



Wilderness First Responder (WFR) Curriculum Guide

Background and Goals

The Wilderness First Responder course is ideally suited to professionals or other individuals who may find themselves as the primary medical caregivers for an extended period of time. The program's goal is to help learners develop the critical thinking skills necessary to develop appropriate diagnoses and treatment plans for patients being managed in remote, low-resource areas.

Suitable Audiences

A WFR is ideally suited for non-medical professionals or other individuals who will be working or playing in remote contexts for an extended period of time and who are a day or more from definitive care. Examples may include: professional mountain or river guides, expedition leaders, SAR members, and public safety specialists.

Protocols Taught on this Course

- Anaphylaxis
- CPR
- Wounds & Impaled Object Removal
- Spine Assessment
- Asthma
- Dislocation

Prerequisites and Eligibility

- Must be at least 16 years of age to participate in this course. Learners who are 16 and 17 year olds must have written proof of parental consent. Any exceptions must first be approved by the WMA Medical Director.

Certifications (Valid for 3 years)

- Wilderness First Responder wallet card including language about CPR and epinephrine for use in anaphylaxis and asthma treatment.

Length of Course

This program is 70-80 hours in length and usually delivered over 7-8 days. While some course time is allotted to homework or learner preparation, instructional time should amount to 8-9 hours a day actually teaching (not including lunch). While a day off is strongly recommended, breaking the course into multiple components should be discouraged. In some instances by prior arrangement with the sponsor, additional days can be added.

The course is also available in a 5-day version. It requires a minimum of 25 hrs of precourse work including case study assignments, quizzes and reading. Because learners are expected to be familiar with the material, the majority of the learner/instructor contact time focuses more on patient assessment drills and practical labs (see 5-day Guide).



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Books

- WMA Field Guide
- SOAP Notes Booklet
- WFR Lecture Note Book
- Workbook
- WARM Text (sent to all 5-day WFR candidates before the class begins so that learners can complete all of the required precourse work*).
- All learners will get new editions of ALL* of these books on the first day of the course.

Equipment Supplied by Office

- Injection Lab Kit - including syringes for students. (3 extra syringes included for demo, 1 non-injectable 1 ml ampule of saline for demo, 10 ml 0.9% sodium chloride (1 per 14 students), sharps biohazard container (1 per 14 students).
- Fast Packs - 1 fastpack per 3 students (only if not supplied by instructor)
- Course Paperwork
- AED Trainer (or supplied by instructor)

Equipment Supplied by Instructor (tools of the trade)

- Fast Packs (if owned)
- Wound Cleaning Kit
- CPR manikins (if not supplied by sponsor)
- Moulage Kit
- Video Recording Device
- Laptop Computer
- Digital Projector (if not supplied by sponsor)

Equipment from Sponsor (instructor should confirm all of this beforehand):

- Digital Projector and Projection Screen
- Classroom with Chairs and Tables
- CPR manikins (instructor needs to confirm or bring your own)
- Hypo wrap material - sleeping bag(s), tarp, garbage bags, and ground insulation (instructor needs to confirm with sponsor or bring your own)
- Splinting Material - the sponsor will supply materials that are used on-site; supplemental equipment may be necessary.
- Spine Injury Carrying Devices - boards, commercial splints, litter, vacuum mattress, SKED and/or other carrying devices and other rescue equipment if available and appropriate.



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Presentation Notes and Approach

