

# **COURSE OVERVIEW**

*PCP-129, Trauma 2* will be delivered in the classroom setting using a blend of lecture and group discussion. As a continuation of the curriculum covered in PCP-119 Trauma 1, Trauma 2 will present the student with specific information regarding the assessment and management of traumatic injuries with which they may be faced when responding to emergencies.

Specific topics include: Bleeding & shock, soft tissue injuries, burns, head & face injuries, spinal injuries, thoracic injuries, abdominal injuries, and musculoskeletal injuries

# **MEETING TIMES & INSTRUCTIONAL METHODS**

In-class sessions (virtual when warranted)			
Lecture/Group Discussion:	Mondays	13:00 - 14:45	
	Thursdays	13:00 - 14:45	
Total hours:	40		

#### **REQUIRED MATERIALS & PREREQUISITES**

#### Textbooks

Caroline, N. (2021). *Emergency Care in the Streets, Canadian Edition* 8<sup>th</sup> edition. Burlington, MA, Jones and Bartlett Learning.

#### **Class Materials**

Students will be expected to be prepared to take notes and to complete in-class activities. Instructors may also specify the use of mobile phones and laptops for some activities.

**Supplemental Materials to be posted on the private members' area of the Omni Life Support website:** Materials related to PCP-129 such as in-class presentations & assignments will be available for student access on this website. Academy faculty does not authorize the posting of PCP-129 materials on other sites. Each student is responsible for his/her own learning which includes staying current with postings on the Omni Life Support website.

Prerequisites:	PCP-119 Trauma 1	
<b>Corequisites:</b>	PCP-100, PCP-108, PCP-122, PCP-124, PCP-126, PCP-127,	
	& PCP-12PT	



# **INSTRUCTOR(S)**

Instructor: Joel Mattatall, ACP

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# LEARNING OUTCOMES

Upon successful completion of this course, it is expected that students will have gained sufficient knowledge and skill to safely and proficiently render patient care to patients suffering from traumatic emergencies. By the end of the course, the student will be able to:

- Explain the pathophysiology of shock
- Explain how a patient suffering from hemorrhage may present and describe the appropriate focused assessment and management plan
- Describe the function and structure of the skin
- Broadly explain the healing process for skin
- Explain how a patient suffering from a soft tissue injury may present and describe the appropriate focused assessment and management plan
- Describe the pathophysiology of burns of varying severity
- Explain how a patient suffering from a burn may present and describe the appropriate focused assessment and management plan
- Explain how a patient suffering from a face or head injury may present and describe the appropriate focused assessment and management plan
- Describe the secondary complications that can arise from a head injury
- Explain how a patient suffering from a spinal injury may present and describe the appropriate focused assessment and management plan
- Be able to explain the practical application and steps of the Canadian C-Spine Rule
- Be able to identify the various diagnostics applicable to the trauma patient.
- Explain how a patient suffering from a thoracic injury may present and describe the appropriate focused assessment and management plan
- Explain how a patient suffering from an abdominal injury may present and describe the appropriate focused assessment and management plan
- Explain how a patient suffering from a musculoskeletal injury may present and describe the appropriate focused assessment and management plan



# **INTENDED LEARNING OBJECTIVES:**

Learning objectives for PCP-129 Trauma 2 are guided by the *National Occupational Competency Profiles (NOCP)* for Paramedics. Each objective, indicated by the prefix "O", is linked to the corresponding NOCP sub-competency with the matching alphanumerical code (e.g., O1.1.a is the learning objective tied to sub-competency 1.1.a of the NOCP for Paramedics). As per the NOCP guidelines for Paramedics, to succeed in this course, you must demonstrate competence in the following areas.

Learning Objectives	Embedded Knowledge and Skills	
O4.3.i	<ul> <li>By the end of the course, the student will be able to: <ul> <li>4.3.i.1 - Explain the pathophysiology of specific integumentary illnesses and injuries.</li> <li>4.3.i.2 - Apply assessment techniques, specific to the integumentary system.</li> <li>4.3.i.3 - Evaluate findings related to the etiology, pathophysiology, and manifestations of integumentary system illnesses and injuries.</li> <li>4.3.i.4 - Demonstrate assessment techniques, for integumentary illnesses and injuries.</li> <li>4.3.i.5 - Adapt assessment techniques, to integumentary history findings.</li> </ul> </li> </ul>	
O4.3.j	<ul> <li>By the end of the course, the student will be able to: <ul> <li>4.3.j.1 - Explain the pathophysiology of specific musculoskeletal illnesses and injuries.</li> <li>4.3.j.2 - Apply assessment techniques, specific to the musculoskeletal system.</li> <li>4.3.j.3 - Evaluate findings related to the etiology, pathophysiology, and manifestations of musculoskeletal system illnesses and injuries.</li> <li>4.3.j.4 - Perform assessment techniques, for musculoskeletal illnesses and injuries.</li> <li>4.3.j.5 - Adapt assessment techniques, to musculoskeletal history findings.</li> </ul> </li> </ul>	



