



CDS Outdoor School, Inc

**Course Overview, Curriculum, and Learning
Objectives**

March 2006

Course Philosophy & Overview

The Classes

Our classes are designed to build upon the knowledge and skills learned in the previous classes. While the higher-level classes may include a review of some of the material presented in earlier classes, that review is not of sufficient depth to substitute for completion of the entire class.

CDS Outdoor School prides itself on not just teaching its students to react to a set of memorized injuries or ailments, but to have the background knowledge that allows them to think through these problems.

While each course has a set of standards, the accompanying scenarios are always tailored to the group being taught and additional emphasis can be added to courses to meet the needs of a specific audience.

All techniques and information taught in this course are in line with the standard of care established by the Wilderness Medical Society for a wilderness environment. The classes covered are:

Wilderness First Aid

This class focuses on preventing, recognizing, and treating common wilderness injuries and illnesses when activation or response of the local EMS system will be delayed beyond 30 minutes. The principles of the course are based upon several different disciplines in wilderness medicine. Among these are: Wilderness Medical Society Practice Guidelines, current American Red Cross guidelines, general protocols established by the Wilderness Emergency Medical Services Institute, current research and experience of the CDS Outdoor School, Inc. staff, and the information contained in the course texts.

All techniques and information taught in this course are in line with the standard of care established by the Wilderness Medical Society for a wilderness environment.

Advanced Wilderness First Aid

The Advanced Wilderness First Aid (Level 3) course increases the knowledge base of WFA. Students will learn more about the Wilderness EMS System, casualty assessment, anatomy, and physiology. In addition, students will receive a great deal of hands-on practical time designed to increase their skill level.

Wilderness First Responder

The Wilderness First Responder Course is an intensive 36 hours of training designed to prepare those who lead groups in the wilderness, operate outside of

the normal EMS system scope, members/medics on a Mountain Rescue Team, or other individuals who would gain from additional knowledge.

The WFR Course greatly expands upon the concepts and skills taught in WFA and AWFA. The course is designed to be conducted over 4 days of intensive study and outdoor practice.

Course Design

Each of the courses has a stated Course Purpose and a set of Educational Objectives that supports that purpose. The courses are then broken into a number of lessons. Each lesson has a set of Learning Objectives that support the overall Educational Objectives for the class. The learning objectives are used to guide the information to be presented in that specific lesson. These Learning Objectives are also used to determine what material is appropriate for inclusion in the test for that course.

Each course is divided into three parts. The didactic portion of the class is used to provide the students with general knowledge that supports the overall Educational Objectives for that class. The Psychomotor portion of the class is used to teach the students skills needed to perform medical interventions on a casualty in the wilderness environment. The evaluation portion of the class is designed to determine if the students were able to understand, retain and make use of the information provided.

Students who are performing psychomotor skills are required to perform as much of the skill as is practical and safe. For example, if a student is to be obtaining vital signs on a casualty, that student must take the casualty's pulse, BP, respirations and temperature. Actual casualty vital signs must be provided prior to simulated vital signs being provided to the student.

When teaching the material in these courses, it is important that the students have a solid base for understanding of any new material presented. In the didactic arena, this is accomplished by the progression of material from one course to the next. It is equally important that the same type of progression be used in the teaching of psychomotor skills. Throughout these courses there is a significant application of case based education through the use of casualty scenarios. It is important that the students are first given simple scenarios and then progress to more complex scenarios as their skills and confidence increase. The complexity of the scenarios is based on two factors. The first factor is the level and complexity of the medical condition of the casualty in the scenario. The second factor that influences complexity is the environment in which the scenario is presented. There is a significant difference between "An Ankle Injury" when done inside in the warmth and light and the same scenario performed outdoors after dark when it is raining and the temperature is 9C. The progression that CDS suggests is that initial scenarios be performed indoors until the students are

comfortable with performing initial casualty assessment and dealing with simple injuries. The scenarios should then be moved outdoors without greatly increasing the medical complexity of the scenario. Finally, increase the medical complexity while continuing to perform the scenarios outdoors.

