

TRAINING ATHLETES FOR OPTIMAL PERFORMANCE: SKILL ACQUISITION & PERFORMANCE ASSESSMENT

SPM 5936 ~ 3 CREDITS ~ SPRING

INSTRUCTOR: Christine Brooks, EdD

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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 methodologies for enhancing, analyzing and assessing the athlete's skill acquisition and performance development.

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 quizzes are packaged together. All course resources are accessible via Canvas.

COURSE FORMAT: The course is divided into 5 content units:

• (1) How Movement Occurs, (2) Analyzing Technique, (3) Coaching Pedagogy, (4) Testing Performance Components and (5) Selecting Relevant Training Protocols.

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

Learning objective	Method	Bloom's taxonomy level
Demonstrate the ability to recall key	Quizzes	Level 1 (remember):
principles of skill acquisition &		Recognizing and
performance assessment		recalling facts
Apply knowledge concerning the	Forums	Level 2 (understand):
assessment of skilled performance to		Explain ideas or
manipulate practice conditions for		concepts
enhancing an athlete's skill acquisition for		
their sport to their genetic potential		
Critically evaluate how to apply generic	Research	Level 3 (apply): Use
performance tests to assess the	insight	information in new
performance of athletes in specific sports	discussions	situations
Adapt performance analysis	Forums &	Level 4 (analyze):
methodologies to match the	research insight	Draw connection
developmental level of athletes	discussions	among ideas or
		concepts
Demonstrate proficiency in the use of	Forums &	Level 5 (evaluate):
biomechanical principles to analyze an	research insight	Justify a stand or
athlete's skill and movement effectiveness	discussions	decision
Competently use common video and	Final	Level 6 (create):
computer analysis software for	assignment	Produce new or
evaluating an athlete's performance and		original work.
apply the data obtained to the design of		
the athlete's training.		

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.bluera.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 opti on 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 = 30% (multiple choice and T/F) Forums and research insight discussions = 40% 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	% <u>total</u> points	
А	94 – 100 %	
A-	90 – 93.9 %	
B+	87 – 89 %	
В	80 – 86 %	
C+	77 – 79 %	
С	70 – 76 %	
D+	67 – 69%	
D	60 – 66 %	
Е	< 60 %	

WEEKLY COURSE SCHEDULE:

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

How Movement Occurs

WEEK 1: GENERAL OVERVIEW

- The coaching paradox
- Movement components
- How the athlete moves in space
- Motion of joints and muscles
 - Discussion Forum 1

WEEK 2: ROLE PLAYED BY THE BRAIN

- How athletes process information
- Stages of learning
- Timing, tempo and rhythm
 - o Quiz 1

Analyzing Technique

WEEK 3: MEANING OF TECHNIQUE

- What is technique analysis
- Relevance of biomechanics
- Important terminology
 - Quiz 2
 - o Discussion Forum 2

WEEK 4: SPEED, COORDINATION, FLIGHT

- Analyzing linear speed
- Analyzing rotational speed
- Analyzing coordination
- Analyzing flight
 - o Quiz 3

Coaching Pedagogy

WEEK 5: THE BASICS

- Understanding your athlete
- How to structure the athlete's training
 - Discussion Forum 3

WEEK 6: DEVELOPING A COACHING EYE

- Observational skills
- Instructional strategies for skill acquisition
- Meeting the athlete's psychological needs
- Providing feedback
 - o Quiz 4

Testing Performance Components

WEEK 7: THE STLOW STRETCH-SHORTENING CYCLE

- Analyzing speed strength
- Vertical jump testing
- Historical insights
 - o Quiz 5
 - Discussion Forum 4

WEEK 8: THE FAST STRETCH-SHORTENING CYCLE

- Enhancing the fast SSC
- Understanding reactive strength
- Shock jump styles
- Assessing strength of the fast SSC
- Monitoring SSC fatigue
- Growth, maturation and the SSC
 - o Quiz 6

WEEK 9: UNDERSTANDING SPEED

- How speed is used in sports
- Important strength qualities
- · Concepts to understand
- 100 m strength qualities
 - o Quiz 7
 - Discussion Forum 5

WEEK 10: NEUROMUSCULAR AND AGING EFFECTS

- Neuromuscular mechanisms
- Developing neuromuscular power
- Comparison of fast and slow runners
- How speed changes with age
 - o Quiz 8

Selecting Relevant Training Protocols

WEEK 11: ASSESSING TRANSFER OF TRAINING

- Relevance of transfer of training
- Power athletes and endurance training
 - Discussion Forum 6

WEEK 12 & 13: MONITORING FITNESS STATUS

- The 40 m speed test
- Assessing body composition
- Body composition & performance
- Metabolic adaptation to energy restricted diets
 - o Quiz 9

WEEK 14 & 15:

Final assignment

SUCCESS AND STUDY TIPS:

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