

2017 National Ski Patrol Outdoor Emergency Care Syllabus

08/24/17 Thursday: Chapters 1-3

Introduction/Intro to OEC/Emergency Care System & Rescue Basics

Skill Set: 3-1

INTRODUCTION

Instructor of Record
Attending Instructors

Introduction to National Ski Patrol Organization

Beginning
Current # of divisions
We are a part of the:
Central Division
Western Michigan Region
Section 2
Patroller designations
♣ Candidate
♣ Patroller
♣ Alpine Patroller or Nordic Patroller
♣ Senior Alpine or Nordic Patroller
♣ Certified Alpine or Nordic Patroller

Professional *Reasons to Join the NSP*

Free skiing at the C-Burg
Free PSIA ski lessons at C-Burg
Continual First Aid Educational Opportunities
Continual Ski Enhancement/Educational Opportunities
Opportunities for personal growth (leadership, self confidence)
Join an organization comprised of caring and committed individuals

Reasons you may not want to Join the NSPS

Candidate time and financial commitments
Costs: Dues/ Supplies/ Fanny Pack/ Patrol Coat
Legal & Liability Issues

Patroller Candidate Program

To become an *Alpine or Nordic* Patroller, you must complete the Alpine or Nordic Training and Education Program. The program is comprised of five education or training modules. Plan on two years to successfully complete the program. The benefits afforded to patrollers (free skiing) are provided throughout the two years.

First Aid Classes-OEC (Outdoor Emergency Care)

Objective: to provide candidates the basic knowledge and skills required for the identification and stabilization of injuries and illnesses to others in a non-urban setting and in all seasons.

Class format: Twice a week. Tuesday and Thursdays from 6:30pm until 10pm and 2 additional Sunday's from 10:00am – 1:00pm. There is both a substantial amount of bookwork and hands on practical application each week. Candidates are expected to complete the days reading assignments prior to class. Although there are certain situations that may arise that make it impossible to make a class, it is expected that you will attend and participate in most classes. Experience has shown that the more classes a candidate attends the better prepared they are for passing the written and practical

exams.

CPR/AED for Professional Rescuers and Health Care Providers Class (Three Classes, Attendance is Mandatory for all three classes)

Midterm and Final tests.

Midterm Test: 100 question written test, 80% to pass. Five hands-on scenario test situations. 80% to pass. Midterm is used as a tool to provide feedback to students.

Final Test: 100 question written test, 80% to pass. Five hands-on scenario test situations. 80% to pass. Final Test determines pass or fail of course.

-When you pass the final tests, you are considered a Patroller (A person who provides emergency care to injured or ill guests but may not transport a guest off of the hill/slope).

Course Challenge: Individuals having training equivalent to a basic EMT may challenge the course. Individuals would hold a current license in medicine (M.D., D.O., Nurse or physician assistant, any level of EMT or paramedic). Challenge students are required to demonstrate all of the skill performances and complete the same final written exam & practical scenario evaluation.

Ski Proficiency and toboggan handling

Objective: to provide candidates the knowledge and skills required to safely transport an injured person to the bottom of any hill. (Usually occurs in the second year).

Final test is an evaluation of your ability to deliver patients to the bottom of the hill. With successful completion of this course along with the OEC Course, you are considered an Alpine or Nordic Patroller (a person who provides emergency care to injured ill area guests and can transport the guest off of the hill).

Registration

Payments

Review textbook (Outdoor Emergency Care – 5th Edition)

Review Required Supply List

Review Syllabus

Review Calendar

Chapter 1: Introduction to Outdoor Emergency Care

Chapter Objectives

Upon completion of this chapter, the OEC Technician will be able to:

1-1. Describe the evolution and purpose of the National Ski Patrol's OEC program.

1-2. Describe the history of the National Ski Patrol.

1-3. Identify the founder of the National Ski Patrol.

1-4. Describe the role of National Ski Patrol in the formation of the U.S. Army's 10th Mountain Division.

1-5. Compare and contrast the OEC textbook and OEC course/curriculum.

1-6. Describe the organization of the OEC worktext and its use during an OEC course or OEC refresher course.

1-7. Describe the OEC certification and recertification processes.

1-8. Contrast the standard of training and standard of care.

1-9. Define the following legal terms:

- *abandonment*
- *assault*
- *battery*
- *breach of duty*
- *consent*
- *duty to act*
- *negligence*

1-10. Describe the following forms of consent:

- *expressed consent*

- *implied consent*
- *informed consent*
- *minor consent*

1-11. Describe the impact of Good Samaritan laws on volunteer rescuers.

Chapter 2: Emergency Care Systems

Chapter Objectives

Upon completion of this chapter, the OEC technician will be able to:

- 2-1. List six attributes of an emergency care system.
- 2-2. List four nationally recognized pre-hospital emergency care provider levels.
- 2-3. Compare and contrast direct medical oversight and indirect medical oversight.
- 2-4. Describe the purpose of quality improvement.