Wilderness First Aid (Level 2) Course Outline and Learning Objectives

Suggested Time	SUBJECT
30 Minutes	<p>Lesson 1: Introduction to Wilderness First Aid</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to list the guiding principles of Wilderness first aid. <ul style="list-style-type: none"> ▪ Define wilderness, first aid, and the EMS system. ▪ Demonstrate knowledge of the history of Wilderness EMS/Medicine. ▪ List the differences between wilderness and urban first aid care. • Students will be able to demonstrate understanding of the effect that the environment has on providing wilderness first aid care. • Students will be able to identify agencies and organizations that provide guidance on wilderness care. • Students will be able to identify and define the legal issues associated with providing emergency and long term care in the wilderness setting. • Students will be able to define blood borne pathogens and the spread of disease. • Students will be able to perform techniques for reducing the spread of diseases (glove removal)
1 Hour 30 Minutes	<p>Lesson 2: Patient Assessment</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to explain the effects of the environment on the physical and mental status of the casualty. • Students will be able to recognize the importance of the “Wilderness Triad” • Students will be able to identify the most important “treatment” of the wilderness triad. • Students will be able to perform a Primary Survey to determine life threatening conditions. • Students will be able to perform a conscious and unconscious casualty survey. • Students will be able to demonstrate the proper techniques and understanding of proper documentation.
2 Hours 30 Minutes	Lesson 3: Rescue Breathing/CPR/Choking (Optional)*

	<p>Learning Objectives: The Students will:</p> <ul style="list-style-type: none"> • Perform clearing a blocked airway on a conscious adult and child • Perform rescue breathing on an adult and child • Perform clearing a blocked airway in an unconscious adult and child • Perform CPR on an adult and child. • Describe the implications of cardiac arrest in the wilderness
<p>1 Hour 30 Minutes</p>	<p>Lesson 4: Bleeding Wounds and Burns</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to recognize the importance of controlling bleeding. <ul style="list-style-type: none"> ○ Demonstrate the techniques for controlling severe bleeding. <ul style="list-style-type: none"> ▪ Perform direct pressure ▪ List, locate, and demonstrate digital pressure on pressure points ▪ Demonstrate proper bandaging techniques • Students will be able to list the different types of burns <ul style="list-style-type: none"> ○ Describe the classification system for severity of burns ○ Explain and demonstrate the proper care for burns • Students will be able to define shock. <ul style="list-style-type: none"> ○ Demonstrate understanding on the effects of shock and how it impacts the care and recovery of a casualty. ○ Perform the proper treatment and prevention of shock • Students will be able to list the principles of wound care cleaning <ul style="list-style-type: none"> ○ Demonstrate understanding of long term wound care and healing. ○ Perform proper wound cleaning and dressing.
<p>1 Hour 30 Minutes</p>	<p>Lesson 5: Sprains/Strains Fractures</p> <p>Learning Objectives: Students will be able to:</p> <ul style="list-style-type: none"> • Describe the anatomy of the musculoskeletal system • Demonstrate proper immobilization of an injured muscle, bone and joint • Demonstrate the proper techniques for C-Spine Immobilization in the wilderness

	<ul style="list-style-type: none"> • Explain when to apply Cervical Spine Immobilization • Demonstrate a Log Roll
<p>2 Hours</p>	<p>Lesson 6: Common Medical Problems/Trauma</p> <p>Learning Objectives: Students will learn to recognize and treat the following</p> <ul style="list-style-type: none"> • Eye Injuries • Closed Head Injuries • Severe nosebleed • Rib Fractures • Blunt Abdominal Trauma • Stroke • Seizure • Fainting (Syncope) • Chest Pain • Breathing Difficulty <ul style="list-style-type: none"> ○ Hyperventilation syndrome ○ Pneumonia ○ Asthma • Acute Abdomen • Fecal Impaction and Constipation • Diarrhea • Diabetes • Vomiting • Student will be able to describe the “Mechanism of Injury” for any traumatic event and recognize its implications
<p>1 Hour</p>	<p>Lesson 7: Environmental Emergencies</p> <p>Learning Objectives: Students will be able to:</p> <ul style="list-style-type: none"> • Explain the wilderness triad • List the different modes of heat loss/gain. • Recognize and treat the following cold related illness <ul style="list-style-type: none"> ○ frostbite ○ hypothermia • Perform a hypothermia wrap • Recognize and treat the following heat related diseases <ul style="list-style-type: none"> ○ Dehydration ○ Heat syncope ○ Sunburn ○ heat cramps ○ heat exhaustion ○ heat stroke • Discuss the contributions of alcohol to environmental injuries

<p>1 Hour</p>	<p>Lesson 8: Bites and Stings Learning Objectives: Students will be able to:</p> <ul style="list-style-type: none"> • Demonstrate understanding of Bee-Sting envenomation • Demonstrate understanding of anaphylaxis • Demonstrate the proper use of a EPI-PEN Auto Injector • Remove an embedded tick • Demonstrate understanding of some tick borne illnesses • Demonstrate understanding of snake bites and demonstrate snake bite treatment
<p>30 Minutes</p>	<p>Lesson 9: Casualty Evacuation/Protection Learning Objectives: Students will be able to:</p> <ul style="list-style-type: none"> • Determine the evacuation priority based upon situation and equipment. • Demonstrate hasty methods of evacuation • Explain the need for management of <ul style="list-style-type: none"> ○ Bowel Movements. ○ Urination. ○ Feeding ○ Hydration • Demonstrate proper protection of the casualty from the environment.
<p>30 Minutes</p>	<p>Lesson 10: Wilderness First Aid Kits Learning Objectives: Students will be able to:</p> <ul style="list-style-type: none"> • List the contents of a wilderness first aid kit • Explain the importance of durability in a wilderness first aid kit
<p>2 Hours</p>	<p>Practical Testing Stations Goal Statement: The goal of this testing is give the students a chance to put together everything they learned in a realistic environment and allow the instructor to assess the progress of the students.</p>
<p>30 Minutes</p>	<p>Written Test</p>
<p>Approximate Total: 15 Hours</p>	

