



**Jordan University of Science and Technology**  
**Faculty of Applied Medical Sciences**  
**Department of Rehabilitation Sciences**  
First Semester 2013-2014, Course Syllabus

<b>Course Information</b>	
<b>Course Title</b>	Physical Therapy in Sport Injuries
<b>Course Number</b>	PT 359
<b>Prerequisite</b>	PT 253
<b>Instructor</b>	Saddam Kanaan, PT, MSc, PhD
<b>Office Location</b>	
<b>Office Phone</b>	NA
<b>Office Hours</b>	
<b>E-mail</b>	<a href="mailto:sfkanaan@just.edu.jo">sfkanaan@just.edu.jo</a>
<b>Class time</b>	
<b>Class room</b>	
<b>Credit hours</b>	2 credit hours (1 theory (1 contact hours per week): 1 practical (2 contact hours per week))

<b>Course Description</b>	
This course build on previous knowledge of anatomy, pathology, physiology, biomechanics, kinesiology, musculoskeletal assessment and therapeutic exercises. Students will be introduces to various topics in sport injuries causes, mechanisms, assessment, prevention and management. Special topics about physical therapy techniques and protocols related to athlete injury treatment, rehabilitation, and performance enhancement. This course will be taught by lectures, active learning, case studies and lab demonstrations.	

<b>Text Books</b>	
<b>Title</b>	1. Sport Injuries: Diagnosis and Management ( <b>required</b> ) 2. Sports Medicine Essentials: Core Concepts in Athletic Training & Fitness Instruction
<b>Author(s)</b>	1. Norris C 2. Clover J
<b>Year</b>	1. 2004 2. 2007
<b>Edition</b>	1. Third edition 2. Second edition

### Course Objectives

**Global Objectives:** At the successful completion of this course the student is expected to:

1. define terminology related to sport injury and treatment.
2. identify common injuries occurred in recreational and competitive sport
3. be able to assess athletics with sport injury
4. determine physical therapy modalities according to the severity and stage of injury.
5. design injury prevention, treatment and rehabilitation program.
6. evaluate athletic ability to return to sport and maintain physical wellbeing.

**Specific Objectives:** At the end of this course the student should:

1. understand the biomechanics of injury, evaluation and treatment of sport injuries
2. describe the physiological effects of tissue trauma that occurs as a result of injury
3. define the stage of healing and tissue response to injury
4. integrate previous knowledge of therapeutic modalities to stage of healing
5. distinguish various types of tissues healing following injury
6. understand the fundamental principles of taping
7. perform specific taping techniques
8. explain the usage of taping in injury prevention and treatment
9. demonstrate understanding of principles of training
10. explain warm up types and effects
11. describe the effects and techniques of flexibility training
12. demonstrate understanding of various types of strengthening exercise including: plyometrics, aerobic, weight training, resistance training, circuit training, kinetic training and others
13. prescribe appropriate strengthening exercise for athletic rehabilitation
14. understand muscle pain and fatigue following exercise
15. understand basic strategies for injury prevention
16. describe first aid procedures related to sport medicine
17. discuss the relationship between environment and sport injury
18. explain most common type of injuries, prevention, treatment, rehabilitation that occurred in ankle, foot, knee, hip, shoulder, elbow, wrist and hand
19. design appropriate rehabilitation protocol for common sport injuries to return athlete back to sport
20. identify common internal injuries occur in sport
21. understand the importance of nutrition in athletic performance

Assessment Policy		
Assessment Type	Expected Due Date	Weight
First Exam		20%
Second Exam		20%
Midterm Practical		10%
Practical Case		10%
Final Practical		20%
Final Exam	To be announced by the registrar office	20%

**Course Schedule  
Lectures**

Week #	Lecture
1	<ul style="list-style-type: none"> <li>• Discussion of the syllabus and the timetable</li> <li>• Introduction to course</li> <li>• Injury and healing</li> </ul>
2	Tissue response to injury
3	<ul style="list-style-type: none"> <li>• Taping and kinesio-taping</li> <li>• Physical training and injury 1</li> </ul>
4	Physical training and injury 2
<b>5</b>	<b>First exam</b>
6	First contact management
7	Ankle and foot
8	Knee
9	Hip and pelvis
<b>10</b>	<b>Second exam</b>
11	Shoulder
12	Elbow, wrist and hand
13	<ul style="list-style-type: none"> <li>• Internal injuries</li> <li>• Nutritional consideration</li> </ul>
14	Review
<b>15</b>	<b>Final Exam</b>