Chapter 3: Rescue Basics

Chapter Objectives

Upon completion of this chapter, the OEC Technician will be able to:

- 3-1. Describe how the body regulates temperature.
- 3-2. Describe the four mechanisms of heat exchange.
- 3-3. Describe the “fight or flight” response.
- 3-4. Describe the steps an OEC Technician can take to be prepared when responding to a request for assistance.
- 3-5. Describe how layering clothing can help preserve body heat.
- 3-6. Describe the five modes of disease transmission.
- 3-7. Define the following terms:
 - *pathogen*
 - *Standard Precautions*
 - *body substance isolation (BSI)*
 - *hazardous material*
- 3-8. List common personal protective equipment used by OEC Technicians.
- 3-9. Describe the four components of the scene size-up.
- 3-10. Describe and demonstrate how to ensure scene safety.
- 3-11. Describe chain of custody.
- 3-12. Demonstrate how to safely put on and remove disposable medical gloves.

OEC SKILL SETS

_____ Skill 3-1 Removing Contaminated Gloves

08/29/17 Tuesday: Chapter 6 & 9
Anatomy & Physiology and Airway Management
Skill Sets: 9-1, 9-2, 9-3 & 9-4

Chapter 6: Anatomy and Physiology

Chapter Objectives

Upon completion of this chapter, the OEC Technician will be able to:

6-1. *Define the following terms:*

- *anatomy*
- *body system*
- *cell*
- *homeostasis*
- *organ*
- *physiology*
- *tissue*

6-2. *Identify various anatomical terms commonly used to refer to the body.*

6-3. *Identify at least four body positions.*

6-4. *List the five body cavities.*

6-5. *Identify and describe the fundamental anatomy and physiology of the 11 body systems.*

6-6. *Describe homeostasis and its importance for good health.*

6-7. *Identify and properly use various anatomical terms to describe body direction, location, and movement.*

Chapter 9: Airway Management

Chapter Objectives

Upon completion of this chapter, the OEC Technician will be able to:

9-1. *List the major anatomical structures of the upper airway.*

9-2. *Describe and demonstrate how to manually open the airway or mouth using the following techniques:*

- *Head-tilt, chin-lift*
- *Jaw thrust*
- *Crossed finger*

9-3. *Describe how to clear a patient's airway using the following methods:*

- *Gravity*
- *Finger sweep*
- *Suction*

9-4. *Describe how to place a patient into the recovery position.*

9-5. *Compare, contrast, and demonstrate the usage of a rigid suction catheter and a flexible suction catheter.*

9-6. *List the indications of and uses for the following airway adjuncts, and demonstrate the proper methods for choosing the correct size and inserting them:*

- *Oropharyngeal airway*
- *Nasopharyngeal airway*

9-7. *Describe how to calculate the oxygen flow duration rate.*

9-8. *Describe and demonstrate how to properly set up an oxygen tank for use.*

9-9. *List four tips for the safe use of oxygen.*

9-10. *Describe and demonstrate how to use the following oxygen delivery, ventilation, and barrier devices:*

- *Nasal cannula*
- *Non-rebreather mask*

- Pocket mask
- Bag-valve mask
- Face shield

OEC SKILL SETS

- _____ **Skill 9-1 Suctioning a Patient’s Airway**
- _____ **Skill 9-2 Inserting a Nasopharyngeal Airway (NPA)**
- _____ **Skill 9-3 Inserting an Oropharyngeal Airway (OPA)**
- _____ **Skill 9-4 Oxygen Tank Set-up and Breakdown**

08/31/17 Thursday: Chapter 7
Patient Assessment – Part 1 & Vital Signs
Skill Sets: 7-4, 7-5, 7-6 & 7-7

NOTE: \$60.00 OEC Enrollment Fee Due Today

Chapter 7: Patient Assessment

Chapter Objectives

Upon completion of this chapter, the OEC Technician will be able to:

- 7-1. Describe the two parts of the overall assessment process.
- 7-2. Describe the importance of scene safety.
- 7-3. List the two parts of a patient assessment.
- 7-4. Describe and demonstrate how to perform a primary assessment and manage the ABCDs.
- 7-5. Describe and demonstrate how to perform a secondary assessment.
- 7-6. Define the following terms:
 - assessment
 - chief complaint
 - DCAP-BTLS
 - sign
 - symptom
- 7-7. List and describe the key components of a patient history.
- 7-8. Describe how environmental conditions can affect patient assessment.
- 7-9. Describe and demonstrate how to obtain a SAMPLE history.
- 7-10. Describe and demonstrate how to assess pain using the OPQRST mnemonic.
- 7-11. Describe and demonstrate how to assess the eyes (pupils and motion).
- 7-12. Describe and demonstrate how to assess a patient’s level of responsiveness using the following:
 - AVPU
 - Glasgow Coma Score
- 7-13. Describe and demonstrate the procedure for obtaining the following vital signs:
 - Respiratory rate
 - Blood pressure
 - Heart rate
- 7-14. Describe and demonstrate how to reassess a patient.

