

KINES 3091
Spring 2021
Online Course
3.0 Credit Hours

Instructor: Adriana Coletta PhD, MS, RD

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Office Hours: Via Zoom by appointment. Please email Dr. Coletta to schedule a meeting.

Recitation Hours: Thursdays 12:30-1:30pm & Fridays 9:00-10:00am, via zoom.

Course Recitation Hours:

These sessions will be held over zoom. YOU ARE REQUIRED TO ATTEND ONE RECITATION HOUR PER WEEK. Recitation will start the week of January 19th, the first week of class (see course schedule below for details). These sessions allow students the opportunity to ask questions about course materials/content for clarification. The link to the meeting will be available on Canvas. Even if you do not have a specific question, it is helpful to join the zoom meeting to listen to other questions, as this may spark a question or need for further clarification that you didn't realize at first. Participation in recitation will facilitate your learning process and is required. If you are absolutely unable to make either of the listed times, please contact Dr. Coletta prior to the scheduled sessions you are unable to attend.

Course Description:

Movement is a basic human behavior. The primary objective of this course is to examine the physiological basis of human movement. The focus will be on reviewing what exercise physiologists have learned about the diversity of physical activity. Although many physiological responses to activity are predictable, the magnitude and pattern of responses are unique depending on the age, gender, and previous experience of the individual.

Pre-requisites: C- or better in BIOL 2325 AND MATH: 1050, 1210 or 1080 –OR- AP Calc AB score of 3 or better OR AP Calc BC score of 3 or better

Required Materials:

Kraemer WJ, Fleck SJ, Deschenes MR. Exercise Physiology: Integrating Theory and Application, 2nd Edition. 2016. Lippincott Williams & Wilkins.

This code, WZT70LFT, will give you 30% discount and free shipping if you purchase at shop.lww.com. Make sure you select the 2nd edition.

You will need a new version as opposed to used in order to access animations and videos that will help facilitate mastery of concepts. See course schedule below for details.

Student Learning Outcomes/Course Objectives:

By the end of this course, you will be able to:

- Describe and illustrate the scientific method and learn how to identify credible sources of information in the field of Exercise Physiology and beyond.
- Differentiate between the energy systems utilized by the human body, and demonstrate how these systems work together to provide energy at rest and during exercise of different modes and intensity.
- Decipher, appraise and compare the different body systems and demonstrate how they respond to exercise at different modes and intensity.
- Infer and discern how nutrition and the environment can impact exercise at different modes and intensity.

Teaching and Learning Methods:

This course is asynchronous online. All lectures will be recorded in smaller sections in order to make absorption of the material more palatable and facilitate your learning process. In addition to online lectures, readings, animations and videos provided by the text will be required in order to ensure all concepts are properly communicated. See course schedule below for details on required readings, animations and videos for each lecture. Additionally, there will be a quiz associated with each topic to enable evaluation of progress in successfully understanding and mastering the course content. While office hours will be held by appointment and reserved for critical issues, recitation sessions will be held weekly in efforts to facilitate learning.

Expectations:

- *Of my students* – I expect academic integrity during exams and quizzes. I expect you to complete all required readings, videos, and animations in preparation for recitation, quizzes, and exams. I encourage you to be engaged in your recitation discussions. I value and encourage your intellectual curiosity. I expect you to behave in a respectful manner with fellow classmates and myself. I will support an atmosphere in which the freedom to ask questions and learn without concern for harassment will be upheld.
- *Of myself* - I take responsibility for helping create a positive and respectful environment in which you are not afraid to participate, or come to me for help.

Course Policies:

- Grading and Academic Integrity
 - You are responsible for tracking your grades throughout the term and for knowing the registration, drop and withdrawal dates for the semester.
 - Course letter grades will be based on cumulative scores from recitation, quizzes, and exams. Once the quiz or exam is completed and grades are submitted, they can only be changed if I have made a mathematical or recording error. I will not assign additional work after the fact to improve a grade.
 - Letter grades are NOT negotiable.
 - Academic honesty and integrity is expected from all of us as members of the University of Utah community. Cheating, lying, or plagiarism will not be tolerated and result in failure of this course.
- Inclusivity

- My intent for this class is to create a space where you, as the student, feel included, heard, and respected, and that your diverse identities and backgrounds are valued and viewed as an asset to our shared learning community. We all come to this course with unique life experiences, and there will be diversity of perspectives in our recitation discussions. This diversity is our strength as we strive to communicate and connect across differences, and build an inclusive and equitable learning environment.

Evaluation:

- Weekly Recitation Attendance (14 weeks)
 - You are required to attend one recitation per week, starting the first week of class, week of January 19th. You must be present for the duration of the session, and engage in the discussion/activity to earn full points. Please see page 1 of the syllabus for more details.
- Quizzes (9)
 - You will be required to complete 9 quizzes throughout the course of the semester. All quizzes will be available at the start of the week and due at 5:00pm MST on Friday of that week on Canvas.
 - After graded quizzes are returned, you will have two business days to discuss any grading issues with Dr. Coletta.
- Exams (4)
 - You will be required to complete four exams for this course, three exams throughout the semester and one cumulative final exam.
 - All exams will be multiple choice, with some fill in the blank and matching questions, and will be completed on Canvas.
 - After graded exams are returned, you will have two business days to discuss any grading issues with Dr. Coletta.

