HHPK 450 – Exercise Physiology
Summer II, 2015

Instructor: Dr. Vipa Bernhardt
Office: Field House 006
Office Hours: TR 11:00-12:00 or by appointment
E-mail: Vipa.Bernhardt@tamuc.edu

Class Meeting Time: MTWR 9:00-10:50, FH 003
Lab Meeting Time: MW 11:00-12:50 (TA: Joseph Wolf)

COURSE INFORMATION

Textbook Required


Additional Resources

Peer-reviewed journal articles of the student’s choice related to exercise physiology. PubMed and Google Scholar via the TAMUC Gee Library’s access.

Course Description

Topics include neural control during physical activity, skeletal muscle contraction, pulmonary and circulatory physiology, gas exchange and transport, aerobic and anaerobic energy sources for muscular activity, temperature regulation during exercise, body composition and weight control. Prerequisites: BSc 251 and 252. Corequisites: HHPK 450L.

Learning Objectives

1. Examine procedures in conducting various exercise physiology measurements.
2. Explore the mechanisms of energy metabolism during exercise.
3. Examine the neural control of movement.
4. Explore the responses to exercise on the respiratory and cardiovascular systems.
5. Study the effects of temperature, altitude, ergogenic aids on performance.
6. Create a specific exercise prescription based on ACSM guidelines.
COURSE REQUIREMENTS

Quizzes and attendance

Unannounced quizzes may be given at the beginning of class. No make-up quizzes will be given, so be in class and on time. Some activities/quizzes will be graded, and some will not. Student attendance will be averaged into this category.

Tests

There are four (4) exams throughout the semester worth 100 points each. Exams will cover lectures, class activities, and the book.

Article Summaries

Each student will be required to write four (4) summaries of exercise physiology articles. Articles should be from journals such as Medicine and Science in Sports & Exercise, Athletic Training, etc. See rubric for specific requirements and formatting.

Exercise Prescription

Students will create a detailed exercise prescription based on a case study and information learned throughout the course. Assignment with specific requirements and case studies will be handed out in class on August 8th. Written exercise prescriptions are due on August 12th.

Laboratory

You must attend all labs. All lab write-ups are required and are due at the beginning of the next lab. The lab graduate assistant will conduct all labs, assign and collect homework, give quizzes, etc.

GRADING

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>1. Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>2. Tests (4)</td>
<td>40%</td>
</tr>
<tr>
<td>3. Article Summaries (4)</td>
<td>10%</td>
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<tr>
<td>4. Exercise Prescription (1)</td>
<td>10%</td>
</tr>
<tr>
<td>5. Labs</td>
<td>25%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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</table>

Grading Scale:  

- 100 – 90% A
- 89 – 80% B
- 79 – 70% C
- 69 – 60% D
- 59 – 0% F
TECHNOLOGY REQUIREMENTS

The following information on technological requirements has been provided to assist you in preparing to use technology successfully in this course. You should have access to a computer with:

- Internet access/connection – high speed recommended (not dial-up)
- Microsoft Office (more specifically, MS Word and PowerPoint)

You also have access to a personal MyLeo account and a MyLeo email address. This is the email address that I will use to send you information regarding this course. Please check it regularly, and be sure to send me emails from this address, also.

ACCESS AND NAVIGATION

Pearson LearningStudio (eCollege) Access and Log in Information

This course will be facilitated using Pearson LearningStudio, the learning management system used by Texas A&M University-Commerce. To get started with the course, go to: http://www.tamuc.edu/myleo.aspx. You will need your CWID and password to log in to the course. If you do not know your CWID or have forgotten your password, contact Technology Services at 903.468.6000 or helpdesk@tamuc.edu.

It is strongly recommended that you perform a “Browser Test” prior to the start of your course. To launch a browser test, login to Pearson LearningStudio, click on the ‘myCourses’ tab, and then select the “Browser Test” link under Support Services.

Pearson LearningStudio Student Technical Support

Texas A&M University-Commerce provides students technical support in the use of Pearson LearningStudio. Technical assistance is available 24 hours a day/7 days a week. If at any time you experience technical problems (e.g., you can't log in to the course, you can't see certain material, etc.) please contact the Pearson LearningStudio Help Desk, available 24 hours a day, seven days a week.

The student help desk may be reached by the following means 24 hours a day, seven days a week.

- Chat Support: Click on 'Live Support' on the tool bar within your course to chat with a Pearson LearningStudio Representative.
- Phone: 1-866-656-5511 (Toll Free) to speak with Pearson LearningStudio Technical Support Representative.
- Email: helpdesk@online.tamuc.org to initiate a support request with Pearson LearningStudio Technical Support Representative.
Accessing Help from within Your Course: Click on the 'Tech Support' icon on the upper left side of the screen inside the course. You will then be able to get assistance via online chat, email or by phone by calling the Help Desk number noted below.

Note: Personal computer problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, an Internet cafe, or a bookstore, such as Barnes & Noble, etc.