OEC SKILL SETS

- _____ **Skill 7-4 Assessing Pupils**

- _____ **Skill 7-5 Assessing Pulse**
- _____ **Skill 7-6 Assessing Respiratory Rate**
- _____ **Skill 7-7 Obtain a Blood Pressure by Auscultation**

09/05/17 Tuesday: Chapter 7 & 8
Patient Assessment – Part 2 & Medical Communications and Documentations
Skill Sets: 7-1 and 7-2

Chapter 8: Medical Communications and Documentation

Chapter Objectives

Upon completion of this chapter, the OEC Technician will be able to:

- 8-1. List the two types of medical communications.
- 8-2. List the essential content that should be included in all verbal communications, using the acronym SAILER.
- 8-3. List the components for the following methods used to complete a PCR:
 - SOAP
 - CHEATED
- 8-4. List the characteristics of good report writing using the acronym FACTUAL-OEC.
- 8-5. Describe and demonstrate how to correct an error on a written report.
- 8-6. List two criteria that must be documented on a patient refusal.
- 8-7. List four injuries or crimes that a mandated reporter must report to authorities.
- 8-8. Demonstrate how to complete a sample patient care report with 100-percent accuracy.
- 8-9. Demonstrate how to provide an oral report.

OEC SKILL SETS

- _____ **Skill 7-1 Patient assessment**
- _____ **Skill 7-2 Pt Assessment – Trauma Patient**
- _____ **AVPU**
- _____ **Glasgow Coma Scale**

09/07/17 THURSDAY: CHAPTERS 10 & 18
PRINCIPALS OF SHOCK & SOFT-TISSUE INJURIES
SKILL SETS: 10-1, 18-1, 18-2, 18-3 & 18-4

CHAPTER 10: SHOCK

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 10-1. Define shock.
- 10-2. Describe the basic components of the cardiovascular system:
 - blood
 - heart
 - blood vessels

- 10-3. Describe the key components of blood.
- 10-4. Define cardiac output.
- 10-5. Compare and contrast the three stages of shock.
- 10-6. List the four types of shock.
- 10-7. Describe how the body compensates for shock.
- 10-8. List the classic signs and symptoms of shock.
- 10-9. Describe and demonstrate the management of shock.

CHAPTER 18: SOFT-TISSUE INJURIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 18-1. List four functions of the skin.
- 18-2. List the layers of the skin.
- 18-3. List and describe three types of closed soft-tissue injuries.
- 18-4. List and describe nine types of open soft-tissue injuries.
- 18-5. Describe the emergency care for the following injuries:
 - closed soft-tissue injury
 - open soft-tissue injury
 - amputation
 - impaled object
- 18-6. Describe and demonstrate three methods for controlling external bleeding.
- 18-7. Compare and contrast a dressing and a bandage.
- 18-8. Demonstrate the proper procedure for applying each of the following:
 - dressing
 - bandage
 - compression dressing
 - tourniquet

OEC SKILL SETS

- _____ **Skill 10-1 Shock Management**
- _____ **Skill 18-1 Controlling Bleeding**
- _____ **Skill 18-2 Applying a tourniquet**
- _____ **Skill 18-3 Treating Closed soft-Tissue Injuries**
- _____ **Skill 18-4 Emergency Care of an Amputated Part**

09/12/17 TUESDAY: CHAPTERS 17 – 19

PRINCIPALS OF TRAUMA, SOFT-TISSUE INJURIES & BURNS

SKILL SETS: 18-5, 18-6, 18-8, & 18-9

CHAPTER 17: PRINCIPLES OF TRAUMA

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 17-1. Define the following terms:
 - kinematics
 - mechanism of injury
 - index of suspicion
- 17-2. Compare and contrast high-velocity injuries and low-velocity injuries.

- 17-3. Compare and contrast the five mechanisms of injury.
17-4. Describe the role of a trauma center in improving the survival of a trauma patient.
17-5. Describe and demonstrate the management of a trauma patient in outdoor or wilderness settings.

CHAPTER 19: BURNS

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 19-1. List four types of burns.
19-2. List the signs and symptoms for each type of burn.
19-3. Compare and contrast the methods for classifying burns.
19-4. Describe the clinical significance of a voice change in the setting of a thermal burn.
19-5. Compare and contrast direct current and alternating current.
19-6. Describe how to assess burn severity using the "Rule of Nines" system.
19-7. Describe and demonstrate the management of a burn patient.

OEC SKILL SETS

- _____ **Skill 18-5 Stabilizing an Impaled Object**
_____ **Skill 18-6 Using a self-Adhering Roller Bandage**
_____ **Skill 18-8 Using a Triangular Bandage – Bandana Wrap**
_____ **Skill 18-9 Bandaging a Finger**

09/14/17 THURSDAY: CHAPTER 20

MUSCULOSKELETAL INJURIES – PART 1 – UPPER EXTREMITIES

SKILL SETS: 20-1, 20-2, 20-3, 20-4

CHAPTER 20: MUSCULOSKELETAL INJURIES

CHAPTER OBJECTIVES

Upon completion of this section of this chapter, the OEC Technician will be able to:

20-1.1. Describe the functions of the following structures:

- bones
- cartilage
- joints
- muscles
- synovium
- tendons

20-1.2. Describe the physiology of human movement.