Grading Criteria:

Item	Points Each	Total Points
Recitation Attendance	10	140
Quizzes	15	135
Exams 1-3	100	300
Final Exam	200	200
Total Points		775

Grading Distribution:

Course Percentage	Grade	Course Percentage	Grade
92% and above	A	72-75.9%	C
90-91.9%	A-	70-71.9%	C-
86-89.9%	B+	66-69.9%	D+
82-85.9%	B	62-65.9%	D
80-81.9%	B-	60-61.9%	D-

76-79.9%

C+

59.9% or lower

F

Policy on Quizzes and Exams:

- Quizzes and exams must be completed by the deadline.
- Make-ups for missed quizzes and exams will only be allowed under the following conditions:
 - Athletic or other University-Sponsored Absences
 - You must provide travel dates and times via a signed memo from the University-sponsored group ***no more than one week prior to*** the dates of travel.
 - Military, State, or Federal Service
 - You must provide military orders or other documentation of government service prior to absentee dates.
 - Illness
 - You must provide notification of the illness prior to the scheduled assessment or as soon as possible thereafter. You must provide a valid medical excuse.
 - Other Extenuating Circumstances
 - In all other circumstances, it will be my prerogative, as your professor, whether or not you will be allowed to make-up a quiz or exam.
 - Vacations are not extenuating circumstances.
 - Technology failures are not extenuating circumstances.
 - It is your responsibility to ensure you have internet connection to submit exams and assignments correctly and on time.
- If you have been approved by Dr. Coletta to make up a quiz or exam, the make-up may only occur no more than one week after the originally scheduled date. This timeline can be flexible pending on the circumstance.

Accommodations:

Please contact Dr. Coletta within the first two weeks of the semester if you need accommodations related to active duty military, religious practice, disability access or any other circumstances. *See Syllabus on Canvas for a more complete list.

University Policies:

*See Syllabus on canvas for a more complete list.

1. **University Safety Statement.** The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at **801-585-COPS (801-585-2677)**. You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit <https://safeu.utah.edu>.
2. **The Americans with Disabilities Act.** The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If

you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability & Access (CDA; <http://disability.utah.edu/>; 162 Olpin Union Building; 801-581-5020). CDA will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the CDA.

3. **Addressing Sexual Misconduct.** Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).
4. **The Code of Student Rights and Responsibilities.** The code, which specifies student rights as well as conduct involving cheating, plagiarism, collusion, fraud, theft, etc., is provided at <http://regulations.utah.edu/academics/6-400.php>.
5. **Wellness Statement.** Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness, <http://wellness.utah.edu/>; 801-581-7776.
6. **Drop/Withdrawal.** The last day to drop (delete) classes is Friday, August 30th, 2019; the last day to withdraw from this class is Friday, October 18th, 2019. Please check the academic calendar for more information pertaining to dropping and withdrawing from a course. Withdrawing from a course and other matters of registration are the student's responsibility.
7. **Veterans Center.** If you are a student veteran, I want you to know that the U of Utah has a Veterans Support Center on campus. They are located in Room 418 in the Olpin Union Building. Hours: M-F 8-5pm. Please visit their website for more information about what support they offer, a list of ongoing events and links to outside resources: <http://veteranscenter.utah.edu/>. Please also let me know if you need any additional support in this class for any reason.
8. **LGBT Resource Center.** If you are a member of the LGBTQ community, I want you to know that my classroom is a safe environment. Additionally, please know that the U of Utah has an LGBT Resource Center on campus. They are located in Room 409 in the Olpin Union Building; their hours are M-F 8-5 pm. You can visit their website to find more information about the support they can offer, a list of events through the center and links to additional resources: <http://lgbt.utah.edu/>. Please also let me know if there is any additional support you need in this class.
9. **Learners of English as an Additional/Second Language.** If you are an English language learner, please be aware of several resources on campus that will support

you with your language development and writing. These resources include: the Writing Center (<http://writingcenter.utah.edu/>); the Writing Program (<http://writing-program.utah.edu/>); the English Language Institute (<http://continue.utah.edu/eli/>). Please let me know if there is additional support you need to discuss for this class.

Course Schedule:

Note: Our schedule is subject to revision based on the needs of our class; any updates will be made available for students through Canvas.