- This guide is intended for instructor use only. It is not to be distributed to students or sponsors. Also refer to tricks-of-the-trade, skills videos, and any of the other resources available on the instructor page at www.wildmed.com.
- This curriculum guide is NOT intended as a course flow schedule, but rather as a compilation of all topics that are expected to be within the WFR. Choose a flow that suits your style, your learners' needs, and the sponsor's needs. (*see sample course schedules*).
- This course curriculum guide and its principles are intended to meet the wide range of requirements of people who live, work and travel anywhere in the world.
- If there is a need for locally specific information (e.g., toxins/snake envenomations), contact the medical/curriculum director for supplemental resources or get approval for any supplemental material you have put together.
- If you have concerns about the curriculum because of regional variations (e.g., no need for lightning in Iceland) remember the often transient nature of our learners. It may be appropriate to their next area of travel.
- Each topic has a specified format that is strongly suggested for delivery of the material. (e.g., Lecture, Demonstration, Practice, etc.)
- The WFR is the traditional core WMA course. It provides a significant amount of time for practice and experiential learning to go along with classroom instruction. Choice of teaching method will help instructors avoid getting behind or losing their learners with excessive detail. Lectures, PAS drills, discussion followed by drills, demos, skills videos, interactive games, etc. Although less formal, alternative techniques typically require more instructor preparation, not less, to remain efficient and useful.
- High/low risk criteria may be a new concept for non-WMA graduates. Introduction for them and review and emphasize for all learners.
- As always, skill proficiency is dependent upon repetition. Consider using as many hands-on ways of instructing as possible, and include repetition in key skills (i.e. anaphylaxis assessment) to help rein-force the learner's proficiency.
- The class should be evaluated daily on material that has already been covered. These could include quizzes, review of homework, small group case study exercise/discussion or games.
- Use of any supplemental teaching materials not produced by WMA should be approved by the medical/curriculum director.
- Any questions about the content or scope of the WFR should be directed to:

David Johnson, President and Medical Director – dejourma@gmail.com



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Evaluation and Assessment

Be prepared to check-in early and regularly with those who are struggling. Instructors are not expected to spend an inordinate amount of time with unprepared learners, especially at the expense of the rest of the class. This course does have pass/fail criteria are similar to all other WMA courses:

- Lack of attendance (learner misses a portion of the course that the instructor deems is too great for full comprehension of the course).
- Lack of participation (learner opts out of PAS drills, scenarios, and simulations, or fails to do any assigned homework).
- Inability to demonstrate CPR. Learners need to demonstrate that they can perform compressions, ventilations and the other required skills for this level of CPR.
- Cannot demonstrate or explain the procedure for delivering an injection of epinephrine by an amp/vial with syringe and auto-injector.
- Failure to perform or demonstrate the appropriate use and understanding of the protocols included in the curriculum.
- Failure to perform at least one formally presented patient assessment. Learners should be permitted to use their SOAP notes and field guide to assist with these assessments.
- Written Exam: 80% is considered a passing grade but it is not an absolute requirement for passing the course. By prior arrangement, the exam can be administered orally, read to the learner, or done as case studies. Extra time can be given. On a case-by-case basis the exam can be waived with the approval of the medical director. Passing the exam is not a criterion for passing the course.
- All instructors are expected to make reasonable accommodations for learners with special needs. Learners should be monitored for their progress. Instructors should communicate supportively and promptly with those who are not progressing effectively. You are encouraged to communicate with the medical director or course operations coordinator about any concerns.
- We are striving to have our learners identify problems, know when they are emergencies, and know how to treat them appropriately including when and how to evacuate. By the end of the course they should be able to demonstrate their understanding and critically think to solve problems. Ultimately, these criteria shall be used as guidelines for the instructor and not as an all-encompassing model to pass/ fail a learner. It is the judgement of the lead instructor to decide and document why a learner has passed or failed the course.
- Instructors should closely monitor the progress of learners and make reasonable accommodations for learners with special needs. Instructors should communicate supportively and promptly with those who are not progressing effectively and are encouraged to communicate with the Medical Director or Course Operations Coordinator about any concerns.

At the conclusion of the course, the learner should be able to demonstrate a level of competence comparable to any other Wilderness Medical Associates WFR. If you are not satisfied with the learner's ability after making reasonable efforts at accommodations and/or remediation, a downgrade or failure is appropriate. Please inform the office as soon as possible. Do not make arrangements for remedial work (e.g., retesting) without gaining approval from the office.