***NOTE: If CPR/Choking is not taught, the additional time should be added to skills practice stations.**

Advanced Wilderness First Aid Course Outline and Learning Objectives.

Advanced Wilderness First Aid Course Outline

Prerequisite – Wilderness First Aid

Suggested Time	SUBJECT
30 Minutes	<p>Lesson 1: Introduction to Wilderness First Aid</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to demonstrate understanding of the following legal issues: <ul style="list-style-type: none"> ○ Duty to act ○ Negligence ○ Abandonment ○ Medical Direction ○ Scope of Practice • Students will be able to demonstrate understanding of the importance of documentation • Students will be able to describe the importance of the Wilderness Triad and its effect on the Wilderness Casualty. • Students will be able to describe the differences between urban and wilderness care
240 Minutes	<p>Lesson 2: Patient Assessment</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to: <ul style="list-style-type: none"> ○ Explain the effects of the environment on the physical and mental status of the casualty ○ Recognize the importance of the “Wilderness Triad” ○ Identify the most important “treatment” of the wilderness triad ○ Perform a complete wilderness primary survey ○ Take and record vital signs ○ Perform a detailed secondary survey ○ Perform a detailed focused exam for medical problems. ○ Demonstrate understanding of a differential diagnosis ○ Demonstrate understanding of the importance of assessment and long term casualty tracking

<p>45 Minutes</p>	<p>Lesson 3: Cold Injuries</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to: <ul style="list-style-type: none"> ○ Demonstrate understanding of the physiologic effects cold has on the following: <ul style="list-style-type: none"> ▪ Circulation ▪ Medications ▪ Rescue Breathing and CPR ○ Recognize and treat Hypothermia ○ Define the differences between passive and active rewarming ○ List and demonstrate several methods for passive rewarming in the field ○ List and demonstrate several methods for active rewarming in the field ○ Recognize and treat local cold injuries
<p>45 Minutes</p>	<p>Lesson 4: Heat Injuries</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to recognize and treat the following heat related diseases <ul style="list-style-type: none"> ▪ Dehydration ▪ Hyponatremia ▪ Heat Edema ▪ Prickly Heat (Miliara Rubra) ▪ Heat syncope ▪ Sunburn ▪ Heat cramps (review) ▪ Heat exhaustion (review) ▪ Heat stroke (review)
<p>30 Minutes</p>	<p>Lesson 5: Altitude Illness</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to: <ul style="list-style-type: none"> ○ Demonstrate understanding of the effect altitude has on the body's physiology. ○ List the symptoms and treatments for the following altitude illnesses: <ul style="list-style-type: none"> ▪ AMS ▪ HACE ▪ HAPE
<p>90 Minutes</p>	<p>Lesson 6: Sprains, Strains, and Fractures</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to: <ul style="list-style-type: none"> ○ Describe the anatomy of the musculoskeletal system ○ Describe the difference between a sprain, strain, fracture, and dislocation

	<ul style="list-style-type: none"> ○ Discuss and demonstrate reduction of common dislocations <ul style="list-style-type: none"> ▪ Shoulder ▪ Finger ▪ Patella
150 Minutes (Optional)	<p>Lesson 7: Basic Search and Rescue Skills</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Students will demonstrate understanding of the following basic search skills: <ul style="list-style-type: none"> ○ Clue Protection ○ Clue Awareness ○ Search Types • Students will demonstrate and perform the following basic rescue skills: <ul style="list-style-type: none"> ○ Anchor selection ○ Anchor systems ○ Basic Lowering systems and rigging. ○ Knots <ul style="list-style-type: none"> ▪ Tape or Water Knot ▪ Figure 8 ▪ Clove Hitch
270 Minutes	<p>Lesson 8: Scenario Practice</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> ○ Students will demonstrate understanding of the various techniques taught in this course and the prerequisite courses.
60 Minutes	<p>Practical Testing Stations</p> <p>Goal Statement:</p> <p>The goal of this testing is to give the students a chance to put together everything they learned in a realistic environment and allow the instructor to assess the progress of the students.</p>
30 Minutes	Written Test
Approximate Total: 14-16 Hours	

Wilderness First Responder Course Outline and Learning Objectives.