20-1.3. Describe how musculoskeletal tissues heal.

20-1.4. List the six types of musculoskeletal injuries.

20-1.5. Compare and contrast sprain and strain.

20-1.6. Describe two classifications of fractures.

20-1.7. List the signs and symptoms of sprains and fractures.

20-1.8. Define the following terms:

- dislocation
- fracture
- sprains

20-2.1. Describe the general assessment of MS injuries.

20-2.2. Describe the signs and symptoms of MS injuries.

- 20-2.3. List specific injuries involving the arm and leg.
- 20-2.4. Describe and demonstrate how to assess each specific arm or leg injury.
- 20-3.1. Explain the general management of a person with an MS injury.
- 20-3.2. List and demonstrate the use of the following types of splints:
- sling and swathe
 - Quick Splint
 - soft splint
 - rigid splint
 - traction splint
- 20-3.3. Demonstrate how to care for specific injuries to the arm or leg.
- 20-3.4. Demonstrate how to remove a boot, including a ski boot.
- 20-3.5. Describe and demonstrate placing a patient in the anatomical position using the principles of “jams and pretzels.”

OEC SKILL SETS

- _____ **Skill 20-1 Applying a sling and Swathe**
- _____ **Skill 20-2 Creating and Applying a Figure Eight Splint**
- _____ **Skill 20-3 Reducing a posterior sternoclavicular (S/C) Injury**
- _____ **Skill 20-4 Applying a Blanket Roll Splint to the Shoulder**

09/19/17 Tuesday: Chapter 20 Continued

Musculoskeletal Injuries – Part 2

See above objectives for Chapter 20

Skill Sets: 20-5, 20-6, 20-7, 20-8 & 20-10

OEC SKILL SETS

- _____ **Skill 20-5 Splinting Humerus Fracture Using a Rigid Splint**
- _____ **Skill 20-6 Rigid Splint Fixation of an Injured Elbow**
- _____ **Skill 20-7 Splinting a Forearm Fracture**
- _____ **Skill 20-8 Splinting to Immobilize the Hand**
- _____ **Skill 20-10 Applying an Airplane Splint**

09/21/17 Thursday: Chapter 20 continued

Musculoskeletal Injuries – Part 3 – Lower Extremities

See objectives listed above

Skill Sets: 20-9 (X2), 20-11, 20-12 & 20-14

OEC SKILL SETS

- _____ **Skill 20-9 Applying a Traction Splint to a Femur (Kendrick)**
- _____ **Skill 20-11 Applying a Quick Splint**
- _____ **Skill 20-12 Replacing a Quick Splint with a Cardboard Splint**
- _____ **Skill 20-14 Removing a Boot**

09/24/17 SUNDAY- LIFE EMS

SPLINTING REVIEW - PUTTING IT ALL TOGETHER SCENARIO PRACTICE

09/26/17 TUESDAY: CHAPTER 5 & 11

MOVING, LIFTING & TRANSPORTING PATIENTS AND ALTERED MENTAL STATUS

SKILL SETS: 5-1, 5-2, 20-13, BENT KNEE, JAMS & PRETZELS

CHAPTER 5: MOVING, LIFTING, AND TRANSPORTING PATIENTS

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 5-1. Define body mechanics.
- 5-2. Describe and demonstrate a power grip.
- 5-3. Describe and demonstrate a power lift.
- 5-4. Describe the basic guidelines for safely moving a patient.
- 5-5. Explain the difference between an urgent and non-urgent move.
- 5-6. List and describe various devices used to move and transport patients.
- 5-7. Describe and demonstrate the following drags, lifts, and carries:
 - Shoulder drag
 - Extremity lift
 - Bridge/BEAN lift
 - Human crutch
 - Fore and aft carry
 - Chair carry
 - BEAM lift
 - Draw sheet carry
- 5-8. List and demonstrate the proper use of equipment to move, lift, and carry a patient.
- 5-9. Compare and contrast common transportation devices.
- 5-10. List the components of a safe landing zone.
- 5-11. Describe and demonstrate how to safety move when near a helicopter.
- 5-12. Describe the use of CPR during transport.