**Wilderness First Responder Course
CORE CURRICULUM**

Registration & Introduction

1 hour

FORMAT: Lecture

- Course Logistics – go over functional position statement
- Paperwork – collect indemnities, releases, etc.
- Staff/Learner Introductions
- Scope/Goals of the WFR Course
- Ground Rules: Course format and any facility information
- Pass/Fail Criteria

NOTES

- Remember a first impression is a lasting impression

General Principles

0.75 hour

FORMAT: Lecture

- Oxygenation and Perfusion
- Critical Systems Overview (& major problems for each)
- Patterns and Trends
- Mental Status
- Swelling & Pressure
- Ischemia/Infarction
- Progressions
- Serious or not serious
- Risk/Benefit Ratio
- Probability/Consequence
- Generic to Specific
- Ideal to Real
- Most Patients Live
- Problem list
- Medicine is Dynamic

NOTES

- Avoid going into too much detail in any of these topics, remember this is simply an introduction to concepts. More detail and their reiteration should follow in subsequent lectures.



Patient Assessment System

1.5 hour

FORMAT: Lecture, Demo & Integrate into Simple PAS Drills

- Purpose/significance of PAS
- Scene Size Up
- Primary Assessment
- Secondary Assessment
- SOAP/Documentation
 - ✓ Radio SOAP format

NOTES

- Some of the skills & knowledge at the WFR level can be delayed until learners have mastered BLS skills. These include O2 administration, airway adjuncts, AED use, blood pressure (optional), child & infant CPR and lung sounds. These can also be introduced individually during the corresponding critical system presentation.
- Emphasize the mottos that accompany each triangle (stabilize scene, stabilize patient, complete then treat).
- AVPU remains the best indicator of perfusion pressure.
- Emphasize the goal of the reaching clear and thorough-problem lists.
- Return to SOAP Notes throughout the course and encourage learners to become clear, logical and concise.



ALS/BLS

4.5 hours

FORMAT: Demo, Skills Practice, Lecture, PAS

- Basic Life Support Skills Practice
- Respiratory System Review
 - ✓ Assess/Open the Airway
 - ✓ FBAO Adult/Child/Infant
 - ✓ Assess Breathing/PPV
 - ✓ Oxygen Administration
 - ✓ Vomit Rolls/Recovery Position
- Nervous System
 - ✓ Assessment/Definition of AVPU
 - ✓ Spine MOI/Initial Spine Management
- Circulatory System Review
 - ✓ Management of Severe Bleeding:
 - (well-aimed direct pressure, compression wrap, tourniquet concepts)
 - ✓ Assessment for pulse
 - ✓ CPR –
 - 1 Rescuer Adult
 - 2 Rescuer Adult
 - Child & Infant
- Wilderness Protocol- CPR (Normothermic)
- BLS Equipment
 - ✓ AED
 - ✓ NPA/OPA
- Use of Barrier Devices/Masks
- Oxygen Devices
- Bag Valve Mask (optional)
- Universal Precautions/BSI

NOTES

- After demonstrations, this topic should be covered almost entirely through hands-on skills practice including Basic Life Support drills (Red Flag/Green Flag drills). Correct and refine learner skills as they demonstrate them.
- Demonstrate/practice single person rolls here.
- Specific skills such as O₂/Airways/AED/Lung Sounds can be covered in skill stations.
- Supplement the CPR Protocol with a discussion about the potential limitations of CPR e.g., long evacuation, single rescuer, trauma, no AED, etc; heart vs respiratory failure as the cause of arrest.
- The PowerPoint slides do not go into detail on MI/Angina. Chest pain Ax & Tx can be addressed here in detail. It can also be done during Backcountry Medicine. Curriculum information can be found in Backbountry Medicine.



Circulatory System

1.5 hour

FORMAT: Lecture/PAS drills

- Anatomy/Physiology of Circulatory System
- Primary Problem: Shock (define)
- Volume Shock
 - ✓ Traumatic (internal bleeding)
 - ✓ Non-traumatic (dehydration)
- Cardiogenic Shock
 - ✓ MI/Angina (if not covered in BLS)
- Vascular Shock
 - ✓ Anaphylaxis (to be covered in separate lecture)
- ASR Sympathetic/Parasympathetic

NOTES

- Multiple rounds of PAS drills are essential for cementing the assessment process and conveying the critical systems material.

