



UNIVERSITI TEKNOLOGI MARA

SPS240: EXERCISE METHODOLOGY AND PHYSICAL CONDITIONING FOR SPORT

Course Name (English)	EXERCISE METHODOLOGY AND PHYSICAL CONDITIONING FOR SPORT APPROVED
Course Code	SPS240
MQF Credit	3
Course Description	This course emphasized the theoretical knowledge and practical application as they relate to physical conditioning. This course equips students with sound fundamental knowledge, understanding, skills and experience to design, implement and evaluate various training methods for the improvement of the fundamentals of fitness for the needs of sports performance.
Transferable Skills	At the end of the course, students should be able to: <ul style="list-style-type: none">• define the scope, objective, principle, method and system of physical training.• practice knowledge and skill in developing, implementing and evaluating specific physical fitness program of various methods, emphasizing on cardiovascular, flexibility, strength, plyometric, SAQ, rehabilitation and functional training for sports performance.
Teaching Methodologies	Lectures, Demonstrations, Discussion
CLO	CLO1 define the scope, objective, principle, method and system of physical training. CLO2 practice knowledge and skill in cardiovascular, flexibility, strength, plyometric, SAQ, rehabilitation and functional training for sports performance. CLO3 Design specific physical fitness program of various methods on cardiovascular, flexibility, strength, plyometric, SAQ, rehabilitation and functional training for sports performance.
Pre-Requisite Courses	No course recommendations
Topics	
1. The Scope, Objective of Physical Training 1.1) Scope of physical and exercise conditioning 1.2) The physical fitness components 1.3) Principles of physical training 1.4) Program design variables	
2. Flexibility and Stretching 2.1) Warm up and cool down stretches 2.2) Flexibility training program 2.3) The physiology of stretching 2.4) Principles and guidelines in stretching 2.5) Types of stretching	
3. Cardiovascular Endurance Training 3.1) Several Techniques on cardiovascular training 3.2) Exercise prescription for cardiovascular endurance 3.3) Interval versus continuous training 3.4) Several types of aerobic training and safety	

4. Strength and Resistance training

- 4.1) Fundamentals, principles and general guidelines
- 4.2) Biomechanical principles of resistance training
- 4.3) Types of strength
- 4.4) Periodization model of strength training
- 4.5) Spotting techniques
- 4.6) Exercise prescription for resistance training
- 4.7) Upper, lower and core body exercises

5. Plyometric and Power Training

- 5.1) Definition and general concept of plyometric exercises
- 5.2) Mechanical model of plyometrics exercises
- 5.3) Advantage and disadvantage of plyometric exercises
- 5.4) Implementing program design and considerations

6. Speed, Agility, Quickness Training (SAQ)

- 6.1) General considerations
- 6.2) Program design
- 6.3) Kinesthetic awareness

7. Rehabilitation and Functional Training

- 7.1) Definition and concept
- 7.2) Type of exercise
- 7.3) Components of functional training exercise program
- 7.4) Benefits of functional training for sports and rehabilitation

8. Final Assessment on project

- 8.1) n/a

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Fitness Test	pre and post fitness test including: 1. 2,4km run test / 3 minutes step test 2. 1 minutes push- up 3. 5 minutes plank	20%	CLO2
	Individual Project	virtual training video	20%	CLO3
	Oral Test	Oral test / viva explanation on exercise execution	20%	CLO1
	Portfolio/Log Book	Training log (6 weeks training)	40%	CLO2

Reading List	Recommended Text	<ul style="list-style-type: none"> Thomas R. Baechle & Roger W. Earle 2008, <i>Essentials of Strength Training and Conditioning</i>, 3rd ed. Ed., 22, Human Kinetics Champaign, IL [ISBN: 9780736058032]
	Reference Book Resources	<ul style="list-style-type: none"> Bill Foran 2001, <i>High-Performance Sports Conditioning: Modern Training for Ultimate Athletic Development</i>, 1st ed. Ed., 10, Human Kinetics Champaign, IL [ISBN: 978-073600163]

Article/Paper List	This Course does not have any article/paper resources
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Other References	This Course does not have any other resources
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