EXERCISE PHYSIOLOGY II
KINE 5315.060 (Fall 2015)
Department of Health & Kinesiology
University of Texas at Tyler

Course Syllabus

Instructor: Scott A. Spier, Ph.D.
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Email: sspier@uttyler.edu
Office Hours: Mondays 2 – 3 p.m. and Tuesdays/Thursdays 1 – 2 p.m. You may also contact me to schedule other times to meet in person or via videoconference.

Course meeting time: Asynchronous (online)
Course location: Blackboard
Required textbook: None (see below)

COURSE DESCRIPTION
Advanced study of cardiovascular and respiratory responses to acute and chronic exercise

COURSE PREREQUISITES
Although there is no official prerequisite for this course, it is assumed that every student has successfully completed 8 credit hours of Anatomy & Physiology and 3 credit hours of Exercise Physiology at the undergraduate level. Though not required, ideal preparation for this class would also include other science courses such as chemistry and/or biochemistry.

COURSE STRUCTURE AND DELIVERY
Blackboard will be used to deliver course content in this class. You can access Blackboard through the UT Tyler Logins link at the top of the UT Tyler main website (you will need your ID and password). Important class resources, including the syllabus, course schedule, announcements, and external links, as well as the weekly modules, will be accessed here. The GETTING STARTED tab in the menu on the left side of the page will explain the different Blackboard functions you will use in this class. The content of this course is organized into weekly modules and will be accessed in the MODULES tab in Blackboard. Within each weekly module, you will find learning objectives (Objectives), assigned readings (Read), recorded lectures and/or videos associated with the reading assignments (View), a Discussion topic (Discuss), and a quiz over the assigned content (Quiz).
GENERAL STUDENT LEARNING OUTCOMES

Students who successfully complete this course will be able to:

1. Describe the cardiovascular regulatory mechanisms responsible for adjustments in cardiac output and systemic blood pressure at rest and in response to exercise;
2. Analyze the cardiovascular and respiratory responses to acute exercise with respect to potential limitations in exercise performance;
3. Explain the mechanisms of cardiovascular and respiratory adaptations to chronic bouts of exercise and inactivity;
4. Analyze the cardiovascular and respiratory responses to chronic exercise in terms of optimization of health and performance;
5. Critically read and discuss research literature related to cardiovascular and respiratory exercise physiology.

More specific learning outcomes will be provided in each learning module.

This course addresses these objectives through the following:

1. study of basic facts, concepts and theories of cardiovascular and respiratory exercise physiology;
2. critically reading and discussing research related to cardiovascular and respiratory exercise physiology;
3. discussing in writing questions and viewpoints related to cardiovascular and respiratory exercise physiology, analyzing and supporting viewpoints based on research evidence;
4. applying theoretical concepts in cardiovascular and respiratory exercise physiology.

REQUIRED MATERIALS

Textbook: There is no required textbook for this course. A good exercise physiology text, though not required, may be helpful, particularly if you need a refresher on the basics of cardiovascular and respiratory physiology. The exercise physiology textbook used in the Training Methods course is adequate for this purpose.

Assigned readings: Readings from review articles and/or original research papers will be assigned in each weekly module. Some of the assigned readings may be difficult to understand if you do not have the appropriate scientific background. An exercise physiology text should provide the appropriate background for a better understanding of the assigned articles. If not, you will need to consult additional resources.

Technical requirements: There are minimum technological requirements that must be met in order to complete this course. You can access an explanation of these technological requirements via the link in the Getting Started tab in Blackboard. If you have technical problems, please review the UT Tyler Technical Support page.
ADDITIONAL RESOURCES (OPTIONAL)

In addition to the reading assignments that I will provide in each module, I will also use the following resources throughout the semester. These texts are optional; no readings will be assigned from these.


COURSE REQUIREMENTS AND EVALUATION

Exams: There will be 3 major exams in this class. The first two exams will be given during the regular semester and will consist of material covered up to that time. Exams will consist of short answer (one-word answers), essay, and/or diagrams over material assigned in lectures, assigned readings, research articles, and discussions. Although the exams mostly focus on the content covered up to that time, they are cumulative in the sense that understanding of content presented earlier in the semester is necessary for comprehending content later in the semester. The third (final) exam will be held during the scheduled final examination period and will be comprehensive.

Online quizzes: Each weekly lesson will contain a short online quiz to assess your understanding of the material. You may use your textbook and reading assignments to complete the quizzes; however, I ask that you take these quizzes by yourself. You may take each quiz up to 3 times during the time they are available and only your highest score will count. Each weekly quiz will be available through the end of that week’s module. Do not wait until the last minute to complete these (in case of computer problems, power outages, etc.).