Respiratory System

1.5 hour

FORMAT: Lecture/PAS drills

- Anatomy/Physiology of Respiratory System
- General Respiratory System Problems
 - ✓ Resp. Distress
 - ✓ Failure
 - ✓ Arrest
- Treatment
 - ✓ PROP
- Generic Problems of each component, Assessment & Treatment
 - ✓ Lower Airway: Constriction
 - (Asthma, Inhalation)
 - ✓ Alveoli: Fluid
 - (Infection, Pulmonary Edema)
 - ✓ Chest Wall: Trauma
 - (Open/Closed)
 - ✓ Respiratory Drive
 - (Increased/Decrease)
- Asthma Protocol
 - ✓ Use of epinephrine, HFA/MDI, corticosteroid

NOTES

- Consider presenting the Asthma Protocol lecture separately from the Respiratory Lecture.
- At this point mention Asthma as a lower airway problem which will be covered in more detail.
- Multiple rounds of PAS drills are essential at this stage for cementing the assessment process and conveying the critical systems material.



Nervous System

1.5 hour

FORMAT: Lecture/Pas drills

- Anatomy/Physiology of Nervous System
- Factors affecting AVPU – ‘STOPEATS’
- Head Wound/TBI
 - ✓ Assessment & Treatment
 - ✓ Post Concussive Syndrome
- Increased ICP
 - ✓ Causes
 - ✓ Assessment & Treatment
- Seizures
 - ✓ General types & causes
 - ✓ Assessment & Treatment
- Stroke
 - ✓ Assessment & Treatment

NOTES

- Specifically address how and when to use STOPEATS.
- Although hypoglycemia is a stand alone topic, it could be included here or in BC medicine.
- Multiple rounds of PAS drills are essential at this stage for cementing the assessment process and conveying the critical systems material.

Musculoskeletal Injuries

0.75 hour

FORMAT: Lecture/PAS Drill

- Anatomy/Physiology of Musculoskeletal System
- CSM – Assessment
- Stable vs. Unstable
 - ✓ High/Low Risk Criteria
- Treatment stable vs. unstable
- High risk musculoskeletal injuries
 - ✓ Femur
 - ✓ Pelvis
 - ✓ Compartment Syndrome
 - ✓ Open fracture
 - ✓ Joint infection
 - ✓ Impaired CSM

NOTES

- Emphasize stable vs. unstable rather than a specific diagnosis in the field.
- Learners might ask about traction splinting, and why we no longer practice it.



Splints - Extremities

1.25 hour

FORMAT: Concise demo followed by practice

- Principles of Splint Building:
 - ✓ Comfortable, Compact, Complete
- Sling and swath
- CSM Monitoring
- Femur Immobilization
- Pelvic Binding

NOTES

- Common techniques taught: go beyond principle, body/buddy splinting, SAM.
- This skill deserves as much time as can be reasonably devoted to it. Encourage learners to practice and become proficient.
- Emphasize 3 C's (Compact, Complete, Comfortable).
- Teach this topic by first demonstrating how to build a good, simple splint. Then move on to the lab. A 'skills rodeo' works well.

Dislocations

1.5 hour

FORMAT: Lecture, Demonstration, Practice

- Classification of dislocations
 - ✓ Simple vs. Complex
- Mechanisms:
 - ✓ Direct vs. Indirect
- Assessment & Treatment
- Wilderness Protocol
 - ✓ Shoulder, patella, digit

NOTES

- Include videos/demos of: Cunningham technique, external rotation, baseball thrower, scapula/hanging.
- Provide opportunities for additional practice of dislocation reduction in PAS drills/SIMS.



