OLS Academy

Primary Care Paramedicine 2025-26
Term 1 | Block 2
PCP-119 Trauma 1
OLS Academy
Course Outline

COURSE OVERVIEW

PCP-119, Trauma 1, will be delivered in the classroom setting using a blend of lecture and group discussion. In Trauma 1, we 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 Airway management & ventilation, supplemental oxygen therapy, airway pharmacology, and trauma systems & mechanism of injury

MEETING TIMES & INSTRUCTIONAL METHODS

In-class sessions (virtual when warranted)

Lecture/Group Discussion:	Mondays	13:00 – 14:45
Total hours:	13	

REQUIRED MATERIALS, PREREQUISITES, & COREQUISITES

Textbooks
Caroline, N. (2021). *Emergency Care in the Streets, Canadian Edition 8th 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 Omni Life Support (OLS) website: Materials related to PCP-119, such as in-class presentations, will be available for student access on. Academy faculty does not authorize the posting of PCP-119 materials on other sites. Each student is responsible for his/her own learning which includes staying current with postings on the OLS website.

Prerequisites:	None
Corequisites:	PCP-105, PCP-107, PCP-112, PCP-113, PCP-114, PCP-116, PCP-117, & PCP-11PT

INSTRUCTOR(S)

Instructor: Rene Savoie E-mail: Rene.Savoie@omnilifesupport.com
Voice: (506) 830-4277

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:

- Describe the structure and function on the upper & lower airways
- Evaluate an airways patency and take corrective steps to remove obstruction
- Describe how to safely suction a patient's upper airway
- Explain how to provide supplemental oxygen therapy and properly use oxygen delivery devices
- Explain proper procedure for inserting, maintaining, and removing advanced airway devices
- Describe the procedure for insertion of a gastric tube
- Describe the difference between surgical and non-surgical airways
- Describe local trauma reporting and the provincial trauma system
- Describe the equipment used for mechanical ventilation, when it is provided, and have a general understanding of the various ventilation modes and settings.

INTENDED LEARNING OBJECTIVES:

Learning objectives for PCP-119 Trauma 1 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 alpha-numerical 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
O5.1.a	By the end of the course, the student will be able to: ○ **5.1.a.1 - Apply** problem-solving techniques required with various types of patients. ○ **5.1.a.2 - Adapt** maneuvers and positioning for head, neck, and jaw positioning, which improve airway patency. ○ **5.1.a.3 - Perform** manual airway maneuvers, under a variety of patient and environmental presentations. ○ **5.1.a.4 - Adjust** to changes in patient's airway patency. ○ **5.1.a.5 - Demonstrate** management of potential complications of airway maneuvers.
O5.1.b	By the end of the course, the student will be able to: ○ **Explain** the purposes of and indications for oropharyngeal suctioning. ○ **Describe** suctioning equipment. ○ **Explain** established standards of maintenance for suctioning equipment. ○ **Identify** pressure limitations for suctioning various age groups. ○ **Operate** appropriate suctioning devices. ○ **Perform** suctioning using safe technique. ○ **Adapt** suctioning techniques, to changes in a patient's condition. ○ **Explain** potential complications of suctioning. ○ **Perform** cleaning and disinfection of suctioning equipment.
O5.1.c	By the end of the course, the student will be able to: ○ **Identify** indications and equipment for suctioning beyond the oropharynx.
O5.1.d	By the end of the course, the student will be able to: ○ **Explain** the purpose and indications for inserting an oropharyngeal airway. ○ **Discuss** oropharyngeal airway types and sizes. ○ **Perform** oropharyngeal airway sizing procedures. ○ **Perform** insertion of an oropharyngeal airway. ○ **Adjust** to changes in patient presentation.
O5.1.e	By the end of the course, the student will be able to: ○ **Explain** the purposes of and indications for inserting a nasopharyngeal airway. ○ **Perform** nasopharyngeal airway sizing procedures. ○ **Perform** nasopharyngeal airway insertion. ○ **Adjust** to changes in patient presentation.

