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## Wilderness First Responder & River Rescue Certification Course

Congratulations on signing up for the Wilderness First Responder and River Rescue Certification Course. We look forward to 10 days of immersive wilderness medicine and River Rescue Training.

### You will need to bring:

- Notebook, pen, and pencil
- Watch
- Two full sets of old clothing (two long-sleeve shirts, two long pants, two t-shirts) that can be cut up, get dirtied with fake blood for scenarios
- Backpack big enough for course materials and other gear, as we will be on the move to various sites around our campus
- Water bottle
- Lunch and Snacks
- Camp chair or crazy creek chair, if you have one
- After the first day, you may optionally bring your own outdoor gear (e.g., trekking poles, paddles, skis, or backpacks) to practice improvising medical tools. While we provide plenty of equipment, learning to use your own gear for splinting and patient care is highly recommended.

For the water:

- **Drysuit or Full Wetsuit!** Drysuits are always recommended because we spend so much time getting in and out of the water, and the weather is always variable. Drysuits can be rented from:  
Pacific River Supply (510-223-3675) will ship you the drysuit by UPS and you only pay for the days you use it. We **highly recommend this option** as we have NEVER had any problems with PRS drysuits!!
- **PFD:** Type 3 or Type 5 with whistle and knife (knife optional)
- **Helmet:** Lightweight swiftwater or climbing helmet.
- **Footwear:** Hard-soled wetsuit booties or good shoes for walking in the river and on the banks with wool socks and/or wetsuit socks
- **Wetsuit gloves** ( optional)
- **Extra warm clothes**
- **Any personal rescue gear that you currently have: Throw Bag, etc. This is an opportunity to practice with your own gear.**



# River Rescue Certification Course

This dynamic curriculum is specifically designed for river guides, private boaters and kayakers, whitewater rafters, river boarders, and river enthusiasts!

## FULL IMMERSION!

Please plan for very active days and homework at night. We integrate the classroom materials throughout the course, and you will be in the water a lot during class. We will make the course as scenario- and case study-based as possible. We will emphasize self-rescue, throw-bag rescue, entrapments, thinking through a rescue, simple rope tricks, and rescue techniques that have been tested and proven successful in real rescues. Please feel free to let us know what is most important to you as we go through the training, and we will make it as relevant as possible to your whitewater interests.

## OVERALL BASIC OUTLINE:

- Introductions and paperwork
- Shallow Water Crossings
- Entrapment Rescues: Wading, Swimming, Throw bag techniques, Foot and Body Entrapment, Kayak Entrapment
- Swimming: defensive, aggressive, barrel rolls, accessing eddies
- Throw bags: when, where, coils, belay, back-up, vector pull
- Contact rescues: defensive, counter panic passengers
- Live-Bait jackets; use, release, self-rescue techniques
- Knots, Hitches, Anchors
- Heads Up DVD: Prevention, Equipment, Organization, Orientation to Swiftwater Rescue
- Homework: Group tabletop scenarios
- Mechanical Advantage
- Wrapped boats: rafts and kayaks: The real scoop on freeing them.
- Mechanical Advantage
- Zip Lines
- Flip drills in the current or in a rapid; boat and passenger recovery drills
- Scenarios
- Debrief written homework, test, and paperwork completion

The outline will evolve based on the focus of the participants. Our goal is to give you as much as you can handle in a couple of days and still keep it fun and supportive. We will integrate many scenarios based on the swiftwater situations you may face as rafters or kayakers.



## Wilderness First Responder

We look forward to eight days of immersive wilderness medicine training. Much of the class takes place outdoors, so come prepared for all weather conditions. Please wear durable clothing that you don't mind getting dirty during simulations and skills sessions.

### Expectations and Certification: PLEASE READ CAREFULLY

Your full attention and participation will be required in the course. This curriculum and class time can exceed 10 hours a day with the required homework. The WFR will require your full commitment throughout the course. There will be simulations in which you are required to act as both a patient and a rescuer; this will involve physical contact, including being touched. You should also be physically capable of lifting 50 pounds without injury. You will be reading, writing, and communicating with other students.