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Spine Management

2 hour

FORMAT: Lecture, Demonstration, Practice

- Spinal Anatomy
 - ✓ (column/cord)
- MOI
- Spine Assessment Protocol
- High/Low Risk Assessment

NOTES

- A complete demonstration of spine evaluation should be done for all learners.
- Ensure that this topic receives thorough attention, especially during PAS Drills and simulations. Present a variety of unclearable and high/low risk spine scenarios during PAS drills.
- Take some time to discuss the tradeoffs between stabilization and spine clearing.
- Consider the option of teaching stabilization skills first then covering the protocol.
- Before discussing high/low risk, make sure that learners are capable and comfortable doing a spine assessment and deciding *clear/not clear*. This can be done during a PAS drill or case study discussion the next day. Emphasize that they are changing the plan and not the diagnosis.

Lifts, Moves and Extrication

1 hour

FORMAT: Demonstration, Practice

- Basic Body Positions
- Principles of Movement
- Body Jams
 - ✓ (upper/lower)
- Rapid Extrication moves and rolls

NOTES

- Basic principles include; axial vs lateral movement, beaming, rolling, stabilizing weight centers.
- Emphasize that this skill is particularly useful for people who are <A or cannot move themselves.
- Talk about self-extrication as an alternative for people who are A and able.
- Encourage learners to try vs. talk, avoid analysis paralysis.
- A short length of chain (or webbing daisy chain) are good visual aids in describing spinal movement.



Patient Packaging Including Hypowrap

1.5 hour

FORMAT: Practice

- Stabilization devices
 - ✓ Backboards/Litters/Vacuum Mattress
- Specific concepts/techniques
 - ✓ Lateral packaging techniques
 - ✓ Proper sequence of securing
 - (Torso, then head)
- Long-term management techniques
 - ✓ Use of BP cuffs, stethoscope, thermometers- (optional in the packaging)
 - ✓ Managing urine/stool
 - ✓ Sufficient padding
- Hypothermia Packaging
 - ✓ Double-vapor barrier systems
- Discuss Use of Cervical Collars (Commercial)

NOTES

- The detail of use and application should be dependent on audience and available equipment.
- Give an overview of insulation qualities of different materials.
- Skill videos can be used to illustrate patient position and various types of equipment.

Improvised Patient Carries

1 hour

FORMAT: Demonstration, Practice

- Split Coil Carry
- Webbing Carries (piggy back)
- Backpack Carries
- Firefighter Carries
- Improvised Stretcher-non spine stable

NOTES

- Discuss relevant patient carrying based on group activities and available gear.
- Be mindful this activity doesn't turn into "chicken fights" and piggy back races.

Litter Carries

0.5 hour

FORMAT: PAS Drill

- Securing patient in device
- Carrying Straps
- Types of Carries
 - ✓ (caterpillar vs. static pass)

NOTES

- Instructor should facilitate a short walk through terrain where learners will need to employ various carrying techniques.



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Allergy/Anaphylaxis

1.5 hours

FORMAT: Lecture, PAS Drill, Debrief, Injection Lab

- Immune System Overview
- Differentiation of local reaction/ mild allergic/anaphylaxis
- Medical/Legal Aspects of Epi
- Injection Lab (including auto-injectors, ampules, vials and syringes)
- Anaphylaxis Protocol
 - ✓ Ephinephrine Administration
 - ✓ Injection considerations & techniques
 - ✓ Care of Epinephrine
 - ✓ H₁ antihistamine (e.g., diphenhydramine/Benadryl); consider corticosteroids

NOTES

- Due to the widely varying exposure that learners will have to this topic, plan on instructing this topic with the assumption of no prior knowledge on the part of the learner.
- Reserve time for questions; most classes will have lots, and this is one topic where it's more useful to address as many as possible to dispel myths and confusion.
- As states pass auto-injector legislation, there may be some supplemental slides that cover specifics that may not be relevant for a wilderness setting. Check with Medical Director.

Toxins, Bites, Stings & Vectors

0.75 hour

FORMAT: Lecture, PAS

- Generic Toxins (tissue and neuro)
- Generic Treatments
- Scorpions
- Prevention Assessment & Treatment
 - ✓ Pit Vipers
 - ✓ Ticks/Mosquitoes
 - ✓ Spiders
 - ✓ Coral snakes
 - ✓ Marine toxins

NOTES

- Depending upon the knowledge/interest of the class, there is flexibility in this presentation. Many topics can be covered through PAS drills or in Backcountry Medicine.
- Contact Medical/Curriculum Director for supplemental materials relevant for non-NA locations.