Week	Dates	Topic	Assigned Readings & Videos	Assigned Activities*
1	Week of January 19 th	Course Policies, Research in Exercise Physiology	<ol style="list-style-type: none"> 1. Syllabus 2. Introduction Video 3. Chapter 1 in textbook 4. Research Lecture Video 	<ol style="list-style-type: none"> 1. Attend one recitation hour 2. <u>Quiz 1-Chapter 1:</u> Due on or before Friday, January 22nd at 5:00pm MST
2	Week of January 25 th	Metabolism & Bioenergetics	<ol style="list-style-type: none"> 1. Chapters 2 & 3 in textbook 2. Metabolism & Bioenergetics Lecture Videos 3. The Point Animations: <ol style="list-style-type: none"> a. Energy Transfer Chain b. Digestion of Carbohydrate c. Glycolysis d. Citric Acid Cycle e. Electron Transport Chain f. Fat mobilization & Use 	<ol style="list-style-type: none"> 1. Attend one recitation hour: This will be focused primarily on chapter 2, but we can also discuss chapter 3 if there are questions.
3	Week of February 1 st		<ol style="list-style-type: none"> 1. Attend one recitation hour: This will be focused primarily on chapter 3, but we can also discuss chapter 2 if there are questions. 2. <u>Quiz 2- Chapters 2&3:</u> Due on or before Friday, February 5th at 5:00pm MST 	

4	Week of February 8 th	The Skeletal Muscle System	<ol style="list-style-type: none"> 1. Chapter 4 in textbook 2. Skeletal Muscle System Lecture Videos 3. The Point Animations: <ol style="list-style-type: none"> a. The Sliding Filament Theory 4. The Point Videos: <ol style="list-style-type: none"> a. Stretch-Shortening Cycle; Skeletal Muscle & Force; Bone Adaptation b. Proprioceptors: How Do They Work 	<ol style="list-style-type: none"> 1. Attend one recitation hour 2. <u>Quiz 3- Chapter 4:</u> Due on or before Friday, February 12th at 5:00pm MST
5	Week of February 15 ^h	EXAM 1- Friday February 19th	STUDY	<ol style="list-style-type: none"> 1. Attend one recitation hour 2. EXAM 1 Available on canvas from 3:00pm to 5:00pm MST on Friday February 19th
6	Week of February 22 nd	The Nervous System	<ol style="list-style-type: none"> 1. Chapter 5 in textbook 2. Nervous System Lecture Videos 3. The Point Animations: <ol style="list-style-type: none"> a. Action Potential 	<ol style="list-style-type: none"> 1. Attend one recitation hour 2. <u>Quiz 4- Chapter 5:</u> Due on or before Friday, February 26th at 5:00pm MST
7	Week of March 1 st	The Cardiovascular System	<ol style="list-style-type: none"> 1. Chapter 6 in textbook 2. Cardiovascular System Lecture Videos 3. The Point Animations: <ol style="list-style-type: none"> a. Blood Circulation b. Fick Principle c. Exercise & Blood Flow 	<ol style="list-style-type: none"> 1. Attend one recitation hour 2. <u>Quiz 5- Chapter 6:</u> Due on or before Friday, March 5th at 5:00pm MST
8	Week of March 8 th	The Respiratory System	<ol style="list-style-type: none"> 1. Chapter 7 in textbook 2. Respiratory System Lecture Videos 3. The Point Animations: <ol style="list-style-type: none"> a. Oxygen Consumption 	<ol style="list-style-type: none"> 1. Attend one recitation hour 2. <u>Quiz 6- Chapter 7:</u>

			b. Oxygen Transport	Due on or before Friday, March 12 th at 5:00 pm MST
9	Week of March 15 th	EXAM 2- Friday March 19th	STUDY	1. Attend one recitation hour 2. EXAM 2 Available on canvas from 3:00pm to 5:00pm MST on Friday March 19th
10	Week of March 22 nd	Nutrition & Fluid Balance	1. Chapters 9 & 10 in textbook 2. Nutrition & Fluid Balance Lecture Videos 3. The Point Animations: a. Biological Function of Vitamins Water Balance	No Recitation this week
11	Week of March 29 th			1. Attend one recitation hour 2. <u>Quiz 7- Chapters 9 & 10:</u> Due on or before Friday, April 2 nd at 5:00 pm MST
12	Week of April 5 th	The Endocrine System	1. Chapter 8 in textbook 2. Endocrine System Lecture Videos 3. The Point Animations: a. Insulin Functions b. Endocrine Gland Stimulation	1. Attend one recitation hour 2. <u>Quiz 8- Chapter 8:</u> Due on or before Friday, April 9 th at 5:00 pm MST
13	Week of April 12 th	Environment Challenges	1. Chapter 11 in textbook 2. Environmental Challenges Lecture Videos 3. The Point Animations: a. Thermal Regulation	1. Attend one recitation hour 2. <u>Quiz 9- Chapter 11:</u> Due on or before Friday, April 16 th at 5:00 pm MST

14	Week of April 19 th	EXAM 3- Friday April 23rd	STUDY	1. Attend one recitation hour 2. EXAM 3 Available on canvas from 3:00pm to 5:00pm MST on Friday April 23rd
15	Week of April 26 th	STUDY FOR FINAL EXAM *Last week of recitation*		1. Attend one recitation hour
16	Monday May 3rd	FINAL EXAM Available on Canvas from 1:00pm-4:30pm **Please reach out to Dr. Coletta prior to the exam if you have a scheduling conflict with a final for a synchronous course**		

*All assigned activities will be available on Canvas at the start of the week