This is a **VERY** interactive course. To protect your personal space, wear protective undergarments (jog bra, bathing suit, boxers, or shorts—which will not be cut) beneath your simulation clothes for all Patient Assessment Skills labs. You are responsible for your emotional and physical safety at all times.

Sierra Rescue presents skills and techniques according to practice guidelines established by the Wilderness Medical Society, as outlined in the Wilderness Medical Society Practice Guidelines. Sierra Rescue is not liable if you do not adhere to those standards in a field situation, nor can we authorize you to use the skills presented. Your authorization will need to come from a licensed medical control.

When you have successfully completed the Wilderness First Responder Course, you will receive a certification card from Sierra Rescue. This card acknowledges that you have successfully demonstrated the skills presented in your course in accordance with the above practice guidelines. It does not certify that you will be able to perform at that level. It is your responsibility to stay current with both your understanding and practice. Most medical control personnel require certification as a baseline for authorization.

Your certification will be valid for three years. You **MUST** recertify within this three-year period in a course specifically designed as a “Wilderness First Responder Recertification” course. Your Sierra Rescue certification will be recognized worldwide! When you go to recertify, you may recertify with a



responsible and recognized provider of Wilderness Medicine Instruction. We recommend that you attend a three-day recertification course. If you fail to recertify within the three-year time period, you will have to take the FULL 7280 WFR again. Do not ever let your WFR expire!

You will be asked to sign an “Agreement of Responsibility” that acknowledges your understanding of the above information on the first day of your course.

### **What the course includes:**

The course price includes instruction, patient SOAP notes, case studies, a workbook, and a waterproof field guide. It includes all lab materials and all supplies, except for personal clothing. Please feel free to contact us with any questions that you may have.

## **Objectives and Outline**

**GOAL:** Our Wilderness First Responder course is designed for the outdoor professional and outdoor enthusiast. It focuses on developing skills to treat problems outside the “golden hour” of first response, under extreme conditions or when forced to improvise. It is based on the protocols set by the Wilderness Medical Society, and instruction encourages students to think through body systems to determine the best response to traumatic, environmental, or medical situations. Classroom sessions are followed by hands-on practice to integrate the information in a field setting. 100% attendance is required, and a night scenario is included. Students will see their skills in action as video coverage of intensive scenarios is reviewed toward the end of the class. A comprehensive written exam is also administered. The course includes AEHS adult, child, and infant CPR certification, which is OSHA approved.

## **Course Objectives**

Some of the many skills students will be able to do:

- Understand basic Anatomy and Physiology
- Perform solid CPR and BLS skills
- Make an improvised splint
- Clean and manage wounds in the backcountry
- Know how to clear someone who has MOI for spinal injury
- Be able to package patients on both backboards and litters
- Understand allergic reactions and when and how to administer epinephrine
- Recognize serious trauma injuries
- Recognize serious environmental issues
- Recognize serious medical issues



- Make improvised litters and alternative carrying methods
- Triage and know how to handle mass casualty incidents
- Pass final written exam
- Pass final practical exam

## **WFR Outline**

### **Basic Life Support Skills/ Anatomy and Physiology**

- Opening and Course Paperwork
- Course Introduction and Expectations
- Student and Instructor Introductions
- Medical Legal Overview
- Evolution of Patient Care System and how WFR's fit in
- Patient Assessment System (PAS) Part 1 How to approach a scene!
- General Review of Anatomy and Physiology (All Systems)
- Specific exploration of the Respiratory System
- Hands-on practice in establishing an airway/airway management
- Specific exploration of the Circulatory System
- Hands-on practice for checking for pulse, controlling bleeding, and CPR
- Specific exploration of the Nervous System
- Evaluating Level of Consciousness and maintaining Spine stability
- Optional Examination of a pig's heart, lungs, kidneys, and liver
- Basic Life Support Lab / AED's/ AEHS CPR testing

