



# the Wilderness Medicine Training Center

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## Student Handbook

This student handbook is designed as a reference to assist you in preparing for your Wilderness Medicine Training Center medical course. Pre-course curriculum questions should be addressed by e-mail to our office ([office@wildmedcenter.com](mailto:office@wildmedcenter.com)). Curriculum questions during a course should be directed to the course instructors. Site questions should be addressed directly to the course sponsor.

### Course Types

We have two course formats: our Standard course format and our hybrid Distance Learning Project (DLP) course format. While there are no prerequisites for our Standard courses, our hybrid DLP courses require you to successfully complete the online exam(s) prior to attending the practical session. Use our text, handbook, and the presentations on the course web site to prepare for their online test(s) and practical session (DLP students only). Access to the course web site and online test(s) will be sent to you via email from our office; complete directions are on the home page of the course web site. If you have registered and paid for a DLP course and do not receive your login information, please contact our office.

Instruction in both formats is augmented, as necessary, through the use of a large whiteboard (or overhead projector depending on the class size), dry-erase posters, full-sized anatomical torso, full-sized skeleton, symptomatic "acting" by the course instructors, case study summations, and case study quizzes.

### What to Bring

Please bring the following supplies and equipment to your course; note that the course sponsor may ask you to bring additional supplies.

- **a watch capable of measuring seconds** (for taking patient vital signs during simulations)
- **cutable simulation clothing: 2 t-shirts, 2 long sleeved shirts, 2 pair of long pants, and a pair of heavy socks** (DO NOT short this list! ALL the listed clothing IS REQUIRED for effective practice during simulations and labs. Clothing can usually be purchased cheaply through Goodwill, Salvation Army, local thrift store, church, yard sale or secondhand stores. Ask clerk for rejects and throw-aways)

- **notebook(s)** (for taking notes)
- **colored pens or pencils** (your instructors will use different colored markers during lecture to help organize the lecture material on the white board; you may find it EXTREMELY helpful to do the same in your notes)
- **two pencils and a pocket sharpener** (for writing in the rain on weather-proof patient notes or the patient notes located in the Wilderness Medicine Handbook during simulations)
- **old clothing** (to wear during skill labs; you WILL get dirty and may NOT want to wear your expensive outdoor gear)
- **a small backpack** (to wear during simulations)
- **a wide-mouth water bottle** (for use during simulations and some labs)
- **a headlamp** (for night simulations; this is especially important during late fall and winter courses)

## Registration

You will have two forms to complete prior to or during registration. Please print clearly. Your name and course information will be entered into our data base; your contact information is used only if we need to reach you. If you are registered for a DLP course, your name and e-mail will be used to set up your user account with test.com; it is vital that both are accurate and readable. Information is kept on file for three years.

1. Course Registration Form: Print your full name as you would like it to appear on your certification card. Use an address and phone number that are likely to remain the same for the next three years (the duration of your certification). Use an e-mail that you check on a regular basis and make sure to "allow" attachments from wildmedcenter.com, the sponsor, and test.com (if you are taking a DLP course).

2. Agreement of Responsibility Form: This is the WMTC Release Form and must be read and signed by you. Only those students who have read and signed the form may participate in WMTC course. You should receive a copy of the release form when you register for your course or by e-mail shortly thereafter.

## Site & Sponsor information

The course sponser and/or site host will have information and guidelines they would like you to follow during the course. If these are not included in your pre-course packet or readily available upon arrival at the course site, please ask the course sponsor. In most cases you and your fellow students will be responsible for keeping the classroom clean and neat during your course. Please cooperate with everyone and your course will be MUCH more pleasurable.

## Course Materials

### Books & Handouts:

Make sure you have all the required books.

Depending on the course and the sponsor **Standard** Wilderness First Responder (WFR) students may receive their books, a course syllabus, and this file a few weeks prior to their course start; most **Standard** Wilderness First Aid (WFA), Wilderness Advanced First Aid (WAFA) and Recertification students will receive all their course materials on Day 1 of their course.