Learning	Embedded Knowledge and Skills
Objectives	By the end of the course, the student will be able to:
	<ul> <li>4.3.k.1 - Explain the pathophysiology of specific ears, eyes,</li> </ul>
	nose, and throat illnesses and injuries.
	<ul> <li>4.3.k.2 - Apply assessment techniques, specific to the ears, eyes,</li> </ul>
	nose, and throat.
	<ul> <li>4.3.k.3 - Evaluate findings related to the etiology,</li> </ul>
O4.3.k	pathophysiology, and manifestations of ears, eyes, nose, and
	throat illnesses and injuries.
	• <b>4.3.k.4 - Demonstrate</b> assessment techniques, for ears, eyes,
	nose, and throat illnesses and injuries.
	• <b>4.3.k.5 - Adapt</b> assessment techniques, to ears, eyes, nose, and
	throat history findings.
	By the end of the course, the student will be able to:
O4.5.g	• <b>4.5.g.1 - Differentiate</b> between core and peripheral temperature
	monitoring.
	By the end of the course, the student will be able to:
O4.5.n	• <b>4.5.n.1 - Describe</b> common radiological data.
	• <b>4.5.n.2 - Differentiate</b> normal from abnormal results.
	By the end of the course, the student will be able to:
O4.5.0	• <b>4.5.o.1 - Describe</b> common findings of a CT, ultrasound, and
	MRI.
	By the end of the course, the student will be able to:
	• <b>5.5.b.1 - Identify</b> the purposes of and indications for
	hemorrhage control through the use of direct pressure and
	patient positioning.
O5.5.b	<ul> <li>5.5.b.2 - List the steps for hemorrhage control through the use of direct pressure and patient positioning.</li> </ul>
05.5.0	<ul> <li>5.5.b.3 - Perform hemorrhage control through the use of direct</li> </ul>
	pressure and patient positioning.
	<ul> <li>5.5.b.4 - Discuss potential complications of hemorrhage control</li> </ul>
	through the use of direct pressure and patient positioning.
	<ul> <li>5.5.b.5 - Adapt to changes in patient presentation.</li> </ul>
	By the end of the course, the student will be able to:
05.5	• <b>5.5.r.1 - Describe</b> the purpose of a chest tube.
O5.5.r	• 5.5.r.2 - Describe indications for the use of chest tubes
	• <b>5.5.r.3 - Identify</b> the components of a closed chest tube system.
	By the end of the course, the student will be able to:
O5.5.s	• <b>5.5.s.1 - Describe</b> indications for needle thoracostomy.
	• <b>5.5.s.2 - Identify</b> equipment for needle thoracostomy



Learning Objectives	Embedded Knowledge and Skills	
O5.6.a	<ul> <li>By the end of the course, the student will be able to:         <ul> <li>5.6.a.1 - Identify the purposes of and indications for soft tissue dressing, bandaging and immobilization.</li> <li>5.6.a.2 - Describe the various types of dressings and bandages.</li> <li>5.6.a.3 - Perform appropriate dressing, bandaging and immobilization procedures.</li> </ul> </li> </ul>	
O5.6.b	<ul> <li>5.6.a.4 - Adjust to changes in patient presentation.</li> <li>By the end of the course, the student will be able to:         <ul> <li>5.6.b.1 - Identify the purposes of and indications for dressing a burn.</li> <li>5.6.b.2 - Describe types of burn dressings.</li> <li>5.6.b.3 - Demonstrate application of burn dressing.</li> <li>5.6.b.4 - Adjust to changes in patient presentation.</li> </ul> </li> </ul>	
O5.6.c	<ul> <li>By the end of the course, the student will be able to:</li> <li>5.6.c.1 - Identify the purposes of and indications for an eye dressing.</li> <li>5.6.c.2 - Describe types of eye dressings.</li> <li>5.6.c.3 - Demonstrate application of eye dressing.</li> <li>5.6.c.4 - Adjust to changes in patient presentation.</li> </ul>	
O5.6.d	<ul> <li>By the end of the course, the student will be able to:</li> <li>5.6.d.1 - Identify the purposes of and indications for dressing a penetration wound.</li> <li>5.6.d.2 - Describe types of penetration wound dressings.</li> <li>5.6.d.3 - Demonstrate application of penetration wound dressing.</li> <li>Adjust to changes in patient presentation.</li> </ul>	
O5.6.f	<ul> <li>By the end of the course, the student will be able to: <ul> <li>5.6.f.1 - Describe the stages of wound healing.</li> <li>5.6.f.2 - Describe common dressings and therapies associated with wound care.</li> <li>5.6.f.3 - Explain the ongoing care associated with wound management.</li> <li>5.6.f.4 - Explain the process of suturing/stapling and suture/staple removal.</li> <li>5.6.f.5 - Perform wound care.</li> <li>5.6.f.6 - Utilize sterile or aseptic technique as appropriate.</li> </ul> </li> </ul>	



