



Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Department of Allied Medical Sciences
Second Semester 2013/2014

Course Information	
Course Title	Paramedic Management of Trauma Emergencies
Course Number	PARA 304
Prerequisites	PARA 303
Course Website	http://elearning.just.edu.jo/
Time	-
Location	-
Course Coordinator	Rawan Tawalbeh
Office Location	Faculty of Applied Medical Sciences, L2
Office Phone	NA
Office Hours	
E-mail	ratawalbeh8@just.edu.jo
Teaching Assistant	-

Course Description	
-	This course provides an intense study in the pathophysiology and the management of trauma. It includes assessment of trauma patient, management of head injuries, spinal injuries, general seizures, abdominal injuries, burn injuries, orthopedic injuries, management of multi-trauma patient, and management of various types of shocks.
-	Define the role of kinematics as an additional tool of patient assessment; Apply principles of kinematics to the assessment of patients whose mechanism of injury is rotational impact, motorcycle, bicycle, moped crash, pedestrian vs. motor vehicle, and fall.
-	The student will be also introduced to the precautions in prehospital settings
-	Assessment and management of trauma in special populations including, pregnancy, children, geriatrics, patient under influence of drugs

Text Book& References	
Title	Paramedic Care: Principles and Practice, V3: Trauma Emergencies
Author(s)	Bryan E. Beldose, Robert S. Porter, and Richard A. Cherry
Publisher	Pearson Education, Inc.
Year	2009
Edition	Third Edition
ISBN	13:978-0-13-513701-7
Book Website	www.bradybooks.com

Title	International trauma life support: for prehospital Care Providers
Author(s)	Joan Emory Campbell, MD, FACEP
Publisher	Pearson Education, Inc.
Year	2009
Edition	6 TH
ISBN	079-0-13-237982-3
Other References	Ahelert, B. (2010). Paramedic Practice Today: Above and Beyond (Vol. 1). MOSBY JEMS.

Assessment			
1.	Assessment Type	Expected Due Date	Weight
2.	First Exam		20%
3.	Second Exam		25%
4.	Clinical evaluations (hospital rotations)	---	15%
5.	Lab Final	At the end of each rotation	10%
6.	Final Exam		30
7.	Totals	75% theory + 25 practical	100%

Objective and outcome	Course Objectives and learning outcomes; <i>the student is expected to</i>	Percentage	Reference(s) Handouts
1.	<ul style="list-style-type: none"> Discuss the nature of trauma and its costs to society Introduce the concept of trauma care systems Outline the role of the paramedics in trauma care Discuss trauma triage protocols 	7.5%	Introduction
2.	<ul style="list-style-type: none"> Discuss the scene size up, MVCs, falls, and assessment and initial management of trauma patients 	7.5%	MVC, falls, and assessment and initial management
3.	<ul style="list-style-type: none"> Describe the kinetics and biomechanics of blunt trauma Discuss how to evaluate the mechanism of injury in cases of blunt trauma in order to determine likely injuries 	7.5%	Blunt traumas
4.	<ul style="list-style-type: none"> Describe the physics of penetrating trauma and the effects of penetrating trauma on the body Outline how to evaluate the mechanism of injury in cases of penetrating trauma in order to determine likely injuries 	7.5%	Penetrating traumas
5.	<ul style="list-style-type: none"> Describe the anatomy, physiology, and pathophysiology of the cardiovascular system as the apply to hemorrhage and shock Discuss the assessment and management of hemorrhage and shock 	10%	Cardiovascular and pulmonary traumas Hemorrhage and shock
6.	<ul style="list-style-type: none"> Review the anatomy and physiology of the 	5%	Soft tissues

	<p>integumentary system</p> <ul style="list-style-type: none"> • Discuss the pathophysiology of soft-tissue trauma • Discuss the assessment and management of soft tissue trauma, including a discussion of bandaging 		trauma
7.	<ul style="list-style-type: none"> • Describe the anatomy, physiology, and pathophysiology of burns injuries • Discuss assessment and management of burns 	5%	Burns
8.	<ul style="list-style-type: none"> • Review the anatomy and physiology of the musculoskeletal system • Discuss the various types of injuries and conditions that can affect the musculoskeletal system • Discuss the assessment and management of musculoskeletal trauma, including discussions of realignment, splinting, and pain control 	10%	Musculoskeletal injuries
9.	<ul style="list-style-type: none"> • Review than atomy and physiology of the head, face, and neck • Describe the common results of trauma to these regions • Discuss the assessment and management of trauma to the head, face, and neck, with special emphasis on early recognition of injuries, and early protection of the airway 	10%	Head and face traumas
10.	<ul style="list-style-type: none"> • Review the anatomy and physiology of the spine • Discuss common mechanisms of spinal injury • Discuss the assessment and management of spinal injuries and suspected spinal injuries 	10%	Spinal injuries
11.	<ul style="list-style-type: none"> • Review the anatomy and physiology of the abdomen • Describe abdominal trauma pathology by organ and organ system • Discuss the assessment and management of abdominal injuries, with special emphasis on the need for maintaining a high index of suspicion when there is potential internal injury 	5%	Abdominal injuries
12.	<ul style="list-style-type: none"> • Discuss the trauma in special populations including, elderly, children, pregnancy, and patients under the influence of alcohol or drugs, and trauma cardiopulmonary arrest. 	5%	Trauma in pediatric, elderly, pregnancy, and alcoholic patients
13.	<ul style="list-style-type: none"> • Review the process of assessment for the trauma patient • Describe the basics elements and steps of shock trauma resuscitation • Review methods of improving the delivery of care to trauma patients, including good communication, use of air medical transport, and participation on research programs 	5%	Shock and trauma resuscitation
14.	<ul style="list-style-type: none"> • Discuss the standard precautions in the prehospital setting including precautions for hepatitis B and C, infections, TB, HIV, and precautions for prevention of transmission of infectious agents 	5%	Precautions in prehospital settings

Teaching & Learning Methods

Textbooks, handouts, audio-video presentations, power point presentations, and practical demonstrations will be used to accomplish the objectives as well as the expected outcomes.

