

**Florida Atlantic University**  
**Department of Exercise Science and Health Promotion**  
**PEP 4138: Applications of Training Physiology 2**  
**CRN# 14032**  
**Fall 2018 – 3 credits**

Class Time: W 5:00-6:20pm (In-Person or Online), M-Online  
Location: ED 116  
Course: PEP 4138, CRN: 14032  
Instructor: Dr. Michael C. Zourdos, Ph.D., CSCS  
Office: FH11A Room 126A/GY 170 (Muscle Lab), Boca Campus  
Office hours: W: 3:00pm-5:00pm, Th: 5:00pm-7:00pm  
Contact: 561-297-1317  
Email: mzourdos@fau.edu

**Prerequisite:** PEP 3136 Leadership II, PET 4351 Exercise Physiology, PET 4551 Fitness Assessment and Exercise Prescription

**Recommended Text: Essentials of Strength Training and Conditioning, 3<sup>rd</sup> Edition**  
Baechle, Earle, (Eds.); Human Kinetics (2008) ISBN: 978-0736058032

**Course Description:**

To continue to bridge the gap between scientific principles and application into practice. Program design, and applied principles of bodily systems (i.e. muscle and endocrine) will be discussed in a manner that can practically improve athletic performance.

This class is web-assisted. The syllabus, handouts, assignments, and class lectures will appear on Canvas. To access these materials, sign on to <http://canvas.fau.edu>. Using Canvas in this course does not rule out your requirement to attend all lectures and class meetings.

**Course Objectives:**

Demonstrate an in-depth knowledge of exercise physiology as it relates to training athletes, with emphasis on the neuromuscular and bioenergetic adaptations that take place with intense training.

The student should be able to demonstrate knowledge of exercise specificity and apply this knowledge in planning training regimens that are specific for the development of both aerobic and anaerobic capacity, as well as muscular strength, endurance and power for specific team and individual sports or varying performance levels and specific athletic populations.

**Course Requirements:**

**Regular Exams: 3 Exams, 50 Points Each (Total: 150)**

There will be 3 regular exams, each worth 50 points. Exams will consist of short response/definition questions (i.e. one or two sentence answers). All exams will be online and

the exam will be open for exactly 90 minutes (i.e. slightly longer than the duration of class) for you to take anytime starting at midnight and ending at 11:59pm on the day specified.

**Final Exam: 80 Points**

The final exam is worth a total of 80 points. This exam will be cumulative and will follow the same structure as regular exams. You will have 150 minutes to take the final exam.

**Quizzes: 2 Quizzes 30 Points Each: 60 Points total**

3 quizzes will be administered however, the lowest quiz will be dropped. Therefore, only 2 quizzes will count toward the final score, with each quiz accounting for 30 points. Since the lowest score will be dropped, quizzes **cannot be made up for any reason**. Quizzes will be available online for 45 minutes for you to take anytime starting at midnight and ending at 11:59pm on the day specified.

**Online Assessment Policy**

Very specific instructions for how to take the online exams will be provided. There is no excuse for not taking and finishing the exams on time. Any reason related to the ‘internet not working’ is not valid. Make sure you are on a secure connection. If this means you need to come to campus and take the quiz or exams in the library, then you should do so. If a quiz or exam is not taken during the specified day then the student will receive a 0.

All quizzes and exams online are open notes.

**Class Lecture Style**

Power point slides will be posted to correspond with every lecture, however, you will NOT be tested on the slides outside of what is covered in the lecture and the slides will NOT be used in class. You MUST take notes during the lecture as everything discussed in lecture is fair game for an exam. The slides are simply for your own reading to supplement the lecture. All questions/comments/discussion are encouraged during lecture.

**Grading Policy:**

The final grade for this class will be based upon:

Exams (3)	150 points
Final Exam (1)	80 points
<u>Quizzes (2)</u>	<u>60 points</u>
<b>Total</b>	<b>290 points</b>

**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.

**Course Policies:**

1. Show up on time.
2. Pay Attention.
3. Enjoy science.
4. It's not that hard.

**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](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/](http://www.fau.edu/counseling/)

### PEP 4138: Applications of Training Physiology 2, fall 2018 Outline, *Subject to Change*

Date	Day	Topic
8/20	M	<i>Read Repeated Bout Effect Publication</i>
8/22	W	<i>Introduction / Skeletal Muscle Physiology and Plasticity</i>
8/27	M	<i>Review Endocrine Slides</i>
8/29	W	<i>Endocrine Responses to Resistance Training and Rest Intervals</i>
9/3	M	LABOR DAY
9/5	W	<i>Review for Quiz #1 and Exam #1</i>
9/10	M	<i>Quiz #1 Online (Muscle and Endocrine Lectures)</i>
9/12	W	<i>Exam #1 ONLINE (Muscle and Endocrine Lectures)</i>
9/17	M	<i>Readings and Review Slides for Warm-Up Recommendations</i>
9/19	W	<i>Warm-Up Recommendations</i>
9/24	M	<i>Readings and Review Slides Concurrent Training</i>
9/26	W	<i>Concurrent Training</i>
10/1	M	<i>Review Concurrent Slides</i>
10/3	W	<i>Quiz #2 Online (Warm-Up and Concurrent)</i>
10/8	M	<i>Programming and Periodization Readings</i>
10/10	W	<i>Exam #2 ONLINE (Warm-Up and Concurrent)</i>
10/15	M	<i>Programming and Periodization Readings</i>
10/17	W	<i>Periodization Design, Integration of Models, Autoregulation, Resistance Training RPE</i>
10/22	M	<i>Programming and Periodization Readings</i>
10/24	W	<i>Periodization Design, Integration of Models, Autoregulation, Resistance Training RPE</i>

10/29	M	<i>Programming and Periodization Readings</i>
10/31	W	<i>Quiz #3 (Programming and Periodization)</i>
11/5	M	<i>Programming and Periodization Readings</i>
11/7	W	<i>Periodization Design, Integration of Models, Autoregulation, Resistance Training RPE</i>
11/12	M	<i>Protein and Leucine Reading and Slide Review</i>
11/14	W	<i>Protein and Supplementation Lecture</i>
11/19	M	<b><i>Exam #3 ONLINE (Programming/Periodization and Protein/Supplementation)</i></b>
11/21	W	<i>Review Technique Notes</i>
11/26	M	<i>Review Technique Notes</i>
11/28	W	<i>Powerlifting Technique Instruction (Squat, Bench Press, Deadlift)</i>

***Final Exam: Wednesday December 12<sup>th</sup>, 2018***

**NOTES:**

- All In-Person classes are denoted in black font above and only fall on Wednesdays.
- All online study is noted in red font. Online study is scheduled for all Mondays during the semester and some Wednesdays. Of course, online study can be conducted on your own on other days of the week as well.