### **Traumatic Injuries**

- Understanding the Inflammatory Response/ Review of cellular physiology
- Autonomic Stress Response/Acute Stress Response
- Nervous System injuries/ Increased ICP, Concussion, Head wounds, Unstable Spine
- Respiratory injuries/ Respiratory distress
- Circulatory Injuries/ Volume Shock
- Stable and Unstable Musculoskeletal Injuries
- Patient Assessment System (PAS) Part 2
- Hands-on field exercises/ Two on One Patient Assessment : 3 Rotations
- Quiz 1 -Wounds, Infections, Burns
- Pigs Foot Lab/ Includes wound irrigation, punctured objects and fishhook removal
- Exploration of the Musculoskeletal System/ Anatomy and Physiology
- Stable and Unstable Musculoskeletal Injuries
- 1:1 Splinting Lab -Spine Assessment and Lab/ A conservative process for checking the spine
- Dislocations Lab



## **Environmental Injuries**

- Spine ruling-out quiz
- Hypothermia
- Heat Problems (Heat Stroke, Heat Exhaustion, Electrolyte Sickness, Sunburn)
- Cold Injury ( Frostbite, Trench Foot, Chilblains)
- Near Drowning
- Spine Management Lab/ Moving spine injured patients, back-boarding, litters
- Quiz 2 -Toxins, Bites and Stings/ Includes BBC video
- Anaphylaxis/Allergies
- Injections Lab
- Altitude
- Lightning -More two-on-one patient field assessments: 3 rotations

## **Introduction to Medical**

- Quiz 3 -Introduction to medical problems
- Infectious diseases -Gastrointestinal System/ Anatomy and Physiology and Problems (diarrhea, constipation, ulcers, hernias, signs and symptoms of serious problems)
- Genitourinary System/ Anatomy and Physiology and Problems (UTI, vaginitis, testicular torsion, pregnancy)
- Diabetes
- Ears, Eyes, Nose and Throat/ Teeth Problems
- Asthma -Heart Attack, Angina BBC Video
- Stroke -Seizures
- Mini-Medical Scenarios
- Improvised Litters and Final Written Exam
- Improvised Litters /Carries and Passes
- Obstacle course with litters constructed
- Triage lecture and drill
- Mass Casualty scenario
- Final Written Test

## **Improvised Litters and Final Written Exam**

- Improvised Litters /Carries and Passes
- Obstacle course with litters constructed
- Triage lecture and drill
- Mass Casualty scenario
- Final Written Test

## **Course Closure**

- Debrief Night Scenario
- Review of Written Exam -Medical Equipment, First Aid kits, Survival kits



- Finish any testing -Course Debrief/ Cleanup and Closing

### **Additional Information**

Fake blood and make-up are used to create realistic wounds, bruising, and bleeding. Students will need at least one or two pairs of clothes that may be cut and stained. All scenarios are created with realistic outdoor scenarios, and patients will be in role. Various materials from expedition-type gear will be used for splinting, hypo wraps, and insulating patients from the environment.

The video simulations will allow students to work through their simulations and be able to review them immediately afterward. The pressure of being filmed will add an element of anxiety, which would be there in a real incident.

### **Course Structure**

Sierra Rescue is committed to providing quality rescue instruction by integrating information into practical skills while developing the ability to think through complex wilderness and rescue problems. We integrate knowledge into practical field exercises that work on developing judgment as well as providing hands-on training.

### **Our Expertise**

Sierra Rescue was founded to offer high-quality professional courses to a wide range of individuals. We specialize in designing the best rescue course for each group's specific needs. We are flexible with our curricula and love the challenge of creating a course that is perfect for your environment and activities. Sierra Rescue offers you the skills and certification that you and your organization need. We also travel to your site or choose a site near you that is appropriate.

Our instructors include front-country and wilderness EMTs, wildland and structural firefighters, river guides, climbing and mountaineering guides, instructors in outdoor leadership, and members of search-and-rescue teams. With our diverse backgrounds and decades of teaching experience, we strive to offer you the best and most fun course for you.

We are very passionate about what we do! Please feel free to contact us at any time with any questions about the course or curriculum.

### **CONTACT INFORMATION**



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