Learning Objectives	Embedded Knowledge and Skills	
	By the end of the course, the student will be able to:	
	• 5.7.a.1 - Identify signs and symptoms of possible fractures to	
O5.7.a	the appendicular skeleton.	
	• 5.7.a.2 - Distinguish between open and closed fractures.	
	• 5.7.a.3 - Evaluate commercially manufactured splints for use	
	based on patient presentation.	
	• 5.7.a.4 - Modify splints to meet patient needs.	
	• 5.7.a.5 - Explain how the mechanism of injury and illness can	
	affect injuries to the appendicular skeleton.	
	• <b>5.7.a.6 - Perform</b> appropriate treatment to suspected fracture.	
	By the end of the course, the student will be able to:	
	• 5.7.b.1 - Identify signs and symptoms of possible fracture injury	
	to the axial skeleton.	
	<ul> <li>5.7.b.2 - Describe the relationship of kinematics to potential</li> </ul>	
O5.7.b	spinal injury.	
03.7.0	<ul> <li>5.7.b.3 - Evaluate commercially manufactured immobilization</li> </ul>	
	devices for use based on patient presentation.	
	• <b>5.7.b.4 - Modify</b> immobilization devices to meet patient needs.	
	• 5.7.b.5 - Perform treatment of suspected fractures involving the	
	axial skeleton.	
	By the end of the course, the student will be able to:	
O5.7.c	<ul> <li>5.7.c.1 - Define "Closed Reduction."</li> </ul>	
	• 5.7.c.2 - Discuss the indications for fracture and dislocation	
	reduction.	



Learning Objectives	Embedded Knowledge and Skills		
	By the end of the course, the student will be able to:		
	• 6.1.f.1 - Explain the pathophysiology of specific integumentary		
	conditions.		
	• 6.1.f.2 - Explain the approach to a patient presenting with		
	integumentary conditions.		
	• 6.1.f.3 - Explain how patient history relates to a patient		
	presenting with integumentary conditions.		
	• 6.1.f.4 - Explain how age, gender and health status relate to a		
	patient presenting with integumentary conditions.		
<b>O6.1.f</b>	• 6.1.f.5 - Infer a differential diagnosis for a patient experiencing		
	integumentary conditions.		
	• 6.1.f.6 - Discuss potential complications of integumentary		
	conditions.		
	• 6.1.f.7 - Adapt care based on a patient presenting with		
	integumentary conditions.		
	• 6.1.f.8 - Integrate the approach, assessment, treatment and		
	transport of a patient with integumentary conditions.		
	• <b>6.1.f.9 - Justify</b> approach, assessment, care and transport		
	decisions for a patient with integumentary conditions.		
	By the end of the course, the student will be able to:		
	• <b>6.1.g.1 - Explain</b> the pathophysiology of specific		
	musculoskeletal conditions.		
	• 6.1.g.2 - Explain the approach to a patient presenting with		
	musculoskeletal conditions.		
	• 6.1.g.3 - Explain how patient history relates to a patient		
	presenting with musculoskeletal conditions.		
	• <b>6.1.g.4 - Explain</b> how age, gender and health status relate to a		
0.11	patient presenting with musculoskeletal conditions.		
O6.1.g	• <b>6.1.g.5</b> - <b>Infer</b> a differential diagnosis for a patient experiencing		
	musculoskeletal conditions.		
	<ul> <li>6.1.g.6 - Discuss potential complications of musculoskeletal conditions.</li> </ul>		
	<ul> <li>6.1.g.7 - Adapt care based on a patient presenting with musculoskeletal conditions.</li> </ul>		
	<ul> <li>6.1.g.8 - Integrate the approach, assessment, treatment and</li> </ul>		
	transport of a patient with musculoskeletal conditions.		
	<ul> <li>6.1.g.9 - Justify approach, assessment, care and transport</li> </ul>		
	decisions for the patient with musculoskeletal conditions.		
	accisions for the patient with indsculoskeletal conditions.		