Wilderness First Responder Course Outline

Prerequisite – Advanced Wilderness First Aid

Suggested Time	SUBJECT
30 Minutes	<p>Lesson 1: Introduction to Wilderness First Responder Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to: <ul style="list-style-type: none"> ○ Describe the importance of the Wilderness Triad and its effect on the Wilderness Casualty. ○ Describe the differences between urban and wilderness care
1 Hour 30 Minutes	<p>Lesson 2: Anatomy Learning Objectives:</p> <ul style="list-style-type: none"> • Students will identify and define the following: <ul style="list-style-type: none"> ○ All Body systems and their functions ○ Major Muscle Groups ○ Major Bones ○ Major Vessels
4 Hours	<p>Lesson 3: Patient Assessment Learning Objectives:</p> <ul style="list-style-type: none"> • Students will review and perform the following: <ul style="list-style-type: none"> ○ Primary Survey ○ Complete History and Physical <ul style="list-style-type: none"> ▪ Full Eye, Ear, Nose, and Throat ▪ Lung and Heart Sounds ▪ Bowel Sounds ▪ Full Neurological <ul style="list-style-type: none"> • Cranial Nerve • Micro Mental State • Cerebellar • Gross Motor Function ○ Complete Vital Signs
4 Hours	<p>Lesson 4: Airway Management Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to describe <ul style="list-style-type: none"> ○ The general anatomy of the airway ○ The most likely causes of a blocked airway ○ The gag reflex • Students will demonstrate

	<ul style="list-style-type: none"> ○ The approved methods of clearing an airway <ul style="list-style-type: none"> ▪ Conscious casualty ▪ Unconscious casualty • Students will demonstrate proper use of: <ul style="list-style-type: none"> ○ Suction (Manual and Powered) ○ Oral and Nasal Airways ○ Pocket Mask ○ Bag/Valve Mask ○ Oxygen Delivery Systems <ul style="list-style-type: none"> ▪ Humidification ▪ Use on COPD Casualties ▪ Limitations
<p>4 Hours</p>	<p>Lesson 5: Trauma</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to explain basic principles of mechanism of injury and the body’s response to traumatic insult. • Students will be able to recognize and treat: <ul style="list-style-type: none"> ○ Head and Facial Trauma <ul style="list-style-type: none"> ▪ Closed Head Injuries <ul style="list-style-type: none"> • Basal skull fracture • Epidural hematoma • Subdural hematoma ▪ Spinal cord injury <ul style="list-style-type: none"> • C-Spine Precautions/Packaging • C-Spine “Clearing” Criteria ▪ Blowout Fracture of the Orbit ▪ Impaled object in the eye ▪ Severe nosebleed ▪ Tooth and Mouth Injuries ○ Chest and Abdominal Trauma <ul style="list-style-type: none"> ▪ Rib Fracture ▪ Flail Chest ▪ Open Pneumothorax (sucking chest wound) ▪ Simple Pneumothorax ▪ Tension Pneumothorax ▪ Hemo/Pneumothorax ▪ Cardiac Tamponade ▪ Aortic Tear ▪ Evisceration ▪ Closed Abdominal Trauma ○ Wounds/Bleeding <ul style="list-style-type: none"> ▪ Pressure Bandages ▪ Commercial Clotting Agents ▪ Tourniquets ○ Burns <ul style="list-style-type: none"> ▪ Determine the thickness of burns

	<ul style="list-style-type: none"> ▪ Use the Rule of nines ▪ Determine evacuation criteria ○ Other <ul style="list-style-type: none"> ▪ Lightning ▪ Compartment Syndrome ▪ Crush Syndrome
<p>5 Hours</p>	<p>Lesson 6: Medical Problems</p> <p>Learning Objectives:</p> <p>Students will be able to recognize and treat the following medical problems:</p> <ul style="list-style-type: none"> • Neurological <ul style="list-style-type: none"> ○ Stroke ○ Seizure ○ Syncope • Pulmonary <ul style="list-style-type: none"> ○ COPD ○ Pneumonia ○ Asthma ○ Hyperventilation syndrome • Cardiac <ul style="list-style-type: none"> ○ Myocardial Infarction <ul style="list-style-type: none"> ▪ Angina Pectoris ▪ Congestive heart failure • GI / GU <ul style="list-style-type: none"> ○ Appendicitis ○ GI Bleeds ○ Fecal Impaction/Constipation ○ Gastroenteritis ○ Diarrhea ○ Ulcer ○ Kidney Stones ○ Food poisoning ○ Prevention of GI/GU Problems • Infectious and Inflammatory Diseases <ul style="list-style-type: none"> ○ Rabies ○ Hepatitis ○ Tetanus ○ Allergies <ul style="list-style-type: none"> ▪ Anaphylactic Shock ▪ Review the Epinephrine Auto Injector ○ Fungal Infections (Tineas) ○ Wound Infections <ul style="list-style-type: none"> ▪ Wound Care ▪ Wound Healing • Other Medical <ul style="list-style-type: none"> ○ Diabetes ○ Mental Illnesses

