



Online Master of Science in Sport Management

College of Health and Human Performance

TRAINING ATHLETES FOR OPTIMAL PERFORMANCE: DEVELOPING PHYSIOLOGICAL CAPACITY

SPM 5936 ~ 3 CREDITS ~ FALL

INSTRUCTOR:

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Office: None

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Preferred Method of Contact: email

OFFICE HOURS:

No office hours. This is an online course.

MEETING TIME/LOCATION: Online course

COURSE DESCRIPTION: This course overviews the theory and practice of sport training methodologies for enhancing the athlete's physiological capacity. We begin by examining how to configure a sport-specific physical work capacity from the five foundational motor performance abilities of endurance, strength, speed, coordination and flexibility. The impact of growth, maturation and genetics is factored into the discussion. Other broad topics include:

- How the body adapts to a training stimulus
- Principles of training theory
- Development of sport specific strength, speed and endurance
- How the energy systems work and are fueled
- Overtraining and fatigue
- Mechanics of the training plan.

The importance of a balanced approach to sport and life is emphasized throughout the course, with specific emphasis on the principle encompassed in the Hippocratic Oath of “*doing no harm*”.

PREREQUISITE KNOWLEDGE AND SKILLS: While this course is '*intermediate*' in terms of the science of skill development and performance assessment theory, there are no prerequisites for this course. However, experience with sport, either as a coach and/or athlete, and strong desire to bring science into modern coaching practices is important.

REQUIRED AND RECOMMENDED MATERIALS: All reading materials, study guides, video lecture modules and practice quizzes are packaged together. All course resources are accessible via Canvas.

COURSE FORMAT: The course is divided into units. One unit includes the video lessons, reading, quiz and insight research discussion. When material is particularly complex, the unit is sub-divided into 2-to-3 sections with a quiz assigned to each section.

COURSE LEARNING OBJECTIVES: At the completion of this course students will be able to:

Learning objective	Method	Bloom's taxonomy level
Demonstrate knowledge and understanding of important physiological and training theory principles as they apply to training athletes of any age to reach their optimum athletic potential	Quizzes	Level 1 (<i>remember</i>): Recognizing and recalling facts
Recognize how to develop fundamental and derive motor performance abilities of athletes generally, and in a specific sport (or positions within a team)	Forums	Level 2 (<i>understand</i>): Explain ideas or concepts
Locate and critically evaluate recommended performance evaluation practices for a specific sport and athletes	Research insight discussions	Level 3 (<i>apply</i>): Use information in new situations
Demonstrate an understanding of the physiological theory of performance analysis tests that assess strength, power, energy system capacity and lactate test data	Forums & research insight discussions	Level 4 (<i>analyze</i>): Draw connection among ideas or concepts
Demonstrate proficiency of applying training programs and evaluate whether they are physiologically sound according to the specific needs of an athlete	Forums & research insight discussions	Level 5 (<i>evaluate</i>): Justify a stand or decision
Design a comprehensive annual training program for an athlete in a specific sport.	Final assignment	Level 6 (<i>create</i>): Produce new or original work.

COURSE AND UNIVERSITY POLICIES:

ATTENDANCE POLICY: No attendance. This is an online course.

PERSONAL CONDUCT POLICY: Students are expected to exhibit behaviors that reflect highly upon themselves and our University. As a UF student, you have committed to the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity". Please complete all work independently unless the instructor provides explicit permission for you to collaborate on course tasks. It is your responsibility to know and comply with all UF policies and procedures regarding academic integrity and the Honor Code. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see:

<http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php>.

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult the instructor or TA in this class.

EXAM MAKE-UP POLICY: Late work will be penalized 5 pts. Exceptions will be made when life conditions negatively impact the student's ability to submit work on time. "Requirements for make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>."

ACCOMMODATING STUDENTS WITH DISABILITIES: "Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations."

COURSE EVALUATIONS: Students in this class are participating in GatorEvals. This evaluation system is designed to be more informative to instructors so that teaching effectiveness is enhanced and to be more seamlessly linked to UF's CANVAS learning management system. Students can complete their evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluer.com/ufl/>. Thank you for serving as a partner in this important effort.

GETTING HELP:

Technology: Please contact the UF Computing Help Desk and e-Learning Support Services (www.helpdesk.ufl.edu/) if you have any technical issues with CANVAS, or your email.