CHAPTER 11: ALTERED MENTAL STATUS

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 11-1. Define altered mental status.
- 11-2. List nine causes of altered mental status using the mnemonic AEIOU-TIPS.
- 11-3. List and compare the four major types of diabetes.
- 11-4. List the signs and symptoms and demonstrate the treatment of the following medical conditions:
 - hypoglycemia
 - hyperglycemia
 - partial seizure
 - generalized seizure
- 11-5. Compare and contrast the three types of stroke:
 - ischemic stroke
 - hemorrhagic stroke

- transient ischemic attack
- 11-6. Describe how to assess a patient with altered mental status.
11-7. Describe and demonstrate the treatment of a patient with altered mental status

OEC SKILL SETS

- _____ **Skill 5-1 Multiple Person Direct Ground Lift**
- _____ **Skill 5-2 Bridge/BEAN Lift**
- _____ **Skill 20-13 Immobilizing a Tib/Fib Fracture with 2 Rigid Splints**
- _____ **Bent Knee**
- _____ **Jams & Pretzels**

09/28/17 THURSDAY: CHAPTER 21

HEAD & SPINE – PART 1

SKILL SETS: 21-1, 21-2, 21-3 & 21-4

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 21-1. Correctly identify the major anatomical components of the central nervous system.
21-2. Define traumatic brain injury.
21-3. Describe common traumatic injuries involving the head, neck, and back.
21-4. Describe the signs and symptoms of potential head injuries involving the brain.
21-5. Describe the signs and symptoms of potential spinal injuries.
21-6. Describe how to properly assess a patient with a suspected neurologic injury, including neck and spine injuries.
21-7. List the signs and symptoms of increased intracranial pressure.
21-8. Demonstrate how to properly treat a patient with a head, neck, spine, or back injury.
21-9. Demonstrate how to maintain proper spinal alignment while placing a patient onto a long spine board from the following positions:
- lying
 - sitting
 - standing
- 21-10. Describe and demonstrate how to remove a helmet

OEC SKILL SETS

- _____ **Skill 21-1 Manual Spine Stabilization**
- _____ **Skill 21-2 Sizing and Applying a Cervical collar**
- _____ **Skill 21-3 Supine Patient: Log Roll onto a Long Spine Board**
- _____ **Skill 21-4 The axial drag**

10/03/17 TUESDAY: CHAPTER 21 CONTINUED

HEAD AND SPINE – PART 2

SKILL SETS: 21-5, 21-6, 21-7 & 21-8

SEE ABOVE FOR CHAPTER OBJECTIVES

OEC SKILL SETS

- _____ **Skill 21-5 Securing the Patient onto a Long Spine Board**

- _____ **Skill 21-6 Immobilizing a Seated Patient**
- _____ **Skill 21-7 Immobilizing a Standing Patient**
- _____ **Skill 21-8 Removing a Helmet from a Lying Patient**

10/05/17 THURSDAY: CHAPTERS 13 & 14
RESPIRATORY EMERGENCIES/ALLERGIES & ANAPHYLAXIS
SKILL SETS: 7-3, 13-1, 13-2, 14-1, 14-2 & 14-3

CHAPTER 13: RESPIRATORY EMERGENCIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

13-1. Define the following terms:

- diffusion
- dyspnea
- respiration

13-2. List the major anatomical structures of the lower airway.

13-3. Identify the primary muscle of respiration.

13-4. List the accessory muscles of respiration.

13-5. Describe the physiology of breathing.

13-6. Compare and contrast normal and abnormal breathing.

13-7. List the normal breathing rate for individuals in the following age groups:

- infant
- child
- adult

13-8. Identify the most common cause of airway obstruction.

13-9. List the signs and symptoms of acute respiratory distress.

13-10. List the signs and symptoms of the following respiratory emergencies:

- asthma
- COPD
- spontaneous pneumothorax
- pulmonary embolism
- hyperventilation

13-11. Describe and demonstrate how to assess a patient who is having difficulty breathing.

13-12. Describe and demonstrate the appropriate treatment of a patient in respiratory distress.

CHAPTER 14: ALLERGIES AND ANAPHYLAXIS

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

14-1. Define the following terms:

- allergy
- allergic reaction
- anaphylaxis
- antigen
- hypersensitivity

14-2. List four routes by which an antigen may enter the body.

14-3. List four potential allergy sources.

14-4. List the signs and symptoms of an anaphylactic reaction.

14-5. Describe and demonstrate the steps for properly using portable epinephrine auto-injectors.

OEC SKILL SETS

_____ **Skill 7-3 Pt Assessment – Medical Patient**

_____ **Skill 13-1 Auscultation of Breath Sounds**

_____ **Skill 13-2 Assisting with a Metered-Dose Inhaler**

_____ **Skill 14-1 Administration with an Auto-Injector: Epipen**

_____ **Skill 14-2 Administration with an auto-injector: Twinject**

_____ **Skill 14-3 Administration with an auto-injector: Twinject –
Additional Dose**

10/08/17 SUNDAY

WM II REFRESHER – HELP AS NEEDED

10/10/17 TUESDAY

MIDTERM – (MANDATORY) - CANNONSBURG

10/12/17 THURSDAY: CHAPTERS 12 & 15

**REVIEW MIDTERM, SUBSTANCE ABUSE & POISONING AND
CARDIOVASCULAR EMERGENCIES**

CHAPTER 12: SUBSTANCE ABUSE AND POISONING

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

12-1. List and describe the four ways a drug enters and moves through the body.

12-2. List the four routes of absorption.

