

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

American Public University System

The Ultimate Advantage is an Educated Mind

School of Management

Department of Sports and Health Sciences

Course Number: SPHS 501

Course Name: Advance Sport & Exercise Physiology

Credit Hours: 3

Length of Course: 8 Weeks

Prerequisite: None

Table of Contents

Instructor Information	Evaluation Procedures
Course Description	Grading Scale
Course Scope	Course Outline
Course Objectives	Policies
Course Delivery Method	Academic Services
Course Materials	Selected Bibliography

Instructor Information

Instructor:

Email:

Phone:

Fax:

Office Hours:

[Table of Contents](#)

Course Description (Catalog)

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

This graduate health sciences course examines with the physiology of the human body during sports and exercise, including the physiological adaptations that occur in response to physical activity. Knowledge and application of scientific principles at the graduate level are necessary to develop peak performance in athletes and maintain health and fitness in the general population - quantitatively and qualitatively improving life.

[Table of Contents](#)

Course Scope

This graduate level course is designed to provide students with a advanced knowledge of Sport and Exercise Physiology as it relates to fitness, performance and health. Topics include the history of exercise physiology, neuromuscular, metabolic, cardiovascular, pulmonary, and endocrine responses to exercise, the methods for improving exercise performance and special considerations that are specific to the science of exercise physiology. It serves to enlighten students on the human adaptive response to exercise, addressing the questions: How *exactly* does the body respond to intense exercise? How do the muscles work? What role do the heart, lungs and central nervous system (CNS) play in the exercise process? How exercise performance measured? What are the metabolic and physiological demands of resistance training exercises? What are the physiological differences between men and women as it relates to training? And how can exercise either prevent or exacerbate the disease process? Through a series of reading assignments, essay projects, and knowledge assessments, the student will be able to answer these questions.

[Table of Contents](#)

Course Objectives

After successfully completing this course, students will fulfill the following **Learning Objectives** (L.O.):

1. Analyze the field of exercise physiology related to fitness, performance & health
2. Apply knowledge of exercise physiology with e- learning classmates
3. Compare & contrast functions of the human body related to exercise physiology
4. Explore how the body adapts to physical activity during sports & exercise
5. Evaluate the physiological responses to exercise in hot and cold environments
6. Assess the impact of exercise at different altitudes and identify health risks
7. Assess body composition and examine the role of diet in athletic effectiveness
8. Identify the various drugs in sports and explore and discuss hormonal agents.
9. Demonstrate comprehension skills through written assignments
10. Synthesize information from the field of Sport & Exercise Physiology and apply this knowledge in the form of a scholarly research paper.

[Table of Contents](#)

Course Delivery Method

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

This SPHE 501 Sport & Exercise Physiology Course is delivered via distance learning will enable students to complete academic work in a flexible manner, completely online. Course materials and access to an online learning management system will be made available to each student. Online assignments are due by Sunday evening of the week as noted and include Discussion Board questions (accomplished in groups through a threaded discussion board), examination, and individual assignments submitted for review by the Faculty Member). Assigned faculty will support the students throughout this eight-week course.

[Table of Contents](#)

Course Materials

Required Course Textbook:

Book Number	Authors	Book Title	Publication Info	ISBN
SPHE 501 -1	Powers, Scott, Howley, E: 8 th Editiom	<i>Exercise Physiology: Theory & Application to Fitness & Performance</i>	McGraw - Hill	978-0-07-802253-1

Required Readings:

See Course Outline

Additional Resources

In the Resources folder of the online classroom there are additional course materials and up to date APA handouts.

Websites

In addition to the required course texts the following public domain Websites are useful. Please abide by the university's academic honesty policy when using Internet sources as well. Note web site addresses are subject to change.

Site Name	Website URL/Address
The OWL at Purdue	http://owl.english.purdue.edu/
APA Style Homepage	http://www.apastyle.org/index.aspx
American Society of Exercise Physiologists	http://www.asep.org/node/60
North American Society of Sports Management	http://www.nassm.org/
National Health & Exercise Association	http://www.nhesa.org/

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

[Table of Contents](#)

Evaluation Procedures

Information on each of these deliverables can be found in the document: How this course works and the Weekly Assignment Guides.

Grade Instruments	Points
Writing Assignment #1 Week 1	15
Writing Assignment #2 week 3	20
Writing Assignment #3 week 6	20
Final Research Project	50
Quiz 1 (week 2)	25
Quiz 2 (week 4)	25
WK1 Discussion Forum Questions Week #1 (2 Questions)	6
WK2 Discussion Forum Questions (2 Questions)	6
WK3 Discussion Forum Questions (2 Questions)	6
WK4 Discussion Forum Questions (2 Questions)	6
WK5 Discussion Forum Questions (2 Questions)	6
WK6 Discussion Forum Questions (2 Questions)	6
WK7 Discussion Forum Questions (2 Questions)	6
WK8 Discussion Forum Questions (1 Question)	3
Total:	200

[Table of Contents](#)

8 – Week Course Outline

Please see the [Student Handbook](#) to reference the University’s grading scale

[Table of Contents](#)

<u>Week</u>	<u>Topic</u>	<u>Learning Objectives</u>	<u>Readings</u>	<u>Assignment</u>
1	Introduction to Exercise & Sport Physiology Physiology of Health &	<u>1, 2, 3</u>	Text Readings: Exercise Physiology: Chapters 0 & 2	Discussion Forum #1 Discussion Forum #2