Health and Wellness

- U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575
- Counseling and Wellness Center: <https://counseling.ufl.edu/>, 352-392-1575
- Sexual Assault Recovery Services (SARS) - Student Health Care Center, 392-1161

- University Police Department, 392-1111 (or 9-1-1 for emergencies)
<http://www.police.ufl.edu/>

Academic Resources

- E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>
- Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling. <https://career.ufl.edu/>
- Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio/>
- Student Complaints On-Campus: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/> On-Line Students Complaints: <http://distance.ufl.edu/student-complaint-process/>

GRADING:

Quizzes = 35% (multiple choice and T/F)

Forums and research insight discussions = 35%

1 Assignment = 30%

GRADING SCALE: Detailed information regarding current UF grading policies can be found here: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.

Letter Grade	% total points
A	94 – 100 %
A-	90 – 93.9 %
B+	87 – 89 %
B	80 – 86 %
C+	77 – 79 %
C	70 – 76 %
D+	67 – 69%
D	60 – 66 %
E	< 60 %

WEEKLY COURSE SCHEDULE:

Please note that this schedule may change slightly. Refer to canvas for the updated schedule.

Week #	WEEKLY TASKS
Unit 1: Physiological development through the athlete's lifespan	
Week 1	<ul style="list-style-type: none"> • Introduction to high performance coaching • Motor performance abilities • Growth and maturation • How to Analyze a Research Paper <p>Assessment</p> <ul style="list-style-type: none"> • Discussion Forum 1
Week 2	<ul style="list-style-type: none"> • Critical training periods • Long term athlete development • Factors affecting the athlete's potential • Body structures important for performance <p>Assessment</p> <ul style="list-style-type: none"> • QUIZ 1
Unit 2: Energy systems and motor performance abilities.	
Week 3	<ul style="list-style-type: none"> • The athlete's energy supply • Energy system, power and diet • Aerobic capacity • Strength <p>Assessment</p> <ul style="list-style-type: none"> • Discussion Forum 2
Week 4	<ul style="list-style-type: none"> • Physiology of strength • Anaerobic capacity • Coordination: • Flexibility <p>Assessment</p> <ul style="list-style-type: none"> • Quiz 2
Unit 3: Training science	
Week 5	<ul style="list-style-type: none"> • Introduction to the 2nd half of the course • Biology of adaptation • Core training principles <p>Assessment</p> <ul style="list-style-type: none"> • Discussion Forum 3.

Week 6	<ul style="list-style-type: none"> • Training stimulus • Periodization theory • Placing periodization into context • <i>Guest lecture:</i> Periodization and team sports <p>Assessment</p> <ul style="list-style-type: none"> • Quiz 3
Unit 4: Sport specific strength and power	
Week 7	<ul style="list-style-type: none"> • Strength and power basic concepts • Principle of specificity <p>Assessment</p> <ul style="list-style-type: none"> • Discussion Forum 4.
Week 8	<ul style="list-style-type: none"> • Peripheral strength adaptation • Central strength adaptations <p>Assessment</p> <ul style="list-style-type: none"> • Quiz 4
Unit 5: Fatigue	
Week 9	<ul style="list-style-type: none"> • Fatigue theories • Fatigue due to low fuel supplies • Fatigue due to acidity • Fatigue due to temperature <p>Assessment</p> <ul style="list-style-type: none"> • Quiz 5
Unit 6: Overtraining	
Week 10	<ul style="list-style-type: none"> • Endocrine system basics • Autonomic nervous system • Fundamentals of overtraining
Week 11	<ul style="list-style-type: none"> • Heart rate and overtraining • Monitoring overtraining <p>Assessment</p> <ul style="list-style-type: none"> • Quiz 6 • Discussion Forum 6
Unit 7: Preparing the athlete for competition	
Week 12	<ul style="list-style-type: none"> • Managing training effects • Tapering and Training load quantification • How to assemble the yearly plan <p>Assessment</p> <ul style="list-style-type: none"> • Quiz 7

Unit 8: Consolidating your knowledge	
Week 13	<ul style="list-style-type: none">• Master Athlete Assessment <ul style="list-style-type: none">• Quiz 8
Week 14 & 15	<ul style="list-style-type: none">• Final assignment

SUCCESS AND STUDY TIPS:

Comprehensive videos, study guides and reading material are provided to enhance student learning. Maximizing use of these study aids. They will enhance successfully complete assignments and thereby course success.