# Florida Atlantic University Department of Exercise Science and Health Promotion Exercise Physiology 2 APK4112 Fall 2018 – 2 credits

Class Time: XXX Course: APK 4112

**Prerequisite:** APK 4110 Exercise Physiology and APK 4110L Exercise Physiology Lab.

**Textbook:** Exercise Physiology (APK 4110) edited by Chun-Jung Huang. ISBN: 978-1-308-64250-5

# **Course Description:**

To further the underlying knowledge of physiological function as it pertains to exercise. Perspectives and data will be explored related to environmental aspects of exercise with special attention paid to training at altitude and the effects of microgravity on muscle loss and bone density.

## **Course Objectives:**

Students should be able to demonstrate an in-depth knowledge of advanced exercise physiology principles. This includes the effects of the environment on exercise performance and well-being. The effects of exercise at altitude and underwater. Further, students will gain knowledge related to the effects of exercise in various diseases states and the effects of microgravity on physiological function.

## **Course Requirements:**

#### Regular Exams: 3 Exams, 100 Points Each (Total: 300)

will be multiple choices and fill-in-the-blanks. You will be required to "understand" the material and be able to answer "how" and "why" from that information, not just memorize facts. There will be NO make-up tests or early exams – NO EXCEPTION!

#### Final Exam: 100 Points

The final exam is worth a total of 100 points. This exam will be cumulative and will follow the same structure as regular exams.

**Quizzes:** 3 Quizzes 20 Points Each: 60 Points total These will be distributed throughout the semester.

#### **Grading Policy:**

The final grade for this class will be based upon:

Quizzes (3) Total	60 points
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Final Exam (1)	100 points
Exams (3)	300 points

#### **Grading Scale:**

93.0-100% = A	73.0- 77.9%=C
90.0- 92.9%=A-	70.0-72.9% = C-
88.0- 89.9%=B+	68.0- 69.9%=D+
83.0- 87.9%=B	63.0- 67.9%=D
80.0- 82.9%=B-	60.0 - 62.9%=D-
78.0- 79.9%=C+	< 60.0% = F

#### **Attendance:**

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance.

Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absence and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

#### **HONOR CODE** (4.001):

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty, including cheating and plagiarism, is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the University community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information:

http://wise.fau.edu/regulations/chapter4/4.001\_Code\_of\_Academic\_Integrity.pdf

## **STUDENT CODE OF CONDUCT** (4.007):

"The University's Student Code of Conduct is an integral part of the educational mission of the University, emphasizing the development of each individual's acceptance of his or her own

personal and social responsibilities and to ensure fairness and due process for all students. Since behavior which is not in keeping with standards acceptable of the University community is often symptomatic of attitudes, misconceptions, and emotional crises; reeducation and rehabilitative activities are essential elements of the disciplinary process.

A humanistic approach is employed. The University's Student Code of Conduct is designed to provide and help maintain an atmosphere within the University community that is conducive to academic pursuits. Serious action against a student, such as separation, is considered and invoked only when other remedies fail to meet the needs of the University's mission."

#### STUDENTS WITH DISABILITIES:

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) located in Boca Raton – SU 133 (561-297-3880), in Davie – MOD I (954-236-1222), in Jupiter – SR 117 (561-799-8585), or at the Treasure Coast – CO 128 (772-873-3305), and follow all OSD procedures.

## Counseling and Psychological Services (CAPS) Center:

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counselling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, visit the CAPS website: www.fau.edu/counseling/

**APK 4112: Topics Covered** 

Day	Topic
Week 1	Acute Response to Exercise in Altitude
Week 2	Acclimation to Altitude
Week 3	Altitude and Illness
Week 4	Air Pollution and Exercise
Week 5	EXAM #1
Week 6	Circadian Rythm
Week 7	Hyberbaric Environments
Week 8	Hyberbaric Continued
Week 9	EXAM #2
Week 10	Effects of Microgravity on Physiological Function
Week 11	Exercise Strategies in Microgravity
Week 12	Performance Effects of Jet-Lag

Week 13	Exercise Oncology
Week 14	Exercise and Neurodegenerative Disease
Week 15	Programming and Periodization Readings
Final Exam Week	Cumulative Final Exam