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

	Fitness		<p>Power Point Slides: Chapters 0 and 2</p> <p>Weekly Guide:</p> <ul style="list-style-type: none"> • Introduction • Week 1 Lesson 	Writing Assignment #1
2	Bioenergetics, Exercise Metabolism, Hormonal Response & Measurement of Energy Expenditure	<u>1, 2, 3, 4,5</u>	<p>Text Readings: Exercise Physiology Chapters 3 -6.</p> <p>Power Point Slides: Chapters - 3-6</p> <p>Weekly Guide: Weekly 2 Lesson</p>	<p>Discussion Forum #1 Discussion Forum #2</p> <p>Quiz1</p>
3	The Nervous System, Skeletal Structure & Circulatory Response	<u>1, 2, 3,9</u>	<p>Text Readings: Exercise Physiology: Chapters 7-9</p> <p>Power Point Slides: Chapters 7-9</p>	<p>Discussion Forum #1 Discussion Forum #2</p> <p>Writing Assignment #2</p>
4	Respiration during Exercise, Acid Based Balance, Temp Regulation & The Physiology of Training	<u>1, 2, 3,5,9</u>	<p>Text Readings: Exercise Physiology: Chapters 10-13</p> <p>Power Point Slides: Chapters 10-13</p>	<p>Discussion Forum #1 Discussion Forum #2</p> <p>Quiz 2</p>
5	Patterns in Health & Disease & Evaluating Cardio-respiratory Fitness	<u>1, 2, 3, 4,5</u>	<p>Text Readings: Exercise Physiology: Chapters 14-15</p> <p>Power Point Slides: Chapters 14-15</p>	<p>Discussion Forum #1 Discussion Forum #2</p>
6	Exercise Prescriptions, Special Populations, Body Composition &	<u>1, 2, 3,5,9</u>	<p>Text Readings: Exercise Physiology: Chapters 16-19</p>	<p>Discussion Forum #1 Discussion Forum #2</p>

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

	Factors Affecting Performance		Power Point Slides: Chapters 16-19	Writing Assignment #3
7	Laboratory Assessment of Human Performance, Training Principles & Training for Females, Children & Special Populations	<u>6,7,8,9</u>	Text Readings: Exercise Physiology: Chapters 20-23 Power Point Slides: Chapters 20-23	Discussion Forum #1 Discussion Forum #2
8	Exercise Environments & Ergogenic Aids	<u>6,8,9,10</u>	Text Readings: Exercise Physiology: Chapters 24-25 Power Point Slides: Chapters 24-25	#1 DB & Final paper

[Table of Contents](#)

Policies

Please see the [Student Handbook](#) to reference all University policies. Quick links to frequently asked question about policies are listed below.

[Drop/Withdrawal Policy](#)

[Plagiarism Policy](#)

[Extension Process and Policy](#)

[Disability Accommodations](#)

Writing Expectations

Describe your writing expectations.

Citation and Reference Style

Attention Please: Students will follow the APA 6th Edition as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA 6th Edition.

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

Late Assignments

Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. As adults, students, and working professionals I understand you must manage competing demands on your time. Should you need additional time to complete an assignment please contact me before the due date so we can discuss the situation and determine an acceptable resolution. Routine submission of late assignments is unacceptable and may result in points deducted from your final course grade.

Netiquette

Online universities promote the advance of knowledge through positive and constructive debate--both inside and outside the classroom. Discussions on the Internet, however, can occasionally degenerate into needless insults and "flaming." Such activity and the loss of good manners are not acceptable in a university setting--basic academic rules of good behavior and proper "Netiquette" must persist. Remember that you are in a place for the fun and excitement of learning that does not include descent to personal attacks, or student attempts to stifle the discussion of others.

- **Technology Limitations:** While you should feel free to explore the full-range of creative composition in your formal papers, keep e-mail layouts simple. The Sakai classroom may not fully support MIME or HTML encoded messages, which means that bold face, italics, underlining, and a variety of color-coding or other visual effects will not translate in your e-mail messages.
- **Humor Note:** Despite the best of intentions, jokes and--especially--satire can easily get lost or taken seriously. If you feel the need for humor, you may wish to add "emoticons" to help alert your readers: ;-), :), ☺

Disclaimer Statement

Course content may vary from the outline to meet the needs of this particular group.

[Table of Contents](#)

Online Library

The Online Library is available to enrolled students and faculty from inside the electronic campus. This is your starting point for access to online books, subscription periodicals, and Web resources that are designed to support your classes and generally not available through search

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

engines on the open Web. In addition, the Online Library provides access to special learning resources, which the University has contracted to assist with your studies. Questions can be directed to librarian@apus.edu.

- **Charles Town Library and Inter Library Loan:** The University maintains a special library with a limited number of supporting volumes, collection of our professors' publication, and services to search and borrow research books and articles from other libraries.
- **Electronic Books:** You can use the online library to uncover and download over 50,000 titles, which have been scanned and made available in electronic format.
- **Electronic Journals:** The University provides access to over 12,000 journals, which are available in electronic form and only through limited subscription services.
- **Tutor.com:** AMU and APU Civilian & Coast Guard students are eligible for 10 free hours of tutoring provided by APUS. [Tutor.com](http://tutor.com) connects you with a professional tutor online 24/7 to provide help with assignments, studying, test prep, resume writing, and more. Tutor.com is tutoring the way it was meant to be. You get expert tutoring whenever you need help, and you work one-to-one with your tutor in your online classroom on your specific problem until it is done.

Request a Library Guide for your course (<http://apus.libguides.com/index.php>)

The AMU/APU Library Guides provide access to collections of trusted sites on the Open Web and licensed resources on the Deep Web. These are specially tailored for academic research at APUS:

- Program Portals contain topical and methodological resources to help launch general research in the degree program. To locate, search by department name or navigate by school.
- Course Lib-Guides narrow the focus to relevant resources for the corresponding course. To locate, search by class code (e.g., SOCI111) or class name.

If a guide you need isn't available yet, let us know by emailing the APUS Library:

librarian@apus.edu

[Table of Contents](#)