12-3. Define the following terms:

- *poison*
- *substance*
- *substance abuse*
- *toxin*

12-4. List and describe three commonly abused substances.

12-5. List the signs and symptoms associated with commonly abused substances and with common poisonings.

12-6. Describe and demonstrate the proper care of a patient who has abused a substance or been poisoned.

12-7. List and describe two emergency sources for poison-related or chemical-related information.

CHAPTER 15: CARDIOVASCULAR EMERGENCIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

15-1. List and describe the anatomical structures of the cardiovascular system.

15-2. Describe the functions of the cardiovascular system.

15-3. Describe the flow of blood through the cardiovascular system.

15-4. Define the following:

- acute myocardial infarction
- atherosclerosis
- cardiovascular disease
- coronary artery disease
- hypertension

15-5. List the signs and symptoms for the following cardiovascular disorders:

- acute myocardial infarction
- aortic aneurysm
- cardiogenic shock
- congestive heart failure
- pericardial tamponade
- pulmonary embolism

15-6. List the arrhythmias associated with sudden cardiac death.

15-7. Describe and demonstrate how to assess a patient with a cardiovascular emergency.

15-8. Describe and demonstrate the proper care of a patient with a cardiovascular emergency.

15-9. List three common cardiac medications.

15-10. Describe and demonstrate how to perform CPR on the following:

- an adult
- a child
- an infant

15-11. Describe and demonstrate the proper use of an AED.

OEC SKILL SET

Skill 15-1 AED Use

10/17/17 TUESDAY: CHAPTERS 22 & 29

FACE, EYE & NECK INJURIES AND WATER EMERGENCIES

SKILL SETS: 18-7 AND 22-1

CHAPTER 22: FACE, EYE, AND NECK INJURIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

22-1. Describe the function of the iris.

22-2. List possible causes of eye injuries.

22-3. Describe and demonstrate how to assess eye injuries.

22-4. Describe and demonstrate the management of a patient with a penetrating injury to the eyeball.

22-5. Identify the important structures of the anterior and posterior neck.

22-6. List the signs and symptoms of emergencies of the neck and upper airway.

22-7. List the functions of the following:

- facial bones
- lacrimal glands
- neck muscles

22-8. List the signs and symptoms of emergent injuries to the face, eye, and neck.

22-9. Describe and demonstrate how to assess face, eye, and neck injuries.

22-10. Describe and demonstrate the proper care of a face, eye, or neck injury.

CHAPTER 29: WATER EMERGENCIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 29-1. Compare and contrast dry drowning and wet drowning.
- 29-2. Describe the physiologic response of the mammalian diving reflex.
- 29-3. Define the following terms:
- submersion injury
 - drowning
 - near-drowning
 - arterial gas embolism
 - decompression sickness
- 29-4. Describe the following gas laws:
- Boyle's law
 - Henry's law
 - Dalton's law
- 29-5. List three types of barotrauma and indicate their causes.
- 29-6. List nine ways in which a water-based emergency may be prevented.
- 29-7. List the signs and symptoms of the following water-related emergencies:
- arterial gas embolism
 - decompression sickness
- 29-8. Describe how to manage a patient who has suffered a water-related emergency.

OEC SKILL SETS

_____ **Skill 18-7 Using an occlusive dressing**

_____ **Skill 22-1 Stabilizing an Impaled Object in the Eye**

10/19/17 THURSDAY: CHAPTERS 16, 23 & 24

GI EMERGENCIES, THORACIC TRAUMA AND ABDOMINAL & PELVIC TRAUMA SKILL SETS: 23-1 AND 24-1, ABDOMINAL & CHEST ASSESSMENT

CHAPTER 16: GASTROINTESTINAL AND GENITOURINARY EMERGENCIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 16-1. List at least six possible causes of emergencies involving the gastrointestinal and genitourinary systems.
- 16-2. List the signs and symptoms of emergencies involving the gastrointestinal and genitourinary systems.
- 16-3. Compare and contrast visceral pain and parietal pain.
- 16-4. Describe and demonstrate how to assess the abdomen.
- 16-5. Describe and demonstrate the management of a patient with a severe GI/GU emergency.

CHAPTER 23: THORACIC TRAUMA

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 23-1. List the major anatomical structures of the thoracic cavity.
- 23-2. Describe the basic physiology of thoracic structures.
- 23-3. Describe the pathology of the following thoracic injuries:
- flail chest

- pneumothorax
- hemothorax
- tension pneumothorax
- sucking chest wounds
- pericardial tamponade

23-4. List the signs and symptoms of various thoracic injuries.

23-5. Describe and demonstrate how to assess the chest for trauma, using the L.A.P. method.

23-6. Describe and demonstrate the emergency management of a sucking chest wound.

CHAPTER 24: ABDOMINAL AND PELVIC TRAUMA

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

24-1. Identify and locate the major anatomical structures within the abdominopelvic cavity.

24-2. List the functions of the major anatomical structures within the abdominopelvic cavity.