Learning Objectives	Embedded Knowledge and Skills
O5.1.f	By the end of the course, the student will be able to: ○ **Explain** the purposes of and indications for airway devices not requiring visualization of vocal cords and not introduced endotracheally. ○ **Describe** various types of airway devices not requiring visualization of vocal cords and not introduced endotracheally. ○ **Perform** sizing procedures for airway devices not requiring visualization of vocal cords and not introduced endotracheally. ○ **Perform** insertion of airway devices not requiring visualization of vocal cords and not introduced endotracheally. ○ **Adjust** to changes in patient presentation.
O5.1.g	By the end of the course, the student will be able to: ○ **Explain** the purposes of and indications for airway devices not requiring visualization of vocal cords and introduced endotracheally. ○ **Describe** various types of airway devices not requiring visualization of vocal cords and introduced endotracheally.
O5.1.g	By the end of the course, the student will be able to: ○ **5.1.g.1 - Explain** the purposes of and indications for airway devices not requiring visualization of vocal cords and introduced endotracheally. ○ **5.1.g.2 - Describe** various types of airway devices not requiring visualization of vocal cords and introduced endotracheally.
O5.1.h	By the end of the course, the student will be able to: ○ **5.1.h.1 - Explain** the purposes of and indications for airway devices requiring visualization of vocal cords and introduced endotracheally. ○ **5.1.h.2 - Describe** the various types of airway devices requiring visualization of vocal cords and introduced endotracheally.
O5.1.i	By the end of the course, the student will be able to: ○ **Identify** the indications for AFB removal. ○ **Describe** the methods of relieving airway obstructions ○ **Describe** the differences in technique required for AFB removal in various age groups. ○ **Perform** AFB removal under a variety of presentations. ○ **Adjust** to changes in patient presentation. ○ **Identify** potential complications of AFB removal.

Learning Objectives	Embedded Knowledge and Skills
O5.1.j	By the end of the course, the student will be able to: ○ **Identify** the purposes of and indications for foreign body removal by forceps. ○ **Describe** equipment used for foreign body removal by direct techniques. ○ **Identify** potential complications of AFB removal by direct techniques.
O5.1.k	By the end of the course, the student will be able to: ○ **5.1.k.1 - Identify** the purposes of and indications for percutaneous cricothyroidotomy. ○ **5.1.k.2 - Describe** equipment used for percutaneous cricothyroidotomy. ○ **5.1.k.3 - Identify** potential complications of percutaneous cricothyroidotomy.
O5.1.l	By the end of the course, the student will be able to: ○ **5.1.l.1 - Identify** the purposes of and indications for surgical cricothyroidotomy. ○ **5.1.l.2 - Describe** equipment used for surgical cricothyroidotomy.
O5.2.a	By the end of the course, the student will be able to: ○ **5.2.a.1 - Describe** indications for oxygen administration. ○ **5.2.a.2 - Discuss** the purpose of oxygen administration. ○ **5.2.a.3 - Discuss** oxygen administration complications. ○ **5.2.a.4 - Describe** the safe handling of oxygen delivery systems. ○ **5.2.a.5 - Discuss** oxygen administration precautions. ○ **5.2.a.6 - Identify** different oxygen cylinder types and sizes. ○ **5.2.a.7 - Apply** the formulas that determine oxygen cylinder factors, volume (or type) and maximum filling volumes and duration. ○ **5.2.a.8 - Identify** various types of oxygen delivery systems. ○ **5.2.a.9 - Explain** the difference between portable and fixed delivery systems.
O5.2.b	By the end of the course, the student will be able to: ○ **5.2.b.1 - Describe** the sequential steps for setting up oxygen delivery systems. ○ **5.2.b.2 - Operate** oxygen delivery systems. ○ **5.2.b.3 - Demonstrate** cleaning and disinfection of oxygen delivery systems.