Wounds and Burns

1.25 hours

FORMAT: Lecture, Demonstration (Wound cleaning)

- Anatomy/Physiology
- Normal/Abnormal Healing Process
- Wound Classification
 - ✓ Simple/Cosmetic
 - ✓ Functional/High Risk
- Wound Cleaning & Impaled Object Removal Protocol
- Infection - Assessment & Treatment
- Burns
 - ✓ Classification
 - ✓ Assessment & Treatment
- Evisceration & Amputation Management

NOTES

- Consider a mix of lecture/demo/practice for this topic. A slide presentation with pictures is a good way to illustrate the various types of wounds and the principles of recognition and management as a morning quiz after the lecture.
- General wound management should be a topic familiar to virtually all learners, regardless of their training background. Emphasis should be placed on wound cleaning and management of impaled objects.
- The full lecture can be challenging to deliver on its own; much of the key material can be easily summarized, followed by the slides presentation at the end of the powerpoints.
- It is strongly recommended to include a wound cleaning demonstration as a part of this topic, using a pig's foot/chicken or moulaged wound. This can be done as one large demo for the whole group or in smaller groups skill stations, 2 – 3 people/foot.
- Consider a blister dressing demo, depending on group interest/needs.



Environmental Problems

4 hours

FORMAT: Lecture/ PAS drills

- Thermoregulation:
 - ✓ Assessment & Treatment
 - Mild Hypothermia
 - Severe Hypothermia
 - Heat Exhaustion
 - Heat Stroke
 - Hyponatremia
- Submersion
 - ✓ MOI
 - ✓ BLS treatment
 - ✓ Anticipated Problems:
 - Hypothermia
 - Respiratory distress
 - Increased ICP
 - Spine
- Lightning
 - ✓ MOI
 - ✓ Associated Problems
 - ✓ Treatment
 - ✓ Prevention/Risk Management
 - ✓ AC Electrical Injuries
 - ✓ Scene Hazards/Complications
- Altitude
 - ✓ Assessment & Treatment
 - HAPE
 - HACE
 - Risk factors
 - Prevention
 - Altitude related problems
- Frostbite/Cold Injuries
 - ✓ Assessment pre-thawed
 - Frostnip/Superficial/Deep
 - ✓ Pre-thawed Treatment
 - ✓ Post-rewarming Assessment & Treatment
 - ✓ Prevention
 - ✓ Other cold injuries
 - Raynaud's syndrome
 - Non-freezing cold injuries
- Avalanche (optional)
 - ✓ Survival Rates & MOI's
 - ✓ Treatment
 - ✓ Resuscitation guidelines
- SCUBA (optional)
 - ✓ Prevention, Assessment & Treatment of:
 - Pulmonary Overpressure/Barotrauma
 - Decompression Sickness
 - Middle Ear Barotrauma
- Emergency Childbirth (optional)
 - ✓ Fetal Development
 - ✓ Relevant History
 - ✓ Stages of Labor
 - ✓ Delivery – normal and problems
 - ✓ Basic Neonatal Resuscitation

NOTES

- Each of the above environmental topics should receive a quick overview, focusing on assessment and treatment criteria.
- Consider a “rodeo format” to cover these topics



Backcountry Medicine

4 hours

FORMAT: Practice, Debrief

- Pain Management including Meds
- Vomiting/Diarrhea
- Abdominal Pain
- Genitourinary Problems
- Chest Pain
- Headache
- Prevention/Camp
- Hygiene/Water
- Eyes, Ears, Nose, Throat & Teeth Problems
- Cough/URI
- Hypoglycemia/Diabetes
- Fever
- Skin Rashes
- Medical Kits