24-3. List and describe at least six abdominopelvic injuries.

24-4. Describe and demonstrate how to assess a patient with abdominopelvic trauma.

24-5. Describe and demonstrate how to manage a patient with abdominopelvic trauma.

24-6. Describe and demonstrate how to manage an evisceration.

24-7. Describe and demonstrate how to manage an impaled object in the abdomen or pelvis.

24-8. Describe and demonstrate how to manage a pelvic fracture.

OEC SKILL SETS

_____ **Skill 23-1 Managing an Open Chest wound**

_____ **Skill 24-1 Pelvic Stabilization**

10/24/17 TUESDAY

CPR-MANDATORY

10/25/17 WEDNESDAY

CPR-MANDATORY

10/26/17 THURSDAY

CPR-MANDATORY

10/31/17 TUESDAY: CHAPTERS 30 AND 31

PEDIATRIC EMERGENCIES & GERIATRIC EMERGENCIES

CHAPTER 30: PEDIATRIC EMERGENCIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

30-1. List and describe the anatomical and physiological differences between children and adults.

30-2. List and describe the six stages of child growth and development.

30-3. List the normal range of vital signs for each pediatric age group.

30-4. Understand and be able to incorporate communication tips and techniques for assessing and interacting with a pediatric patient.

- 30-5. Describe the signs and symptoms of respiratory distress and failure in a child.
- 30-6. List and describe the signs and symptoms of various pediatric disorders.
- 30-7. List the most common cause of cardiac arrest in pediatric patients.
- 30-8. List common causes of seizures in pediatric patients.
- 30-9. List five indicators of potential child abuse and neglect.
- 30-10. Define sudden infant death syndrome.
- 30-11. Describe and demonstrate how to assess a pediatric patient, using the pediatric assessment triangle.
- 30-12. Describe and demonstrate how to manage common pediatric illnesses and injuries.

CHAPTER 31: GERIATRIC EMERGENCIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 31-1. Describe six physiologic changes that occur with aging.
- 31-2. Describe effective methods for communicating with geriatric patients.
- 31-3. Describe the effects of the following illnesses and diseases on geriatric patients:
- cardiovascular and respiratory disease
 - neurological diseases
 - gastrointestinal (GI) diseases
 - altered mental status
- 31-4. Describe how the chronic use of medication can affect the results of an assessment of geriatric patients.
- 31-5. List four trauma considerations that are unique to geriatric patients.
- 31-6. Describe the general management of geriatric patients.
- 31-7. Describe how to manage a geriatric patient with advanced directives.

11/02/17 THURSDAY: CHAPTERS 25, 26 & 28

COLD-RELATED EMERGENCIES/HEAT-RELATED EMERGENCIES/ALTITUDE RELATED EMERGENCIES

CHAPTER 25: COLD-RELATED EMERGENCIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 25-1. List and define the four mechanisms of heat loss.
- 25-2. List the signs and symptoms of cold exposure.
- 25-3. List the signs and symptoms of frostbite.
- 25-4. List and explain the two classifications of hypothermia.
- 25-5. List and explain the three categories of hypothermia related to severity.
- 25-6. Define afterdrop and explain how to prevent it.
- 25-7. Describe and demonstrate the assessment and emergency care of a patient with a cold injury.
- 25-8. Describe and demonstrate the assessment and emergency care of a patient with frostbite.
- 25-9. Describe and demonstrate the assessment and emergency care of an avalanche victim.

CHAPTER 26: HEAT-RELATED EMERGENCIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 26-1. Explain the way the body normally adjusts to a hot environment.
- 26-2. List the signs and symptoms of a patient with each of the four types of heat-related illness.
- 26-3. Describe and demonstrate the assessment and emergency care of a patient suffering from each of the four types of heat-related illness.
- 26-4. List the signs and symptoms of a patient who is a victim of a lightning strike.
- 26-5. Describe and demonstrate the assessment and emergency care for a patient who has been struck by lightning.
- 26-6. Explain what one can do to prevent heat-related illness.

CHAPTER 28: ALTITUDE-RELATED EMERGENCIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 28-1. Define altitude.
- 28-2. Describe the principles of altitude physiology.
- 28-3. List risk factors for the development of altitude illnesses.
- 28-4. Describe strategies to prevent altitude illness.
- 28-5. List the signs and symptoms of the following altitude illnesses:
- acute mountain sickness
 - high-altitude pulmonary edema
 - high-altitude cerebral edema
- 28-6. Describe how to assess a patient with altitude illness.
- 28-7. Describe the treatment of a patient with altitude illness.

11/07/17 TUESDAY: CHAPTERS 27 & 32

PLANT & ANIMAL EMERGENCIES AND OUTDOOR ADAPTIVE ATHLETES

CHAPTER 27: PLANT AND ANIMAL EMERGENCIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 27-1. Compare and contrast poison, toxin, and venom.
- 27-2. List and describe common toxic plants encountered in wilderness settings.
- 27-3. Describe how plants can be harmful to humans.
- 27-4. List and describe various land and marine creatures that may be harmful to humans.
- 27-5. Describe and demonstrate how to assess a patient that has been injured following an encounter with a toxic plant, an animal, or some marine life.
- 27-6. Describe and demonstrate how to manage an exposure to topical toxins.
- 27-7. Describe and demonstrate the proper management of wounds caused by animals, including reptiles, insects, and spiders.