Research Article Discussions: Your weekly reading assignments will include original research articles. Each student is expected to read each original research article (these will be on the exams) and participate in the discussion of these articles during the semester.

Discussion Board Activity: Due to the online nature of the course, interaction with students and the instructor will occur through the Discussion Board. The Discussion Board will be used to allow you to demonstrate your comprehension of the course material and your ability to communicate that comprehension through writing. Throughout the semester, you will be required to respond to questions about the reading assignments, lectures, research articles, and/or current topics in exercise physiology. It is expected that you will read others’ posts and think critically and logically about the question before offering your insights or thoughts. Your posts and responses should have a logical flow, be free of grammatical and spelling errors, and should cite your sources properly where needed. Finally, all posts and responses should further the discussion or add clarity to the discussion. Your posts should be made in a timely manner, so that others may respond and continue the discussion. Your responses will be graded on the basis of the quantity and quality of your participation.

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**Evaluation:** There will be 500 possible points distributed as follows:

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<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>100 pts</td>
</tr>
<tr>
<td>Exam 2</td>
<td>100 pts</td>
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<tr>
<td>Exam 3 (comprehensive)</td>
<td>100 pts</td>
</tr>
<tr>
<td>Module Quizzes</td>
<td>100 pts</td>
</tr>
<tr>
<td>Research Article/Module Discussions</td>
<td>100 pts</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>500 pts</td>
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</tbody>
</table>

Grading will be based on a modified 10-point scale as detailed below:

- **A** = 89.5 – 100
- **B** = 79.5 – 89.4
- **C** = 69.5 – 79.4
- **D** = 59.5 – 69.4
- **F** = < 59.5

**TIME REQUIREMENTS**

Successful on-line learning is highly student-initiated. Because of the format of the course, the student will be required to exercise initiative and diligence in completing the course. In general, you should expect to spend a similar amount of time completing the requirements of this online course as you would spend on the same course taught in the traditional classroom format. An advantage of the online format is that the lecture material is there for you to review whenever you want. In an online course, more time must be devoted to participation in discussions than is traditionally spent in classroom discussions. Time for completion of assignments, readings and other materials, reviewing for comprehension, and preparing for exams should be similar in this online course as in any other course. As a rough guide, you should plan to spend approximately 15 hours per week on this course. The actual amount of time required will, of course, vary from one person to another. It is absolutely essential that you not fall behind.

Although this is an asynchronous course, this is not an individually paced course. Access to course materials, assigned discussions, assignments, exams, and the like will follow a schedule spread out over the semester (similar to a class in the traditional format). There will be set dates for exams and deadlines by which you must complete all unit assignments. You may access the **Course Schedule** for deadlines.

**MISSING TIME DURING THE COURSE**

Distance learning courses generally require more time than students typically experience in a traditional face-to-face lecture course. It is recognized that many of the students in this class have responsibilities outside of class that require time, as well. If you encounter any unforeseen circumstances (family emergency, jury duty, etc.) that greatly compromise your coursework, contact the instructor immediately. Alternatives for missed time may be arranged at the discretion of the instructor. Note: Vacation time does not count as an excused “absence”. Please plan your vacations around assignment due dates or submit your assignments early.
COURSE POLICIES

**Professionalism:** Students are expected to display a professional attitude in all aspects of the course, including discussions in Blackboard and communication with the instructor and classmates.

**Preparation and Participation:** Based on past experience, students who are prepared for class and are actively engaged in discussions perform well in this class and those that are not prepared do not. "Preparation" consists of completing the weekly lessons, including the reading assignments and lectures as well as any additional background reading. “Participation” consists of two components: 1) participation in discussions and students' ability to explain point(s) of illustrations from the assigned reading for that module, and 2) participation in discussions regarding the peer-reviewed research article(s) presented in that module. Naturally, failure to read the assigned reading or absence in the module will inhibit students' ability to participate. Students are strongly encouraged to ask, and respond to, questions in the modules; vigorous interaction makes for much more interesting sessions for both instructor and students.

**Quality of work:** All assignments, including exams, presentations, participation, and projects, will be graded with rigor appropriate for graduate course work. All written assignments should incorporate correct grammar, spelling, and a logical flow of ideas. I have little tolerance for bad grammar, and, in particular, run-on sentences, lack of punctuation, and incorrect spelling.