Teaching duration

Duration: 16 weeks including final exams' week

- Lectures: 40 lectures, 1 hour 15 minutes each
- Laboratory: 10 weeks of preclinical labs including a final examination

Useful Resources

- JUST university Library.
- lecture notes
- The “elearning” website will be the most useful resource to the students; it will contain study materials, articles, power point presentations, websites, videos, pictures, and other useful resources.
- Students are encouraged to discuss any unclear material or information with the instructor during the announced office hours or by appointment.

Course Content

Week	Topics	Chapter in Text (handouts)
1.	Introduction to course Introduce concepts of trauma	ITLS: Ch.1 PCPP: ch.1
2.	Scene size-up, MVC's, and assessment and initial management	ITLS: Ch.1 PCPP: ch.1
3.	Blunt traumas Penetrating traumas	ITLS: Ch.1 PCPP: ch.2&3
4.	Cardiovascular and pulmonary traumas Hemorrhage and shock	ITLS: Ch.6,8, 21 PCPP: ch.4
5.	Soft tissue traumas	PCPP: ch.5
<i>Tuesday; March 12, 2013</i>		
6.	Burns	ITLS: Ch.16 PCPP: ch.6
7.	Musculoskeletal injuries and traumas	ITLS: Ch.14 PCPP: ch.7
8.	Head and face traumas	ITLS: Ch.10 PCPP: ch.8
9.	Spinal traumas	ITLS: Ch.11 PCPP: ch.9
10.	Thoracic traumas (RSI and ventilators overview)	ITLS: Ch.6 PCPP: ch.10

Tuesday, April 16, 2013

11.	Abdominal traumas	ITLS: Ch.13 PCPP: ch.11
12.	Shock trauma resuscitation	ITLS: Ch.8 PCPP: ch.12
13.	Trauma in pediatric Trauma in elderly Trauma in pregnancy Trauma in patient under the influence of drugs or alcohol	ITLS: Ch.17-20 PCPP: ch.12
14.	Precautions in the prehospital settings	ITLS: Ch.22

Final Exams Period

Additional Notes	
Assignments	The student has <u>one</u> week from the time any test, assignment, or lab summary is returned to the class to appeal the grade.
Exams	Exams will include essay and multiple choice questions Make-up (including assignments) work will be granted for <u>excused</u> absences only: Extenuating circumstances (<u>PRIOR approval</u> should be obtained or direct contact made with the instructor within 24 hours)
Cheating	The instructor will follow JUST's rules and regulation
Attendance	Attendance will count for points in this class. The student is responsible for any information discussed in lecture and lab sessions. It is imperative to attend all classes!
Graded Exams	Exams will include essay and multiple choice questions The student has <u>one</u> week from the time any test, assignment, or lab summary is returned to the class to appeal the grade.
Final Project	<ul style="list-style-type: none">• Students will be divided into groups consisting of 3-4 students only.• Student will have to simulate a trauma scenario and provide the most appropriate prehospital trauma care• The scenario must be recorded to be presented at the end of the semester.
Expected work load	Students are expected to work hard in order to ensure a high quality learning
feedback	Concerns or complaints should be expressed in the first instance to the course instructor. Questions about the material covered in the lecture, notes on the content of the course, its teaching and assessment methods can be also sent by e-mail to the following address ratawalbeh8@just.edu.jo

Course Content			
Week	Dates	Topics	Instructor
1.		Introduction to course Introduce concepts of trauma	Rawan Tawalbeh
2.		Scene size-up, MVC's, and assessment and initial management	Rawan Tawalbeh

3.		Blunt traumas Penetrating traumas	Rawan Tawalbeh
4.		Cardiovascular and pulmonary traumas Hemorrhage and shock	Rawan Tawalbeh
5.		Soft tissue traumas	Rawan Tawalbeh
<i>First Exam</i>			
6.		Burns	Rawan Tawalbeh
7.		Musculoskeletal injuries and traumas	Rawan Tawalbeh
8.		Head and face traumas	Rawan Tawalbeh
9.		Spinal traumas	Rawan Tawalbeh
10.		Thoracic traumas (RSI and ventilators overview)	Rawan Tawalbeh
11.		Abdominal traumas	Rawan Tawalbeh
12.		<i>Second Exam</i>	
13.		Shock trauma resuscitation	Rawan Tawalbeh
14.		Trauma in pediatric Trauma in elderly Trauma in pregnancy Trauma in patient under the influence of drugs or alcohol	Rawan Tawalbeh
15.		Precautions in the prehospital settings	Rawan Tawalbeh
<i>Final Exams Period</i>			

Preclinical and clinical training		
Week	Date	
.١		Trauma Assessment
.٢		Trauma Assessment
.٣		Head, face, eyes and neck trauma
.٤		Chest Trauma
.٥		Abdomen Trauma
.٦		Pelvic Trauma
.٧		Extremities trauma, fracture and skin traction
.٨		Extremities trauma, fracture and skin traction
.٩		Immobilization and rapid extrication
.١٠		Triage, MCI

**Best wishes in your semester
Rawan Tawalbeh, MS, BSN**

