtesy-letters/>). 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.

Canvas: A ticket number received from UFIT Helpdesk must accompany requests for make-ups due to technical issues (see Academic Resources below). The ticket number will document the time and date of the problem. If the time and date are past the assignment deadline, the request may not be granted. You must e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

ACCOMMODATING STUDENTS WITH DISABILITIES

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting their Get Started page at <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.

COURSE EVALUATIONS

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Getting Help

HEALTH & WELLNESS

- U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575
- Counseling and Wellness Center: <https://counseling.ufl.edu/>, 352-392-1575
- Sexual Assault Recovery Services (SARS) - Student Health Care Center, 392-1161
- University Police Department, 392-1111 (or 9-1-1 for emergencies) <http://www.police.ufl.edu/>

ACADEMIC RESOURCES

- E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>
- Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling. <https://career.ufl.edu/>
- Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio/>
- Student Complaints On-Campus: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/> On-Line Students Complaints: <http://distance.ufl.edu/student-complaint-process/>

INCLUSION, DIVERSITY, EQUITY, AND ACCESSIBILITY RESOURCES

For suggestions or concerns related to IDEA, please reach out to any of the following:

- Dr. Linda Nguyen, APK IDEA Liaison, linda.nguyen@hhp.ufl.edu
- Dr. Rachael Seidler, APK Graduate Coordinator, rachaelseidler@ufl.edu
- Dr. Joslyn Ahlgren, APK Undergraduate Coordinator, jahlgren@ufl.edu

Grading

The following table outlines the point-accruing components of this course. The points listed are approximate and the final grade will be weighted based on the percentages of each category regardless of the actual number of points.

Evaluation Components (number of components)	Points Per Component (total)	% of Total Grade
Lecture Exams (3)	50 points each = 150 points total	54%
Lecture Quizzes	100 points total	36%
Participation	30 points total	10%

Exams (54%): There will be a total of three exams given throughout the course of the semester, including the final exam. Each exam will be worth 50 points. You will be told what chapters each exam will cover. Exams will consist of multiple choice and true/false questions. Exam dates are listed in the syllabus on the course schedule page. You must take the exam during your regularly-scheduled class time unless prior arrangements were made with the instructor. 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.

Quizzes (35%) – There will be quizzes administered in class using Canvas. The quizzes will address topics presented during lectures and assigned reading. These quizzes are generally at the end of class but might also happen in the middle or beginning of class. The quiz will consist of short-questions or simple problem-solving exercises. Students will take the quiz individually and any type of collaboration with other students, opening of non-quiz related website, or checking material from self or other during the quiz is prohibited. There will be 1-10 questions per quiz.

Participation (10% of final grade) – This will be determined based on the student’s preparedness assessed by quality and correctness of answer to discussion questions, involvement in class activities or lectures, and contribution in classroom discussions. Students are required to participate through presentation of a lecture slide, providing answers on the board, and discussion of applied questions in front of class. Students must participate once to receive all points. The instructor will select a student to participate, but students can also volunteer to participate. There are no pre-arrangements of questions or topics for specific students. Students should be prepared to present all slides, answer all questions, and discuss all problems assigned for the day.

Excellent	100%	<ul style="list-style-type: none"> - Defines, describes, and illustrates concepts - Explains, assesses and criticizes ideas - Demonstrates preparation and reading of assignments - Is always involved in class discussions
Good	90%	<ul style="list-style-type: none"> - Defines, describes, and illustrates concepts - Explains, assesses and criticizes ideas - Evidence of reading assignments, but not fully prepared - Is often involved in class discussions
Reasonable	80%	<ul style="list-style-type: none"> - Defines, describes, and illustrates concepts - Explains, assesses, or criticize some ideas - Evidence of incomplete reading of assignments and preparation - Is occasionally involved in class discussions
Basic	70%	<ul style="list-style-type: none"> - Defines and describes some concepts - Explains but cannot assess and criticize ideas - Clearly unprepared and lacking evidence of reading assignments - Is rarely involved in class discussions
Bare Minimum	60%	<ul style="list-style-type: none"> - Defines and describes some concepts - Unable to explain, assess, or criticize ideas - Clearly unprepared and lacking evidence of reading assignments - is never involved in class discussions
Unacceptable	0%	<ul style="list-style-type: none"> - Refuses to engage in discussion or answer questions when asked - Engaged into inappropriate behaviors (using cell phone, social media, visiting irrelevant websites) - Not present

GRADING SCALE

Students take exams and quizzes using Canvas and scores are available immediately upon submission. Students should contact the instructor as soon as possible if they feel there is an error in the grading of individual questions or submission of final grades. Final course grades will be assigned based on the table below. The grade achieved by the student and showing on Canvas is final. There is no rounding of

grades in any circumstance. Any requests for additional extra credit or special exceptions to these grading policies will be interpreted as an honor code violation (i.e., asking for preferential treatment) and will be handled accordingly.

More detailed information regarding current UF grading policies can be found here:

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.

Letter Grade	Percent of Total Points Associated with each Letter Grade	GPA Impact of Each Letter Grade
A	93.00 – 100%	4.00
A-	90.00 – 92.99%	3.67
B+	87.00 – 89.99%	3.33
B	83.00 – 86.99%	3.00
B-	80.00 – 82.99%	2.67
C+	77.00 – 79.99%	2.33
C	73.00 – 76.99%	2.00
C-	70.00 – 72.99%	1.67
D+	67.00 – 69.99%	1.33
D	63.00 – 66.99%	1.00
D-	60.00 – 62.99%	0.67
E	0.00 – 59.99%	0.00

Weekly Course Schedule

Every effort will be made to adhere to the tentative lecture topics and exam dates listed. However, topic dates and exam dates are subject to change by the instructor with advance notice to students.

	Dates	Lecture Topic
Week 1	Aug 24 – Aug 26	Introduction to the course/interview and examination skills
Week 2	Aug 29 – Sep 2	Graded Exercise Testing and Exercise Prescription
Week 3	Sep 5 – Sep 9	No class Sep 5th (Labor Day) Obesity (metabolic syndrome intro)
Week 4	Sep 12 – Sep 16	Hypertension/diabetes
Week 5	Sep 19 – Sep 23	Diabetes/dyslipidemia Exam 1 Sep 23
Week 6	Sep 26 – Sep 30	Cardiovascular Review
Week 7	Oct 3 – Oct 7	Acute coronary syndromes No Class Oct 7th (Homecoming)

Week 8	Oct 10 – Oct 14	Revascularization of the heart
Week 9	Oct 17 – Oct 21	Heart failure/Stroke
Week 10	Oct 24 – Oct 28	Peripheral artery disease Exam 2 Oct 28
Week 11	Oct 31 – Nov 4	Pulmonary Review
Week 12	Nov 7 – Nov 11	COPD No Class Nov 11 th (Veterans Day)
Week 13	Nov 14 – Nov 18	Asthma
Week 14	Nov 21 – Nov 25	Arthritis No Class Nov 23-25 (Thanksgiving)
Week 15	Nov 28 – Dec 2	Arthritis/Osteoporosis
Week 16	Dec 5 – Dec 9	MS No Class Dec 8-9 (Reading Days)
		Exam 3 – Dec 13th 8-10 PM