NOTES

- This topic should be covered by means of a 'Rodeo', followed by debrief.
- De-emphasize specific diagnoses; use anatomy, physiology and pathophysiology only as it helps with understanding.
- Particular emphasis should be placed on the 'Red Flags' serious/not serious for the necessity and urgency of evacuation.
- Consider adding problems not listed within the overheads/Lecture Notes that give good examples of the use of 'Red Flag' assessments (i.e. abdominal pain due to pregnancy, or appendicitis).
- Consider including hypoglycemia if not already covered in previous lecture
- Medical Kits:
 - ✓ Include location duration, numbers, cost, training as variables.
 - ✓ Also container types.
- Consider having smaller, divided groups of learners design kits for several different hypothetical trips and then review and critique each as a larger group.



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Roles & Responsibilities

0.75 hour

FORMAT: Lecture

- Expedition Medic
- Incident Command System (ICS)
- Search Basics

NOTES

- This is a very flexible lecture to give learners some exposure to the range of possible roles that might apply in any given situation. This information can be presented as a lecture or incorporated into a scenario.

Medical/Legal Issues

0.75 hour

FORMAT: Lecture

- Duty to Act
- Negligence
- Standard of Care
- Scope of Practice
- Consent for Treatment
- Use of Wilderness Protocols
- Certification/Authorization

NOTES

- Special emphasis should be placed on the Wilderness Protocols, and the requirements to use them.

Behavioral

1 hour (Optional)

FORMAT: Lecture; Case Study Discussion

New Material

- Prescreening
- Change in Mental Status Assessment

Red Flags

- Worrisome Conditions/Behaviors
- Specific Diagnoses



NOTES

- At least 3 (or more if time allows) simulations should be included in the WFR Course.
- Challenging and realistic simulations are one of the hallmarks of WMA courses. When done well, they bring all of the lessons of the course together and provide a memorable experience for the entire class. Learners should rarely be learning new content or skills for the first time in a simulation.
- It is useful to plan out the progression of simulations even as you plan each individual one. As the course progresses, learners can be challenged with more complicated logistical, transport or extended-care scenarios. Stress and critical thinking are important aspects.
- Each simulation should be fully moulaged and videotaped as typically done on a WFR Course.
- Consider integrating patient profiles that will require the differentiating between wilderness vs. urban protocols.
- Consider what simulations will be most useful to the group. Some might respond well to relatively controlled but realistic scenarios, other will eagerly anticipate full-on, mass casualty screaming chaos. Try to keep simulations fresh, both in design and in your questioning and videotaping.
- Parallel universe disasters and rotations with smaller numbers work well.
- Your final simulation should provide an opportunity for critical thinking and problem solving.
- Don't allow the scene to interfere with the medical lessons.
- Avoid long SAR missions where learners are either sitting and waiting or most are doing manual and non-medical/rescue tasks.



PAS Drills

20 hours

NOTES

- The number of hours listed here is in addition to the PAS drills previously noted that are run directly after or as part of a presentation on a topic.
- PAS drills should occur regularly throughout the course. They should reinforce the concepts introduced in class or expose learners to new information. Specific drills have not been supplied; the medical concepts are self-evident and the scenarios should be tailored to the needs and experience of the learners on each course. Instructors all have their favorites, but avoid getting into a rut.
- The standard drill format uses a 3-role rotation; patient, primary and secondary. This works very well and allows learners to experience the full range of roles.
- For fast review of BLS skills and other concepts, consider 1:1 drills. Every patient can have the same injury or multiple iterations of a potential injury (e.g., spine, head injury, etc). These can be done quickly to reinforce automatic response to initial assessment problems.
- When using multiple problems or iterations of the same, have the learners line-up in order of severity, high risk/low risk, etc.
- Also consider demonstrations of assessment techniques in front of the whole class. These can be done after the first day to help correct bad habits and get learners back on the same page.
- Consider using PAS drills first thing in the morning as a review/warm up before starting on new material.

