



Course Code SPSC-421	Course Title Advanced Coaching	ECTS Credits 6
Department Sports Science	Semester Fall	Prerequisites SPSC: 240, 315, 316, 360
Type of Course Elective	Field Science of Sports: Coaching	Language of Instruction Greek
Level of Course 1 st Cycle	Year of Study 4 th	Lecturer Dr Hadjicharalambous Marios Dr Aphantis George
Mode of Delivery face-to-face	Work Placement N/A	Co-requisites None
Recommended Optional Programme Components: N/A		

Objectives of the Course:

This course focuses on developing advanced scientific coaching theory which will be fully translated into practice during the follow up semester (SPSC-422). The course deals with exercise testing and physiologically monitoring and evaluating exercise performance of both athletes and training programs. In this course, special attention is paid to an awareness and understanding of the problems associated with the learning and improvement of motor skills; daily, weekly, and seasonal planning; training and conditioning methods; and integration of the whole individual and team in preparation for contests.

Learning Outcomes:

On successful completion of this course students will be able to:

1. Exhibit the ability to plan, deliver and evaluate an appropriate training session.
2. Evaluate their strengths and weaknesses as a coach.
3. Summarise the concepts and principles of training.
4. Demonstrate an understanding of biomechanical analysis.
5. Demonstrate performance assessment skills, through the use of inferential statistical analysis.

Course Contents:

1. Training fundamentals: Periodisation of training (intensity, duration, time, off-season and on-season training programs); constructing training sets.
2. Training principles: Specificity, Frequency, Duration, Progression, Overload, and Reversibility will be covered in some details and where suitable examples for each particular sport will be given.
3. Training methods: progression, adaptations, tapering, glycogen super-compensation, resting from training, endurance development, power, sprinting, quickness, agility etc. will be covered.
4. Performance assessment: Testing, monitoring and evaluation of training

programs.

5. Applied training for young athletes and talent identification.

Learning Activities and Teaching Methods:

Lectures, discussion, practical demonstration and practical application

Assessment Methods:

Written scientific reports and a written examination

Required Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Tudor O. Bompa, Michael Carrera	Periodization Training for Sports-2nd Edition,	Human Kinetics	2005	0736055592
Lee E. Brown, Vance Ferrigno	Training for Speed, Agility, and Quickness- 2nd Edition.	Human Kinetics	2005	0736058737

Recommended Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Rainer Martens	Successful Coaching- 3rd Edition	Human Kinetics	2004	0736040129
Christopher Carling, Thomas Reilly, A. Mark Williams	Performance Assessment for Field Sports	Routledge: Taylor and Francis	2008	978-0-415- 42685-5
Powers, Scott and Edward Howley	Exercise Physiology: Theory & Application to Fitness & Performance: Exercise Physiology, 6/e	McGraw- Hill.	2007	0073028630