

HHPK 545.01E Advanced Exercise Physiology

COURSE SYLLABUS: FALL 2018

INSTRUCTOR INFORMATION

Instructor:Dr. Vipa BernhardtOffice Location:Field House 006Office Hours:By appointment

Email Address: Vipa.Bernhardt@tamuc.edu

COURSE INFORMATION

Textbook(s) Required

Required Materials

 Peer-reviewed journal articles of the instructor's and student's choice related to exercise physiology throughout the semester.

Course Description

Application of basic physiological concepts to the programs of kinesiology, emphasis upon the physiological effects and adjustments occurring from participation in physical activity. Major factors in conditioning, fatigue, diet, and physical fitness are considered.

Student Learning Outcomes

- 1. To gain and/or deepen knowledge of the physiological responses exercise
- 2. To be able to critically evaluate journal articles
- 3. To hone presentation skills
- 4. To engage in discussion and interaction in various topics in exercise science

Tentative topics to be discussed:

- Pulmonary responses to exercise
- Cardiovascular responses to exercise
- Cardiorespiratory training
- Neural control
- Perception of effort
- Temperature regulation during exercise
- Hydration during exercise
- Other current topics of interest

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Using the learning management system D2L, navigating the library databases, using computer software (e.g., Microsoft Word and PowerPoint, Adobe Acrobat).

Instructional Methods

This course will be heavily student-led, thus all students need to be prepared for the discussions to occur in class. Research articles will be provided (either by instructor and/or students) one week in advance to allow for personal engagement with the text prior to coming to class.

Student Responsibilities or Tips for Success in the Course

Student leaders are expected to prepare engaging presentations and discussion questions, all others are expected to actively participate. Reading research articles is an acquired skill that takes practice. Weekly readings should take 1-2 hours. Preparing for student-led presentations can take 2-4 hours.

GRADING

Total:	100%
Journal Article Presentation (individual)	30%
Journal Article Presentation (group)	30%
Group debate	20%
Class Participation	20%

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80% - 89%

C = 70% - 79%

D = 60%-69%

F = 59% or Below

Assessments

1. Class Participation:

This class will rely heavily on your participation in class. Discussions within small groups or the whole class are required. For effective discussion, students must read the articles before class.

2. Group Debates:

Students will be divided into two groups, debating two opposing views on the chosen topic. Groups will be responsible for finding relevant journal articles to use in the argumentation.

The syllabus/schedule are subject to change.

3. Journal Article Presentations:

Each student will prepare two (2) presentations about a journal article of their choice. The first time, students will work in groups of two or three (randomized selection). The second time will be individually.

Select an interesting journal article for this presentation/discussion. Email the article to the professor at least one week before your scheduled presentation to be made available to the other students.

Explain the physiological principles to be discussed by using other sources besides the article (textbooks, other articles, etc). Present the article, including the study background, methodology, results, and the author's discussion. Then provide your own critique of the study (e.g. is the study valid? Are the conclusions drawn supported by the data presented? Benefits vs risks/costs?). End with conclusions, implications, and future directions. Throughout the presentation, encourage discussion with the class by asking thought-provoking questions.

TECHNOLOGY REQUIREMENTS

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Desktop Support

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or point release of that major version) and the previous major version of iOS (the latest minor or point release of that major version). For example, as of June 7, 2017, D2Lsupports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - o 512 MB of RAM, 1 GB or more preferred
 - o Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
 - Sound card, which is usually integrated into your desktop or laptop computer
 - Speakers or headphones.
 - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at:
 JAVA web site http://www.java.com/en/download/manual.jsp
- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.

JavaScript is enabled.

Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
 - Adobe Reader https://get.adobe.com/reader/
 - o Adobe Flash Player (version 17 or later) https://get.adobe.com/flashplayer/
 - o Adobe Shockwave Player https://get.adobe.com/shockwave/
 - o Apple Quick Time http://www.apple.com/quicktime/download/
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office.
 Microsoft Office is the standard office productivity software utilized by faculty,
 students, and staff. Microsoft Word is the standard word processing software,
 Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is
 the standard presentation software. Copying and pasting, along with
 attaching/uploading documents for assignment submission, will also be required. If
 you do not have Microsoft Office, you can check with the bookstore to see if they
 have any student copies.

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection 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, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Brightspace Support

Need Help? Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words "click here" to submit an issue via email.



System Maintenance

Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm-6 am CST.

Interaction with Instructor Statement

The best way to reach me is via email (Vipa.Bernhardt@tamuc.edu) as I check it frequently. In most cases, I will reply within 24 hours. Please email me your chosen journal article (for student-led presentations) at least one week before class.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Attendance is mandatory. If you have a University or a legal excuse for an absence, inform the instructor in advance.

The syllabus/schedule are subject to change.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

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. The Code of Student Conduct is described in detail in the Student Guidebook.

 $\underline{http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx}$

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette
<a h

TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

ADA Statement

Students with Disabilities

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- Room 162 Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

 $\underline{http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServ}$

ices/

Nondiscrimination Notice

Texas A&M University-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.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

COURSE OUTLINE / CALENDAR

Week	Date	Class Content
1	8/28	Syllabus and Intro
2	9/4	Instructor-led presentation
3	9/11	Instructor-led presentation
4	9/18	Group debate
5	9/25	Student pair-led presentation
6	10/2	Student pair-led presentation
7	10/9	Student pair-led presentation
8	10/16	Student pair-led presentation
9	10/23	Student pair-led presentation
10	10/30	Group debate
11	11/6	Individual student-led presentations
12	11/13	Individual student-led presentations
13	11/20	Individual student-led presentations
14	11/27	Individual student-led presentations
15	12/4	Individual student-led presentations