Policy for Reporting Problems with Pearson LearningStudio

Should students encounter Pearson LearningStudio based problems while submitting assignments/discussions/comments/exams, the following procedure MUST be followed:

1. Students must report the problem to the help desk. You may reach the helpdesk at helpdesk@online.tamuc.org or 1-866-656-5511
2. Students MUST file their problem with the helpdesk and obtain a helpdesk ticket number
3. Once a helpdesk ticket number is in your possession, students should email me to advise me of the problem and to provide me with the helpdesk ticket number
4. At that time, I will call the helpdesk to confirm your problem and follow up with you

PLEASE NOTE: Your personal computer/access problems are not a legitimate excuse for filing a ticket with the Pearson LearningStudio Help Desk. You are strongly encouraged to check for compatibility of your browser BEFORE the course begins and to take the Pearson LearningStudio tutorial offered for students who may require some extra assistance in navigating the Pearson LearningStudio platform. ONLY Pearson LearningStudio based problems are legitimate.

Internet Access

An Internet connection is necessary to participate in discussions and assignments, access readings, transfer course work, and receive feedback from your professor. View the requirements as outlined in Technology Requirements above for more information.

myLeo Support

Your myLeo email address is required to send and receive all student correspondence. Please email helpdesk@tamuc.edu or call us at 903-468-6000 with any questions about setting up your myLeo email account. You may also access information at https://leo.tamuc.edu.

Learner Support

Go to the following link One Stop Shop- created to serve you by attempting to provide as many resources as possible in one location.
Go to the following link Academic Success Center- focused on providing academic resources to help you achieve academic success.
COMMUNICATION AND SUPPORT

Interaction with Instructor Statement:

The best way to reach me is via email (Vipa.Bernhardt@tamuc.edu) as I check if frequently. I will reply within 24 hours to your MyLeo email address. Please be courteous and professional in all of your interactions with me and fellow students.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course specific procedures:

- Classes will start promptly. Students are expected to be in class, seated, on time.
- Regular attendance is mandatory. University absences will be handled on an individual basis and should be dealt with prior to the date of absence. If you have a University or a legal excuse for an absence, you must inform the instructor prior to the start of class. Should you miss a lecture, you must obtain lecture notes from other students as exam questions will come from lectures, texts, selected readings, discussions, handouts, etc.
- Please see syllabus for due dates on all assignments. Late assignments will incur a 20% point deduction per day late.
- Students are expected to actively participate during each class period.

Academic Honesty Policy

Texas A&M University-Commerce does not tolerate plagiarism and other forms of academic dishonesty. Conduct that violates generally accepted standards of academic honesty is defined as academic dishonesty. "Academic dishonesty" includes, but is not limited to, plagiarism (the appropriation or stealing of the ideas or words of another and passing them off as one's own), cheating on exams or other course assignments, collusion (the unauthorized collaboration with others in preparing course assignments), and abuse (destruction, defacing, or removal) of resource material. Be aware that the intent to deceive the reader does not have to be present for plagiarism to occur. For more information, please go to http://www.plagiarism.org/. If you are in any doubt as to whether your work constitutes plagiarism or academic dishonesty, please discuss this with me confidentially.

How to succeed in this class:

1. Be in class every day, with your cell phone off and your brain engaged!
2. Study the assigned material before class!
3. Do quality work!
4. Take responsibility for your own grade; I do not give you a grade—you earn a grade.
5. Study the material at least two hours for every hour in class!
6. No excuses, just results!
University specific procedures:

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. This course will cover topics related to health and human performance. Students may have widely differing views. Students should feel comfortable discussing their individual views and experiences concerning each subject. Students should also respect each other’s differences and points of view. If the instructor deems that individual students are not being respectful toward each other or the instructor, then these students will be asked to drop the course. Please refer to pages 42–45 of the TAMU-C Students’ Guidebook Codes of Conduct for details.

ADA statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

A&M-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.
# TENTATIVE COURSE OUTLINE

This schedule is tentative and is subject to change.

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<thead>
<tr>
<th>Date</th>
<th>Chapters</th>
<th>Class Content</th>
<th>Assignments due</th>
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<tbody>
<tr>
<td>7/13</td>
<td>0, 1</td>
<td>Syllabus and Work, power, energy expenditure</td>
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<tr>
<td>7/14</td>
<td>2</td>
<td>Control of the internal environment</td>
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<tr>
<td>7/15</td>
<td>3</td>
<td>Bioenergetics</td>
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<td>7/16</td>
<td>4</td>
<td>Exercise metabolism</td>
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<td>7/20</td>
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<td><strong>TEST 1</strong></td>
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<td>7</td>
<td>Nervous system</td>
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<td>7/22</td>
<td>7, 8</td>
<td>Nervous system and skeletal muscle</td>
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<td>8</td>
<td>Skeletal muscle</td>
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<td>7/27</td>
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<td>Muscular strength training</td>
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<td>7/28</td>
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<td><strong>TEST 2</strong></td>
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<td>Respiratory system</td>
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<td>Respiratory and cardiovascular system</td>
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<td>Cardiovascular system</td>
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<td>Cardiorespiratory training</td>
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<td>8/5</td>
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<td><strong>TEST 3</strong></td>
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<td>8/6</td>
<td>16</td>
<td>Exercise prescription</td>
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<td>18</td>
<td>Body composition &amp; nutrition</td>
<td>Article summary 4</td>
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<td>8/12</td>
<td>24</td>
<td>Exercise at Altitude</td>
<td>Exercise prescription</td>
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<tr>
<td>8/13</td>
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<td><strong>FINAL EXAM</strong></td>
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