CHAPTER 32: OUTDOOR ADAPTIVE ATHLETES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 32-1. Define and contrast the following terms:
- disability
 - handicapped
 - impairment
- 32-2. List and describe two disorders that cause intellectual disabilities.
- 32-3. List two disorders that cause progressive physical disabilities.

- 32-4. Describe four elements of effective communication with a person who has an intellectual disability.
- 32-5. Describe how to assess and care for physically disabled athletes.
- 32-6. List the signs and symptoms of autonomic dysreflexia.
- 32-7. Describe and demonstrate how to assess an adaptive athlete.
- 32-8. Describe and demonstrate how to care for an adaptive athlete who is injured or ill.
- 32-9. Describe and demonstrate how to manage an above-the-knee amputee with a femur fracture of the same leg.

11/07 TO 11/11/2017 WMII SKI SWAP – HELP AS NEEDED

11/09/17 THURSDAY: CHAPTER 33 & 34

BEHAVIORAL EMERGENCIES & CRISIS RESPONSE AND OB/GYN EMERGENCIES

SKILL SETS: 33-1 AND 34-1

NOTE: C-BURG REGISTRATION OF \$73.00 DUE – ONLY CANNONSBURG PATROLLERS, OTHER AREAS CHECK WITH YOUR CONTACT

CHAPTER 33: BEHAVIORAL EMERGENCIES AND CRISIS RESPONSE

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

33-1. Define the following terms:

- behavior
- behavioral emergency

33-2. Compare and contrast neurosis and psychosis.

33-3. List and explain four factors that can cause stress or lead a person to behave strangely.

33-4. List the signs and symptoms of common behavioral emergencies.

33-5. Identify techniques to help maintain rescuer safety when responding to a behavioral emergency.

33-6. Describe and demonstrate how to assess a patient with a behavioral emergency.

33-7. Describe and demonstrate the treatment of a patient with a behavioral emergency.

33-8. List the indications for restraining a patient.

33-9. Describe and demonstrate how to properly restrain a patient.

33-10. List the five phases of the Kübler-Ross grieving process.

CHAPTER 34: OBSTETRIC AND GYNECOLOGIC EMERGENCIES

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

34-1. Identify the major anatomical structures within the pelvic cavity.

34-2. List the functions of the female genitourinary and reproductive system.

34-3. List the functions of the major gynecologic structures.

34-4. List three causes of abdominal pain of gynecologic or obstetrical origin.

34-5. List four possible causes of vaginal bleeding.

34-6. List the three stages of a normal pregnancy.

34-7. List three possible consequences of abdominal trauma in a pregnant patient.

34-8. Describe four possible complications of pregnancy.

- 34-9. Demonstrate how to examine a female patient with abdominal or pelvic pain.
- 34-10. Describe how to assess the abdomen of a pregnant patient.
- 34-11. Describe the process of assisting an emergency delivery.
- 34-12. Describe the management of a pregnant patient with abdominal trauma.

OEC SKILL SETS

_____ **Skill 33-1 Patient Restraint**

_____ **Skill 34-1 Assisting with childbirth**

11/14/17 TUESDAY: CHAPTERS 4 & 35

INCIDENT COMMAND & TRIAGE/SPECIAL OPERATIONS & AMBULANCE OPERATIONS

CHAPTER 4: INCIDENT COMMAND AND TRIAGE

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 4-1. Define incident command system.
- 4-2. Describe the primary responsibilities for each of the five functional areas of the incident command system.
- 4-3. Describe and demonstrate how to use the "ID-ME" triage system.
- 4-4. Describe and demonstrate how to use the START system of triage

CHAPTER 35: SPECIAL OPERATIONS AND AMBULANCE OPERATIONS

CHAPTER OBJECTIVES

Upon completion of this chapter, the OEC Technician will be able to:

- 35-1. Define special operations.
- 35-2. List several public safety activities that are classified as special operations.
- 35-3. Describe the basic operational tasks or objectives of various special operations groups.
- 35-4. List and describe the disaster response agencies that OEC Technicians are encouraged to join.
- 35-5. Describe HAZWOPER.
- 35-6. Identify the purpose of the International Hazard Classification System diamond placard system.
- 35-7. List and describe the three hazard control zones.
- 35-8. Describe the purpose of and the mechanism of action for the contents of a nerve-agent antidote kit.
- 35-9. Describe and demonstrate how to properly self-administer the contents of a nerve-agent antidote kit.

11/16/17 THURSDAY

COURSE REVIEW – LIFE EMS

WRITTEN FINAL

11/21/17 TUESDAY

FINAL EXAM – MANDATORY - CANNONSBURG