
Course Description:
This course is designed to explore concepts of physiological functions of the human body during physical activity, exercise, and stress to include the following: cardiovascular, respiratory, muscular, and neurological control of movement; ergogenic aids and performance; nutrition; control and maintenance of body weight; sex differences and cardiovascular disease; and physical activity. Students will describe, explain and explore how the body performs and responds to physical activity.

Course Objectives:
1. Explore the relationships between exercise physiology and sports / physical education.
2. Explore the specific physical responses of the body to short- and long-term bouts of exercise.
3. Explore the mechanisms of energy metabolism during exercise.
4. Examine procedures and protocol in conducting various exercise physiology measurements.
5. Explore the relationship among variables such as temperature, age, and gender to exercise.
6. Study the effects of ergogenic aids to athletic performance.
7. Apply physiological concepts to human exercise in a wide variety of activities including improvement of performance in motor activities, evaluation of exercises for special purposes, design of basic conditioning programs, and evaluation of equipment used in athletics and other forms of exercise.

Course Requirements:
**Class Participation, Group/ Homework Activities, Quizzes**
Perfect attendance and an A or B average going into the test will allow the student to be exempt from the final exam. Students will participate in several class, group, and homework activities (including quizzes) throughout the semester. Some will be graded, and some will not. Student attendance will be averaged into this category. All attendance and activities will be worth 150 points (or 15% of your final grade).

**Tests:**
Students will take 4 tests throughout the semester worth 100 points each. Tests will cover lectures, class activities, and the book. (400 points, 40% of final grade)

**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* and *Research Quarterly for Exercise and Sport, Journal of Strength and Conditioning Research*. Each article summary should be 1.5-2.0 pages typed, Times New Roman Font, with one-inch margins. Reference should be listed at the top of the summary in APA format. Each article summary is worth 25 points each. (10% of your final grade)
**Fitness Prescription:**
Students will create a detailed exercise prescription based on a case study and information learned throughout the course. (10% of your grade)

**Laboratory Experiences:**
You must attend all labs. All lab write-ups are required and are due at the beginning of the next lab. Mr. Robert Reed, lab graduate assistant, will conduct labs and collect all lab write-ups from you. Laboratory write-ups will consist of **25% of your final grade.**

**Course Grading:**
1. Class, group, homework, quizzes 150 points 15%
2. Tests (4) 400 points 40%
3. Article Summaries (4) 100 points 10%
4. Fitness Prescription (1) 100 points 10%
5. Labs 250 points 25%
**Total:** 1000 points 100%

**Grading Scale:**
- 100 – 90% A
- 89 – 80% B
- 79 – 70% C
- 69 – 60% D
- 59 – 0% F

**Student Conduct:**
This course will cover exercise physiology. Students should feel comfortable discussing their individual views and experiences concerning each subject. Students should also respect each other’s differences and respect each other as each issue is discussed. **If the instructor deems that individual students are not being respectful toward each other or the instructor, then these students will be asked to leave (and eventually drop the course if the negative conduct continues).** Please refer to pages 42 – 45 of the TAMU-C Student Guidebook’s Codes of Conduct for details.

**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 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu

**Plagiarism/academic dishonesty**---Plagiarism is copying another’s work as your own without proper acknowledgment. Be aware that the intent to deceive the reader does not have to be present for plagiarism to occur. Also ignorance of the definition of plagiarism is also not an excuse and will result in the same consequences as for someone who has knowledge of it. Plagiarism is also not restricted to copying the writings of others, nor to stealing from established authors; it also includes the ideas of your fellow students. If you plagiarize in this class (including cheating on tests) you will receive an automatic “F”. If you are in any doubt as to whether your work constitutes plagiarism or academic dishonesty, please discuss this with me confidentially.
<table>
<thead>
<tr>
<th>Week</th>
<th>Chapters</th>
<th>Topics</th>
<th>Assignments Due (Thursdays except for tests.)</th>
</tr>
</thead>
</table>
| 1-4  | Intro. and 1 | Syllabus  
Introduction to Exercise Physiology  
Structure and Function of Exercising Muscle |  |
| 2 & 3 | Metabolism and Neurological Control of Exercising Muscle | Article Summary description and walkthrough |
| 4    | Hormonal Control |  |
|      | **Test 1** |  |
| 5-8  | 5, 6 | Energy Expenditure and Fatigue  
The Cardiovascular System and Its Control | Article Summary 1 |
| 7, 8 | Respiratory Regulation During Exercise  
Cardiorespiratory Responses to Acute Exercise | Article Summary 2 |
|      | **Test 2** |  |
| 9-12 | 9, 10 | Principles of Exercise Training  
Adaptations to Resistance Training / Aerobic Training |  |
| 11, 12, 13 | Anaerobic Training  
Exercise in Hot and Cold Environments: Thermoregulation | Article Summary 3 |
|      | **Test 3** |  |
| 13-16 | 14, 15, 16 | Training for Sport  
Body Composition and Nutrition for Sport  
Ergogenic Aids |  |
| 17, 18 | Children and Adolescents in Sport and Exercise  
Aging in Sport and Exercise | Article Summary 4 |
|      | **Test 4** |  |
| 19   | Exercise Prescription |  |
| 19   | Exercise Prescription | Exercise Prescriptions Due |