**Discussion Board Activity:** When posting to the Discussion Board, please follow these guidelines:

- Complete any reading assignments prior to participation in discussions, unless the assignment states otherwise.
- Please do not repeat others' posts or respond with one-phrase "I agree" or "thanks" posts on the Discussion Board. These types of messages can be time wasting and frustrating. Please use the e-mail feature in the Communications tab if you wish to convey these messages.
- Use the Module forums for discussion of questions or issues related to that Module. Use the General Questions forum for other questions related to the course (navigation, location of particular items, etc.) or other topics, in general.
- Students should post and respond to discussions in a respectful, professional manner. Please do not ridicule others on the Discussion Board. The instructor reserves the right to remove any posts that are offensive or that do not pertain to the subject being discussed. "Netiquette" is an emerging concept of social conventions for communicating on-line. Please refer to the UT Tyler’s Netiquette Best Practices in the **GETTING STARTED** tab for more information.
- Please type your comments directly into the discussion thread window. Do not attach your responses as documents. This makes following a discussion much more difficult. Please save the attachment option for truly lengthy items (as PDF only), reference material, or items (e.g., JPEG images) that cannot be pasted into the discussion post itself. Please only attach appropriate materials.

**Policy regarding late submission of an assignment:** No assignments or discussion posts will be accepted past their deadlines. Since completion of some assignments in this course depends on the completion of previous assignments (e.g., discussion posts), it is imperative that you submit your assignments on time.
Make-up work: Make-up exams and assignments will be given only according to University policy. On rare occasions (and for a valid reason), make-up exams can be scheduled by pre-arrangement with the instructor before the date of the exam. If any exam is missed due to illness, injury, or family emergency, the instructor should be notified prior to or within 24 hours of the missed exam.

Feedback on exams/assignments: I will strive to give timely feedback on all assignments. You should expect feedback on discussion board posts within a couple of days and feedback on papers and exams within 1 week (I will notify you if I expect feedback to take a little longer for a particular assessment).

Getting help: If you find yourself struggling in the class (especially if you fail an exam), you should meet with me as soon as possible so that we can determine what steps you need to take to succeed in the class. I’m available during my office hours or by appointment. I also have an open door policy.

If you have trouble with writing assignments, please contact the Writing Center on campus at 903-565-5995. They have tutors and other resources available to assist you with your written assignments.

Course Announcements: Announcements will be posted periodically during the semester. You will be able to see these announcements on your course portal page and in your Patriots email account. Please check these frequently so you do not miss any important information.

E-mail communication: Instructors are required to use your Patriots account e-mail address for e-mail correspondence. Therefore, any e-mail message originating from me will be sent to your Patriots account. However, if you send me e-mail from another personal account, I will reply back to that address. You may want to set up your personal e-mail account so that it pushes your Patriots account e-mail to your personal inbox. Due to teaching and research loads and the size of this class, it may take me 1 to 2 business days to respond to e-mail; however, I'll make every effort to respond to e-mail on the same day.

In all e-mail correspondence, please include the course number in the subject line (e.g., "KINE 5315 question" or "KINE 5315 assignment"). Failure to do so reduces the likelihood of me reading the e-mail.

In all e-mail correspondence, please use correct grammar and punctuation. If your e-mail address doesn’t contain your name, please sign your e-mail with your name at the end of the correspondence. See www.emailreplies.com for common etiquette regarding e-mails.

COPYRIGHT

All handouts used in this course, including those delivered via Blackboard, are copyrighted. The term "handouts" refers to all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, assignment sheets, recorded lectures, outlines, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.
UNIVERSITY POLICIES
(From the Handbook of Operating Procedures and the UT Tyler Website)

STUDENT RIGHTS AND RESPONSIBILITIES
To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: [http://www.uttyler.edu/wellness/rightsresponsibilities.php](http://www.uttyler.edu/wellness/rightsresponsibilities.php)

GRADE REPLACEMENT/FORGIVENESS
Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at [http://www.uttyler.edu/registrar](http://www.uttyler.edu/registrar). Each semester’s Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date is the deadline for many forms and enrollment actions that students need to be aware of. These include:

- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a "W" grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

STATE-MANDATED COURSE DROP POLICY
Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date).

Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

DISABILITY SERVICES
In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University offers accommodations to students with learning, physical and/or psychiatric disabilities. If you have a disability, including non-visible disabilities such as chronic diseases, learning disabilities, head injury, PTSD or ADHD, or you have a history of modifications or accommodations in a previous educational environment you are encouraged to contact the Student Accessibility and Resources office and schedule an interview with the Accessibility Case Manager/ADA Coordinator, Cynthia Lowery Staples. If you are unsure if the above criteria applies to you, but have questions or concerns please contact the SAR office. For more information or to set up an appointment please visit the SAR office located in the University Center, Room 3150 or call 903.566.7079. You may also send an email to cstaples@uttyler.edu

STUDENT ABSENCE DUE TO RELIGIOUS OBSERVANCE
Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.
STUDENT ABSENCE FOR UNIVERSITY-SPONSORED EVENTS AND ACTIVITIES
If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

SOCIAL SECURITY AND FERPA STATEMENT
It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

EMERGENCY EXITS AND EVACUATION
Everyone is required to exit the building when a fire alarm goes off. Follow your instructor’s directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

ACADEMIC DISHONESTY
At The University of Texas at Tyler students and faculty are responsible for maintaining an environment that encourages academic integrity. Students and faculty members are required to report an observed or suspected case of academic dishonesty immediately to the faculty member in charge of an examination, classroom or laboratory research project, or other academic exercise.

Since the value of an academic degree depends on the absolute integrity of the work done by the student for the degree, it is imperative that students maintain a high standard of individual honor in scholastic work. Scholastic dishonesty includes but is not limited to cheating, plagiarism, and collusion.

"Cheating" includes:
1. Copying from the paper of another student, engaging in written, oral or any other means of communication with another student, or giving aid to or seeking aid from another student when not permitted by the instructor;
2. Using material during an examination or when completing an assignment that is not authorized by the person giving the examination or making the work assignment;
3. Taking or attempting to take an examination for another student, or allowing another student to take an examination for oneself;
4. Using, obtaining, or attempting to obtain by any means, the whole or any part of, an unadministered examination or work assignment.

"Collusion" includes the unauthorized collaboration with another person in preparing written work that a student offers for credit.

"Plagiarism" includes the unacknowledged incorporation of the work of another person in work that a student offers for credit.

If you have any questions regarding plagiarism, please consult Chapter 8 of the Student Affairs Manual of Policy and Procedures.

This class will be conducted in full compliance with the UT Tyler "no tolerance" policies concerning documented cases of plagiarism and/or academic dishonesty. Any act of cheating or plagiarized work submitted will result in a grade of zero for that assignment and further disciplinary action may be taken. Please make use of the UT Tyler Writing Center if you have concerns about plagiarism.
# TENTATIVE COURSE SCHEDULE

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<thead>
<tr>
<th>Week</th>
<th>Start Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Aug 24</td>
<td>Review of the Cardiovascular and Autonomic Nervous Systems</td>
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<tr>
<td>2</td>
<td>Aug 31</td>
<td>Passive Effects of Gravity on the Cardiovascular System</td>
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<td>3</td>
<td>Sep 7</td>
<td>Reflex and Neural-Humoral Adjustments to Orthostasis</td>
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<td>4</td>
<td>Sep 14</td>
<td>Orthostatic Intolerance</td>
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<td>5</td>
<td>Sep 21</td>
<td>EXAM 1</td>
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<tr>
<td>6</td>
<td>Sep 28</td>
<td>Central Cardiovascular Adjustments to Acute Exercise</td>
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<td>7</td>
<td>Oct 5</td>
<td>Hemodynamics and Vascular Function</td>
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<td>8</td>
<td>Oct 12</td>
<td>Control of Regional Blood Flow During Dynamic Exercise</td>
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<td>9</td>
<td>Oct 19</td>
<td>Control of Blood Flow to Dynamically Active Muscles</td>
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<tr>
<td>10</td>
<td>Oct 26</td>
<td>Topic TBD</td>
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<tr>
<td>11</td>
<td>Nov 2</td>
<td>EXAM 2</td>
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<tr>
<td>12</td>
<td>Nov 9</td>
<td>Structure and Function of the Respiratory System</td>
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<tr>
<td>13</td>
<td>Nov 16</td>
<td>Control of Circulation and Respiration During Exercise</td>
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<tr>
<td>14</td>
<td>Nov 23</td>
<td>THANKSGIVING BREAK – NO CLASSES</td>
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<tr>
<td>15</td>
<td>Dec 7</td>
<td>FINAL EXAM (comprehensive)</td>
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**OTHER IMPORTANT DATES**
- September 4: Census Date; Last day to file a Grade Replacement Contract
- September 7: Labor Day holiday
- October 26: Last day to drop course with “W”
- November 2: Filing deadline for spring graduation
- November 23 – 28: Thanksgiving holiday (no class this week)