**Labs (section 1)  
Thursday: 11:15-1:15**

1	No labs
2	Taping for shoulder, elbow, wrist and hand: Including tape preparation, skin preparation, indication, contraindication, and tape application.
3	Taping for Hip, knee, ankle and foot: Including tape preparation, skin preparation, indication, contraindication, and tape application.
4	Kinisiotaping in sport: Introduction, indications, contraindications, kinisiotape applications. Application for muscle facilitation, inhibition, joint correction, and edema management.
5	Assessment of athletics performance
6	The use of orthosis and braces in Sport
<b>7</b>	<b>Midterm Practical</b>
8	Ankle and foot case presentation
9	Knee case presentation
10	Hip and pelvis case presentation
11	Shoulder case presentation
12	Elbow and wrist case presentation
13	Return back to sport assessment
<b>14</b>	<b>Final Practical</b>

**Labs (section 2)**  
**Wednesday: 11:15-1:15**

<b>Week #</b>	<b>Lab</b>
1	No labs
2	Taping for shoulder, elbow, wrist and hand: Including tape preparation, skin preparation, indication, contraindication, and tape application.
3	Taping for Hip, knee, ankle and foot: Including tape preparation, skin preparation, indication, contraindication, and tape application.
4	Kinisiotaping in sport: Introduction, indications, contraindications, kinisiotape applications. Application for muscle facilitation, inhibition, joint correction, and edema management.
5	Assessment of athletics performance
6	The use of orthosis and braces in Sport
7	<b>Midterm Practical</b>
8	Ankle and foot case presentation
9	Knee case presentation
10	Hip and pelvis case presentation
11	Shoulder case presentation
12	Elbow and wrist case presentation
13	Return back to sport assessment
14	Final Practical

**Theoretical Exams**

The exams may include any type of questions; multiple choice, true or false or essay questions. Exam materials will be decided upon handouts, notes, reading assignments, lab materials, case studies presented and discussion through course. Exams will be designed to assess the foundation knowledge, critical thinking, and problem solving.

**Practical Exams**

The students will be presented with clinical case and asked to perform subjective and objective examination related to the case. The students will be asked to design treatment plan and demonstrate selected treatments. Also, the students will be asked to demonstrate selected assessment techniques and tests, and demonstrate some treatment techniques.

**Participation**

Students will be assessed according to their active participation in the lecture, practical demonstration, group assignments, and other activities. The participation will be evaluated by course instructor and teaching assistants.

**Case presentation**

Students will be assigned a sport related injury topic. A group of 3 students will present in 15 minutes the injury, mechanism of the injury, assessment, treatment and literature related to the management. The students will include 2 peer reviewed articles to justify their chosen treatment. The power point presentation should be sent to the teaching assistant at least one week before the presentation. After the presentation, there will be 5 minutes discussion and all students are expected to participate actively in the discussion. The information in the case presentation will be considered as part of the final exam.

### **Statement on Professionalism**

Professional behavior is expected of students at all times. Attitude and professional behavior are a minimum criterion for passing this class. Repeated lack of professional behavior will result in failure of the course. Examples of unprofessional behavior include but are not limited to: missing classes, tardiness, lack of attention for a speaker, leaving a lecture prior to its completion without prior authorization of the instructor, working on other class material during class, and sleeping during class. Using social network (e.g. facebook, twitter, messenger etc.) during the classes and labs is considered unprofessional behavior. Group discussions are highly recommended however it's crucial for each student to submit individual assignment, unless I indicate otherwise.

**Cheating and plagiarism will not be tolerated and will be leading to consequences determined by university regulations.**

### **Attendance**

Attendance will not count for points in this class, however attending the lectures and labs will greatly enhance your grade. The student is responsible for any information discussed in lecture and lab sessions. It is **imperative** to attend all classes! Make-up (including assignments) work will be granted for excused absences only.

### **Communication with instructor**

Electronic-mail is preferred. Students can use the above listed office hours.

### **Cell phone**

Please do not use cell phones or pagers in class. If you are depended upon for anticipated emergencies please put cell phones on vibration and answer the phone outside the classroom. **CELL PHONES MUST BE TURNED OFF DURING THE EXAMS.**

### **Student Responsibility**

It is the responsibility of each individual student enrolled in this course to monitor grades and progress. The student has one week from the time any test, assignment, or lab summary is returned to the class to appeal the grade.

### **Statement on Disability**

Any student in this course who needs an accommodation because of a disability in order to complete the course requirements should contact the instructor.

### **Religious Observance**

If any examination, except the final examination, conflicts with a personal religious holiday, please privately identify yourself to the instructor to schedule a make-up examination that is mutually acceptable.

### **Statement of Acceptance of Syllabus**

Any student who does not understand or accept the contents and terms of this syllabus must notify the instructor in writing within one week of receiving the syllabus. The syllabus is subject to change based on needs assessment at any time.

**End of Syllabus**