<p>1 Hour</p>	<p>Lesson 7: Pharmacology Learning Objectives:</p> <ul style="list-style-type: none"> • Students will demonstrate understanding of: <ul style="list-style-type: none"> ○ Drug Regulations ○ Drug Names ○ Drug Types ○ Common Medication Routes ○ Indications ○ Contraindications ○ Drug Interactions
<p>30 Minues</p>	<p>Lesson 8: Drowning Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to demonstrate knowledge of <ul style="list-style-type: none"> ○ The prevalence of drowning in the US ○ The risk factors for drowning or near drowning ○ The classifications of drowning types ○ The Pathophysiology of drowning ○ The initial treatment for the drowning victim
<p>30 Minutes</p>	<p>Lesson 9: Poisoning Learning Objectives:</p> <ul style="list-style-type: none"> • Students will be able to demonstrate understanding of <ul style="list-style-type: none"> ○ The routes of exposure to toxins ○ The management of toxicological emergencies ○ The different types of resources that are available to the care provider
<p>2 Hour</p>	<p>Lesson 9: Basic Wilderness Survival Learning Objectives:</p> <ul style="list-style-type: none"> • Students will demonstrate the principles and techniques of: <ul style="list-style-type: none"> ○ Water Collection ○ Fire Building ○ Shelter ○ Equipment
<p>4 Hours</p>	<p>Lesson 10: Search and Rescue Learning Objectives:</p> <ul style="list-style-type: none"> • Students will demonstrate the principles and techniques of: <ul style="list-style-type: none"> ○ Stokes Packaging and Evacuation ○ Semi-tech Rigging <ul style="list-style-type: none"> ▪ Rescue Knots ▪ Anchor Types ▪ Belay Types ○ Land Navigation ○ Communications <ul style="list-style-type: none"> ▪ Radio Basics

	<ul style="list-style-type: none"> ▪ Casualty Survey Reporting
2 Hours	<p>Lesson 11: Skills Practice Session</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> ○ Students will demonstrate the various techniques taught in this course and the prerequisite courses.
6.0 Hours	<p>Mock Rescue</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> ○ Students will demonstrate the various techniques taught in this course and the prerequisite courses.
1 Hour	Written Test
Approximate Total: 36 Hours	

Wilderness First Aid and Advanced Wilderness First Aid Combination Course

Course Length: 24 Hours – Usually taught over three 8-hour days.

Sample Course Schedule:

Day 1

8:30 – 9:00	Introduction to Wilderness First Aid
9:00 – 11:30	Patient Assessment Lecture
11:30 – 12:30	Lunch
12:30 – 14:00	Patient Assessment Practice
14:00 – 15:30	Bleeding, Wounds, and Burns
15:30 – 17:30	Practical Stations

Day 2

8:30 – 9:30	Cold Injuries
9:30 – 10:30	Heat Injuries
10:30 – 11:00	Altitude Illness
11:00 – 11:30	Bites and Stings
11:30 – 12:30	Lunch
12:30 – 15:00	Sprains Strains and Fractures
15:00 – 15:30	Patient Evacuation
15:30 – 17:30	Practical Stations

Day 3

8:30 – 10:30	Common Medical Problems/Trauma
10:30 – 11:30	Practice Scenarios
11:30 – 12:30	Lunch
12:30 – 14:30	Practice Scenarios
14:30 – 15:00	First Aid Kits
15:00 – 16:00	Written Exam

Stand-Alone Wilderness First Responder Course Outline

Suggested Time	SUBJECT
30 Minutes	WFR Lesson 1: Introduction to Wilderness First Responder
1 Hour 30 Minutes	WFR Lesson 2: Anatomy
5 Hours	WFR Lesson 3: Casualty Assessment Initial Assessment Critical Interventions Level of Consciousness History & Directed Physical Cranial Nerve Exam Micro Mental State Exam
3 Hours	WFA Lesson 3: Rescue Breathing/CPR/Choking (Optional)* CPR Lecture Student Skills Practice
4 Hours	WFR Lesson 4: Airway Management Oxygen Equipment Airway Adjuncts
2 Hours	WFA Lesson 4: Bleeding Wounds and Burns Pressure Points, Bleeding Control Shock Burns Wound Cleaning and Irrigation Student Skills Practice
2.5 Hours	Practice/Patient Scenarios I
4 Hours	WFR Lesson 5: Trauma Mechanism of Injury Responses to Trauma Shock Traumatic Injuries and Treatments Burns
4 Hours	AWFA Lesson 6: Sprains, Strains, and Fractures Anatomy Splinting Reduction Techniques
2 Hours	Practice/Patient Scenarios II
5 Hours	WFR Lesson 6: Medical Problems Neurological Pulmonary Eye Cardiac Metabolic GI/GU Infectious Diseases