Learning Objectives	Embedded Knowledge and Skills	
	By the end of the course, the student will be able to:	
	• 6.1.j.1 - Explain the pathophysiology of specific ear, eye, nose	
	and throat conditions.	
	• <b>6.1.j.2 - Explain</b> the approach to a patient presenting with ear, eye, nose and throat conditions.	
O6.1.j	• <b>6.1.j.3 - Explain</b> how patient history relates to patient presenting with an issue related to the ear, eye, nose or throat.	
	<ul> <li>6.1.j.4 - Explain how age, gender, and health status relate to the patient presenting with an issue related to the ear, eye, nose or throat.</li> </ul>	
	<ul> <li>6.1.j.5 - Infer a differential diagnosis on the patient experiencing an issue with the ear, eye, nose or throat.</li> </ul>	
	<ul> <li>6.1.j.6 - Discuss potential complications of ear, eye, nose and throat conditions.</li> </ul>	
	<ul> <li>6.1.j.7 - Adapt care based on a patient presenting with issue(s) related to the ear, eye, nose or throat.</li> </ul>	
	<ul> <li>6.1.j.8 - Integrate the approach, assessment, treatment and</li> </ul>	
	transport of a patient experiencing an issue(s) related to the ear, eye, nose or throat.	
	• 6.1.j.9 - Justify approach, assessment, care, and transport	
	decisions for the patient experiencing an issue(s) related to the	
	ear, eye, nose or throat.	
	By the end of the course, the student will be able to:	
	• <b>6.1.o.1 - Discuss</b> how trauma indices (scores) relate to triage and	
	transport decisions.	
	• 6.1.0.2 - Explain how age, gender, and health status relate to a	
O6.1.o	trauma patient presentation.	
	<ul> <li>6.1.0.3 - Prioritize treatment and transport decisions for trauma patients.</li> </ul>	
	<ul> <li>6.1.0.4 - Adapt care based on the trauma patient presentation.</li> </ul>	
	<ul> <li>6.1.0.5 - Justify approach, assessment, care and transport</li> </ul>	
	decisions for a trauma patient.	



# GRADING

Students will be evaluated through written examination & class participation. A minimum of **70%** must be attained to receive a passing grade for PCP-129 Trauma 2.

Class Engagement	10%
Midterm Test	40%
Final Exam	50%

# **EXPECTATIONS & TIPS FOR SUCCESS**

Academic Standards and Workload: Appropriate professional tone is expected on all student submissions and examinations. This is to help build strong professional practice skills.

A typical PCP course should require 1-2 hours per week of out-of-class work. This time may vary depending on how quickly you read and comprehend assigned course materials.

**Classroom Protocol:** Students are expected to be courteous and respectful of others, and mindful that a classroom is a shared working space with the primary goal of learning course material.

Unnecessary distractions are to be minimized – that includes turning off cell phones and other distracters during lectures unless permission has been granted by the instructed.

Tardiness is strongly discouraged as it is in the Paramedic workplace. If for some reason you arrive late, please wait and enter the class during break.

Unless otherwise notified by the class instructor, attendance to all classes is mandatory. Absences will be dealt with on a case-by-case basis.

**Deadlines and Late Penalties:** Course deliverables submitted after the due date will be assigned a grade of zero (0). This penalty may be waived at the discretion of the instructor (with supporting verification/documentation).

**Engagement Points:** A student's engagement will be graded out of 100 (representing 10% of the overall course mark). Students will be evaluated on their attendance and participation in every class. Each class will be worth an equal portion of the total 100 points. (See: *Engagement Rubric* in the Resource Folder.)



**Absence Due to Special Circumstances or Illness:** Let Mr. Mattatall know in advance if you need to be away due to special circumstances. If the event conflicts with class examinations, verification of the reason for absence will be required.

Academic Integrity: In order to maintain a culture of academic integrity, members of the OLS Academy community are expected to promote honesty, trust, fairness, respect and responsibility.

**Communication Methods**: Most communications regarding PCP-129 will be done during class sessions. Special announcements will be posted on the OLS Academy website. Emails sent to students will be sent from <u>academy@omnilifesupport.com</u>. Students can email the instructor at <u>joel.mattatall@omnilifesupport.com</u>.

This outline is subject to change at the discretion of academy administrators.