Quizzes/Review

6 hours

NOTES

- It is useful to engage in ongoing review throughout the course. It helps learners retain key material, and it alerts instructors to any potential problems. The sooner and more clearly these can be flagged, the better. Format can depend on your group and your style (e.g., written quizzes, review games, group presentations, discussion of workbook cases, discussion of SAR cases in PP slides.)



Final Testing

1.5 hours

- Written Examination (WFR Exam)

NOTES

- 80% pass, subject to other criteria discussed at the beginning of the guide.
- Usually reserved for final afternoon, before or after the final simulation.
- Although WMA assesses practical skills on an ongoing basis, there are times when more formal testing might be appropriate. One instance is a learner who has not passed the written test. That person could be given the opportunity to display strong skills in a lead-rescuer role in a final sim or do a verbal Q and A with the lead. Another is a learner who may have passed the written but done marginally or poorly with skills. A formal, face-to-face skills assessment can be used to justify both passing and failing.
- There are groups, typically very large, that challenge instructors' ability to make accurate judgements. In these cases, formal skill stations (testing the spine protocol, for example) provide fair results.
- Make sure that the reasons for downgrades and outright failures are documented. Include your rationale and steps taken toward accommodation, remediation, and testing.

Course Wrap-up

1 hour

- Final paperwork - Disclaimers, Evaluations if not already done
- Other training options - WEMT, etc.
- Maintenance of certifications- recertification options, reciprocity issues



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Sample Course Schedule

WILDERNESS FIRST RESPONDER (7 day Format)

Day 1:

Introduction to Wilderness Medicine

General Concepts/Anatomy

Patient Assessment System (PAS)
parts 1, 2
BLS/ALS (CPR Protocol)

Day 2:

Circulatory System
Respiratory System

Asthma (Protocol)
PAS Part 3
PAS Drills
SOAP notes/Workbook

Day 3:

Homework review

Nervous system
PAS drills

Spine Injuries/Spinal Assessment (Protocol)
Lifting/moving/extrication
Spine Stabilization/litter packaging
PAS drills

Day 4:

Quiz/Homework Review

Allergy/Anaphylaxis (Protocol)
Musculoskeletal injuries
Dislocations (Protocol)
Splinting
Simulation # 1

Day 5:

Quiz/Homework Review

Toxins/Bites/Stings
Wounds/burns (Protocol)
Thermoregulation
Submersion injuries
Lightning
Simulation # 2

Day 6:

Quiz/Homework Review

Altitude

Frostbite
Hypoglycemia

Back-county Medicine
SAR/Personal prep
Simulation # 3

Day 7:

Medical Legal
Medical kits
Skills Review
Final Quiz
Evals/Wrap up
Graduation



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Sample Course Schedule

WILDERNESS FIRST RESPONDER (9 Day Format)

Day 1:

Registration/Intros
Introduction to Wilderness Medicine
General Concepts/Anatomy
Patient Assessment System (PAS) parts
1, 2
Basic Life Support Drills

Day 2:

BLS/ALS (CPR Protocol)

Circulatory System
Respiratory System
PAS (part 3)
PAS Drills
Asthma (Protocol)

Day 3:

Quiz/Homework review

Nervous System
Spine Management (Spinal-
Assessment Protocol)
LME
Pt. packaging
PAS drills

Day 4:

Quiz/Homework Review
Allergy/Anaphylaxis (Protocol)
Musculoskeletal injuries/Dislocations-
(Protocol)
Splints
Simulation # 1

Day 5: DAY OFF

Day 6:

Quiz/Homework Review

Wounds/Burns (Protocol)
Thermoregulation
Hypo wrap/Pt. carries
Simulation # 2

Day 7:

Quiz/Homework Review

Toxins/Bites/Stings
Near Drowning
Lightning
Simulation # 3

Day 8:

Quiz/Homework Review

Altitude
Frostbite
Avalanche
Hypoglycemia
Backcountry Medicine (rodeo)
SAR/Personal Prep
PAS drills/Sim #4 (if time allows)

Day 9:

Quiz
Medical/legal
Medical Kits
PAS drills/Skills review
Evals/wrap-up/Graduation

Face Any Challenge Anywhere!