	Skin
3 Hours	Practice/Patient Scenarios III
1 Hour	WFR Lesson 7: Pharmacology
1 Hour	AWFA Lesson 3: Cold Injuries Hypothermia Trench Foot Frostnip & Frostbite
1 Hour	AWFA Lesson 4: Heat Injuries Heat & Fluids Heat Cramps Heat Illnesses (Heat Exhaustion & Heat Stroke)
30 Minutes	AWFA Lesson 5: Altitude Illness Physiology of Altitude Acute Mountain Sickness High Altitude Cerebral Edema High Altitude Pulmonary Edema
1 Hour	WFA Lesson 8: Bites and Stings
30 Minutes	WFR Lesson 8: Drowning
30 Minutes	WFR Lesson 9: Poisoning
30 Minutes	WFA Lesson 9: Casualty Evacuation/Protection Assists and Carries Improvised Litters
3 Hours	Practice/Patient Scenarios IV
30 Minutes	WFA Lesson 10: Wilderness First Aid Kits
2 Hour	WFR Lesson 9: Basic Wilderness Survival
4 Hours	WFR Lesson 10: Search and Rescue
2 Hours	WFR Lesson 11: Skills Practice Session
8 Hours	Mock Rescue
2 Hours	Written Test
Approximate Total: 64 Hours	

WFR Full Course - Sample Course Schedule:

DAY 1

08:30- 09:00 Introduction to Wilderness First Responder
09:00- 10:30 Anatomy
10:30-12:00 Patient Assessment
12:00-12:30 Lunch
12:30-16:00 Patient Assessment
16:00-19:00 Rescue Breathing/CPR/Choking

Day 2

08:30-09:00 Review
09:00-12:00 Airway Management
12:00-12:30 Lunch
12:30-13:30 Airway Management
13:30-15:30 Bleeding, Wounds, and Burns
15:30-18:00 Practice/Patient Scenarios I

Day 3

08:30-09:00 Review
09:00-12:00 Trauma
12:00-12:30 Lunch
12:30-13:30 Trauma
13:30-17:30 Sprains, Strains, and Fractures
17:30-18:30 Practice/Patient Scenarios II

Day 4

08:30-09:00 Review
09:00-12:00 Medical Problems Part 1
12:00-12:30 Lunch
12:30-15:30 Patient Scenarios III
15:30-17:30 Medical Problems Part 2

Day 5

08:30-09:30 Pharmacology
09:30-10:30 Cold Injuries
10:30-11:30 Heat Injuries
10:30-12:00 Altitude Illness
12:00-12:30 Lunch
12:30-13:30 Bites and Stings
13:30-14:00 Drowning
14:00-14:30 Poisoning
14:30-15:30 Patient Protection/Evacuation
15:30-18:30 Scenarios/Practice IV

Day 6

08:30-09:00 Wilderness First Aide Kits
09:00-11:00 Basic Wilderness Survival
11:00-12:00 Search and Rescue Part 1
12:00-12:30 Lunch
12:30-15:30 Search and Rescue Part 2
15:30-17:30 Skills Practice Sessions
17:30-18:30 Final Day Briefing

Day 7

06:00-14:00 Mock Exercise
14:00-15:00 Debrief
15:00-17:00 Written Exam

CDS/ WMS Curriculum Matrix

	CDS WFA	CDS AWFA	CDS WFR	CDS BWR	CDS WFR /c BWR
Hours					
64 /s CPR	16	16	36	16	84
WFR vs. UFR					
Principles of extended Pt care					
Medical-Legal Issues					
Certification, Licensure, Authorization	1	1	1		✓
Scope of practice & protocols	1	1	1		✓
Duty to Act	1	1	1		✓
Good Samaritan law	1	1	1		✓
Negligence	1	1	1		✓
Reportable incidents			1		✓
Patients rights					
Civil	1				✓
Consent & Implied consent	1				✓
Right to refuse care	1				✓
Minors	1				✓
Maintenance of Records	2	1	1		✓
Blood-Borne Pathogens					
Body Substance Isolation	1				✓
Communicable diseases and modes of transmission	1				✓
OSHA requirements	1				✓
Patient Assessment System					
Scene size up					
Patient & Rescuer safety	2	2	3		✓
Initial Assessment					
Airway	2	2	3		✓