Learning Objectives	Embedded Knowledge and Skills
O5.3.a	By the end of the course, the student will be able to: ○ **Identify** the purposes of and indications for the use of a nasal cannula. ○ **List** the steps for administration of oxygen by nasal cannula. ○ **Perform** oxygen administration using a nasal cannula. ○ **Adjust** to changes in patient presentation.
O5.3.b	By the end of the course, the student will be able to: ○ **Identify** the purposes of and indications for the use of a low concentration mask. ○ **List** the steps for administration of oxygen by a low concentration mask. ○ **Perform** oxygen administration using a low concentration mask. ○ **Adjust** to changes in patient presentation.
O5.3.c	By the end of the course, the student will be able to: ○ **Identify** the purposes of and indications for the use of a controlled concentration oxygen mask.
O5.3.d	By the end of the course, the student will be able to: ○ **Identify** the purposes of and indications for the use of a high concentration mask. ○ **List** the steps for administration of oxygen by a high concentration mask. ○ **Perform** oxygen administration using a high concentration mask. ○ **Adjust** to changes in patient presentation.
O5.3.e	By the end of the course, the student will be able to: ○ **Identify** the purposes of and indications for the use of a pocket mask. ○ **List** the steps for administration of oxygen by a pocket mask. ○ **Perform** oxygen administration using a pocket mask. ○ **Adjust** to changes in patient presentation.

Learning Objectives	Embedded Knowledge and Skills
O5.4.a	By the end of the course, the student will be able to: ○ **Identify** the purposes of and indications for the use of a manual positive pressure device. ○ **List** the steps for administration of oxygen by a manual positive pressure device. ○ **Discuss** rate, rhythm, volume, compliance, and positive end expiratory pressure. ○ **Perform** ventilation using a manual positive pressure device. ○ **Distinguish** between one person and two-person application of a manual positive pressure device. ○ **Evaluate** the effectiveness of ventilation. ○ **Adjust** to changes in patient presentation.
O5.4.b	By the end of the course, the student will be able to: ○ **Define** "mechanical ventilation". ○ **Identify** the various types of mechanical ventilation equipment. ○ **List** indications for mechanical ventilation.
O5.4.c	By the end of the course, the student will be able to: ○ **Discuss** potential complications and safety issues when using mechanical ventilation. ○ **Describe** vent circuit, end tidal carbon dioxide, manometer, and respirometer. ○ **Differentiate** between intermittent mandatory ventilation, continuous mandatory ventilation, assist control, and inverse ratio ventilation. ○ **Discuss** continuous positive airway pressure, positive end expiratory pressure, and noninvasive positive pressure ventilation. ○ **Describe** blender, saturated oxygen. ○ **Describe** compliance, resistance, plateau pressure, inspiratory pressure, expiratory pressure, peak expiratory pressure, tidal volume, and respiratory rate.
O5.4.d	By the end of the course, the student will be able to: ○ **Describe** use of mechanical ventilator based on patient presentation. ○ **Describe** the adjustment of parameters to changes in ventilatory and hemodynamic status. ○ **Discuss** the use of mechanical ventilator based on patient presentation. ○ **Discuss** the use of capnography and pulse oximetry.

Learning Objectives	Embedded Knowledge and Skills
O5.5.t	By the end of the course, the student will be able to: ○ **Describe** indications for oral and nasal gastric intubation. ○ **Identify** equipment for oral and nasal gastric intubation.

GRADING

Students will be evaluated through written examination & class participation. A minimum of **70%** must be attained to receive a passing grade for PCP-119 Trauma 1.

Class Engagement	10%
Final Exam	90%

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 in the event of extraordinary or special circumstances (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. Savoie 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. **Total Amount of Absences Permitted** = 2 classes.

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-119 will be done during class sessions. Special announcements will be posted on the OLS Academy website. Emails sent to students will be sent from academy@omnilifesupport.com. Students can email the instructor at Rene.Savoie@omnilifesupport.com.

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