Most **Distance Learning Project (DLP)** course students will receive their materials 3-8+ weeks prior to the start of their practical session and their login information to test.com at least two weeks prior to the start of their practical session. Remember DLP students MUST complete their online test(s) prior to the start of the practical session to be admitted.

Put your name on the cover of all your books in an obvious place. Regardless of the type of course—Standard or DLP—you should have:

- a course syllabus
- Access to the course web site (all sites are password protected). Either the course sponsor or the WMTC office will send you the specific site URL and its password. Directions on how to prepare for the tests and practical session are on the home page of each web site.
- Access to on-line testing (DLP courses ONLY). You should receive your login information to test.com at least 2-3 weeks prior to the start of your practical session. Contact the course sponsor immediately if you do not have it on time. It is vitally important that you confirm your access information as soon as you receive it and begin the testing process weeks before the start of your practical session to insure adequate time to complete the process on time.
- the Art & Technique of Wilderness Medicine, Second Edition (WFR & WEMT courses ONLY)
- the Wilderness Medicine Handbook (All courses)
- Case Study Workbook (Standard WFR ONLY; pdf file case studies are included in all DLP course web sites). The case studies may be read online or downloaded.
- SOAP Note tablet (All Standard WFR & WEMT courses; pdf file SOAP notes are included in all DLP web sites; SOAP notes are provided for in-class simulations)
- Access to an abridged of our textbook the Art & Technique of Wilderness Medicine, Second Edition (Standard WFA, WAFA, and Recertification courses ONLY) via a private web site are sent to registered students upon registration or shortly thereafter by the course sponsor. The text may be read online or downloaded.

## First Aid Supplies

Lab supplies will be provided for each lab unless otherwise noted in the pre-course literature. You are responsible for returning them in good condition and you are responsible for loss or damage beyond general wear and tear.

## Goals & Responsibilities

All WMTC courses are intense learning experiences. Both you and your instructors should share the following goals:

- mastery of material
- focused and fun
- shared time management

In order to reach these goals everyone will need to work together. Because of the block nature of most WMTC medical courses, there will be limited “free” time. Please come well rested having completed all the pre-course assignments.

Understanding your role as a student and the role of your instructors will help put your course into perspective and help you to take an active role in learning the course material.

### Instructor Responsibilities:

- Present the lecture material clearly.
- Give clear demonstrations.
- Design and manage effective PAS exercises and video simulations.
- Assist students as necessary outside of class as time permits without losing personal balance. Some instructors will elect to schedule one-on-one time, others will schedule optional “Question & Answer” sessions for the entire class. Remember that your instructors are responsible for presenting material to the entire class and have personal needs of their own. Please be sensitive to their needs.
- Be open to feedback.
- Shared time management. Course instructors are NOT “time” police. Please come a few minutes early to every presentation.

### Student’ Responsibilities:

- BE ON TIME (students may choose time police from the class; if used this person(s) should rotate on a regular basis and include all students). If you are consistently late to class, you may not be eligible for certification and in some instances may be asked to leave the class.
- Ask effective questions (more on this later).
- Do all the assigned homework.
- Practice all practical skills to mastery.
- Attend ALL sessions; complete attendance and focus is required to pass the course.
- Bring the required material to each session.

- Be open to instructor feedback.
- Take responsibility for your learning. Ask for assistance if you need it; it is unrealistic to rely on your instructors to recognize and provide for all your needs during the course.

## Questions

You will likely have a number of questions en route to mastery of the course material. Questions are a double-edged sword. Clear, well timed questions usually benefit everyone. Poorly thought out or poorly timed questions often confuse the issue further while taking valuable class time. The following information will hopefully give you some insight and prepare you to ask effective questions. **IT IS NOT NECESSARY TO REMEMBER ALL THE INFORMATION PRESENTED.** In fact, this is impossible. It is vital for your sanity to realize that the important information is repeated again and again as the course progresses. First in lecture (Standard courses) or via home study and on-line testing (DLP courses), again in skills sessions, then again in homework and quizzes, and finally in multiple simulations. While it may not be important to remember all the details of a topic it IS important to understand the concepts behind each topic as your instructor is speaking.