	Breathing	2	2	3	✓
	Circulation	2	2	3	✓
	Disability (Spine, Mental status)	2	2	3	✓
	Exposure	2	2	3	✓
	Focused Exam				
	Vital Signs		2	3	✓
	History	2	2	3	✓
	Patient Exam		2	3	✓
	Documentation	2		3	✓
	Ongoing assessment		2,3	3	✓
	Airway Management				
	A&P of the airway		2	2	✓
	Recognition & Management of the compromised airway			4	✓
	Extend care and evac considerations			4	✓
	Shock				
	A&P of the circulatory system			2	✓
	Recognition, progression & management of shock	4		5	✓
	Hypovolemic			5	✓
	Cardiogenic			5	✓
	Neurogenic	4		5	✓
	Extended care & evacuation considerations			5	✓
	Wound Management				
	A&P of the Intgumentary System			2	✓
	Normal healing process			5	✓
	Types of wounds and potential complications			5	✓
	Control of bleeding & BSI	4		5	✓
	Wound cleaning and extended wound care	4		5	✓
	Recognition, Prevention and Treatment of infection	4		5, 6	✓
	Dressing & Bandaging skills	4			✓
	Evacuation Considerations	4			✓
	Thermal Burns				
	A&P of the Intgumentary System	4		2	✓

Depth, Extent and Location of Burns	4		5	✓
Burn care and extended burn management	4		5	✓
Evacuation considerations			5	✓
Sprains & Strains				
A&P of the Musculoskeletal System	5	6	2	✓
Recognition & Management of Strains & Sprains	5	6		✓
Evaluation for use		6		✓
Extended care & evacuation considerations		6		✓
Fractures				
A&P of the Musculoskeletal System	5	6	2	✓
Recognition & Management of Fractures	5	6		✓
Splinting & Improvised Splinting	5	6		✓
Traction splinting & improvised traction splinting		6		✓
Extended care & evacuation considerations		6		✓
Dislocations				
Anatomy of Joints		6	2	✓
Recognition & Management of dislocations		6		✓
Reduction Techniques: Shoulder, Patella & Digits		6		✓
Potential negative outcomes		6		✓
Medical-Legal Considerations		6		✓
Head & Facial Trauma				
A&P			2, 5	✓
Recognition & Management of head & facial injuries:			5	✓
Soft tissue/Head wounds			5	✓
Concussion/Brain Injury			5	✓
Recognition of Clinical Presentation			5	✓
Progression of Intracranial Pressure			5	✓
Extended care & evacuation considerations			5	✓
Spinal Column/Cord Injuries				
A&P	5	6	2, 5	✓
Mechanism of Injury	5			✓
Spinal assessment for extended care situations	5	6	5	✓
Medical-Legal Considerations			5	✓

	Recognition & Management	5		5		✓
	Extended care & evaluation decisions			5		✓
Chest Trauma						
	A&P			2,5		✓
	Recognition & Management of Chest Injuries			5		✓
	Types of chest injuries					
	Fractured ribs & flail chest			5		✓
	Open & Closed chest trauma			5		✓
	Pneumothorax/Hemothorax			5		✓
	Tension pneumothorax			5		✓
	Extended care & evacuation considerations			5		✓
Abdominal Trauma						
	A&P			2, 5		✓
	Recognition & Management of Abdominal Injuries			5		✓
	Open vs. Closed Abdominal injuries			5		✓
	Extended care & evacuation considerations			5		✓
Lightning						
	Physics of Lightning			5	✓	✓
	Recognition & Management of injuries caused by lightning			5		✓
	Storm forecasting			5	✓	✓
	Response to Storms & Lightning protocols			5	✓	✓
Heat Injuries & Dehydration						
	Physiology of the Thermoregulatory System	2, 7	1,3	1		✓
	Recognition & Management of					
	Dehydration	7	4	1		✓
	Heat Stroke	7	4			✓
	Heat Exhaustion	7	4			✓
	Sunburn	7	4			✓
	Prevention of heat related injuries	7	4	1		✓
	Extended care & evacuation considerations		4			✓
Cold Injuries						
	Physiology of the Thermoregulatory System	2,7	1,3	1		✓
	Recognition & Management of					

Hypothermia	7	3		✓
Frostbite	7	3		✓
Non-Freezing Cold Injuries		3		✓
Prevention of cold related injuries	7	3	1	✓
Extended care & evacuation considerations		3		✓
North American Bites & Stings				
Recognition & Envenomations from				
Bees, Hornets. Wasps	8			✓
Spiders	8			✓
Snakes	8			✓
Scorpions				✓
Recognition & Management of Animal Bites				
Soft tissue wound management			6	✓
Rabies			6	✓
Recognition & Management of Tick bites & related diseases	8			✓
Prevention of Bites & Stings	8			✓
Extended care & evacuation considerations			6	✓
Poisons & Toxins				
Recognition & Management of Poisoning caused by				
Ingestion			9	✓
Inhalation			9	✓
Injections			9	✓
absorption			9	✓
Prevention of Poisoning			9	✓
Extended care & evacuation considerations			9	✓
Allergies & Anaphylaxis				
Recognition & Management of Allergic Reactions	8		6	✓
Localized vs. Systemic	8		6	✓
Recognition & Management of an Acute Anaphylactic reaction	8		6	✓
Use of Antihistamines & Epi	8		6	✓
Medical-Legal Considerations	8			✓
Extended care & evacuation considerations	8			✓

Altitude Emergencies

Physiology of Altitude & Acclimation
Prevention Recognition & Management of
ACM
HAPE
HACE
Extended care & evacuation considerations

5

✓

5

✓

5

✓

5

✓

5

✓

Drowning

Prevention of drowning & rescuer drowning
Rescue techniques - Reach, throw, row, tow, go
Pathophysiology of Drowning
Immersion vs. Submersion
Recognition & Management of the drowning victim

8

✓

8

✓

8

✓

8

✓

8

✓

Water-borne & Food-borne Illness

Recognition & Management of Diarrhea
Prevention of Water-borne & Food-borne Illnesses
Water disinfection techniques
Proper food handling & preparation
Camp hygiene
Extended care & evacuation considerations

6

✓

6

✓

6

✓

6

✓

6

✓

Neurology - Changes in level of consciousness

A&P of the nervous system
Recognition and Management o changes in level of
consciousness
Unconscious patient
Seizure disorders
Cerebrovascular accidents
Extended care & evacuation considerations

2

✓

6

✓

6

✓

6

✓

6

✓

Respiratory Distress

A&P of the Respiratory System
Recognition and management of respiratory distress
Asthma
Hyperventilation Syndrome
Pulmonary Edema

2

✓

6

6

✓

6

6

✓

6

6

✓

6

✓

Extended care & evacuation considerations		6	✓
Cardiology - Chest Pain			
A&P of the cardiovascular system		2	✓
Cardiac risk factors		6	✓
Recognition & Management of Chest Pain	6	6	✓
Acute Myocardial Infarction	6	6	✓
Angina Pectoris	6	6	✓
CPR Considerations in the backcountry	2,3	6	✓
Medical-Legal Considerations	2,3	6	✓
Extended care & evacuation considerations		6	✓
Abdominal Pain			
A&P of the Digestive System		2	✓
Anatomy of the Abdomen		2	✓
The Quadrants		2	✓
Recognition & Management of Abdominal Pain	6	6	✓
Extended care & evacuation considerations		6	✓
Gender related injuries & illnesses			
Recognition & Management of Genitourinary injuries		5	✓
Genital Trauma - Soft tissue		5	✓
Recognition & Management of Common Urinary & Genital Problems		6	✓
Guidelines for Assessment		6	✓
Prevention & Hygiene		6	✓
Extended care & evacuation considerations		6	✓
Diabetes			
Physiology of Glucose Metabolism & Diabetes		6	✓
Recognition & Management of			
Hypoglycemia		6	✓
Hyperglycemia		6	✓
Prevention, Complications & Dietary Considerations		6	✓
Extended care & evacuation considerations		6	✓
Common Simple Expedition Problems			
Prevention, Recognition & Management of			
Headaches		6	✓

	Coughs, Colds, Fevers, Sore Throats, Nosebleeds	6		6		✓
	Allergies			6		✓
	Diarrhea, Constipation, N/V			6		✓
	Splinters & Fish Hooks					✓
	Hemorrhoids			6		✓
	Sunburns, Sun Bumps, Snow blindness	4, 6		6		✓
	Rashes, Fungal Infections, Contact Dermatitis	6		6		✓
	Motion Sickness			6		✓
	Blisters	6		6		✓
	Dental Problems			6		✓
Expedition Medical Kits						
		10		7		✓
Bivouac Skills						
	Consideration in the Unexpected Night Out Equipment & Clothing			8		✓
	Shelter			8		✓
SAR						
	Immediate simple search		7	9		✓
	Participation in an organized search & rescue		7	9		✓
	General principles of SAR		7	9		✓
Packaging & Transportations						
	Packing Techniques & Thermoregulations	9				✓
	Lifting & Moving Techniques	9	7			✓
	Litter Carrying Techniques	9	7			✓
	Extended patient care in a litter	9				✓
	Improvising a Litter	9				✓
	Helicopter Evacuations					✓
CISM						
	Stress and the rescuer					✓
	Recognizing Stress Reactions					✓
	Managing Stress in the Field					✓