### Hints for Asking Effective Questions:

- Thoroughly study the material prior to the start of your course or practical session. The evening prior to a lecture, skills lab, or simulation write down any questions you may have from your study and listen closely for the answers during next day's presentation.
- PLEASE DO NOT verbally interrupt an instructor as they are speaking; wait until you are called upon. In most cases, your instructor will pause numerous times during each lecture, demo, or review and ask for questions. Interrupting your instructor while they are speaking may throw their thought process off and detract from the presentation or demo.
- Write important questions down to make sure they get answered. If they do not get answered during a presentation, raise them at the end. As a last resort, talk to your instructor privately outside of class.
- Hold all questions about topics that will be covered later. All the topics in the syllabus take more than a few minutes to present clearly. The order or progression of topics within each course have been given careful attention. Refer to the syllabus and avoid asking questions about topics that will be covered later. Relax and let the class unfold.
- PLEASE DO NOT ASK questions you think you know the answer to.
- Outside of class use class members and reference material to answer your own questions before asking an instructor.
- If you don't understand the basic concepts of what your instructor just said AND if your question is crucial to your immediate understanding, please raise

your hand and ask a clarifying question. An effective clarifying question should resolve your problem.

- DO NOT ASK questions where you change the mechanism of injury or illness (MOI) or specific questions about how to evacuate a patient. These questions usually begin with the words "What If". Questions where you need to change the MOI to understand the topic usually conceal a clarifying question. Rethink and rephrase before asking this type of question. Specific evacuation questions are scene specific and can only be answered in context. Instead, focus on the understanding the medical window and how that relates to the problem and its treatment. Focus on when to evacuate and the evacuation window rather than how to evacuate. If you ask a "What If" question, your instructor may choose not to answer it, may ask you to rephrase it as a clarifying question, or they may attempt to guess and answer the clarifying question that may or may not lie beneath your "What If" question. Needless-to-say, guessing the underlying clarifying question that addresses your confusion is a hit-or-miss proposition and many instructors will choose not to guess.
- DO NOT PRESS FOR IN CLASS ANSWERS about problems that rarely occur in a field setting. These types of problems are often referred to as medical zebras because it is rare to find zebras outside of a zoo; if you hear hoofbeats in the field it's usually a horse. While it is important to be aware of what problems are zebras, it's not worth class time to focus on them. If you ask a zebra question, your instructor will let you know that it is a zebra question and probably refer you to additional resources outside class (books, web, video, other courses, etc.).
- DO NOT CONFRONT AN INSTRUCTOR DURING CLASS as this is usually detrimental to everyone concerned. If you have a problem with something an instructor has said please address it outside of class. Information taught in WMTC courses are based on published WMS practice guidelines and NAEMSP position papers. Most instructors have a copy of the guidelines with them for you to review. These "Sacred Cow" questions often indicate resistance to course information usually due to miss-education or a different frame of reference. Try to understand the answer based on the pathophysiology of the problem.
- DON'T take it personally if an instructor asks you to hold a question until later. DO remember to write your question down and schedule a time to talk with your instructor.
- Most large classes (30+) are sub-divided into smaller practical groups. Many of your questions will be better suited and easier to address in your practical group.

## Course Structure

### Lecture & DLP Web Sites

The purpose of lecture and our DLP web site presentations is to provide the basic

anatomy, physiology, and pathophysiology necessary for you to understand how to evaluate, assess, and treat your patients.

The outline for each topic is based on the Wilderness Medicine Handbook. Keep your handbook open and refer to it during every presentation. Ask questions on material that is not addressed. Each problem-based presentation begins with a brief review of MOI and the normal anatomy and physiology. From there the presentation progresses to problems and their associated pathophysiology. Signs, symptoms, and treatment emerge naturally from understanding the pathophysiology. Each change in MOI is introduced by the thought process used to evaluate it (Trauma, Environmental, or Medical). The format for each presentation leads you through the thought process again and again. This same thought process is used in the same manner during all simulation debriefs.

Your instructors may use animated movies, whiteboards, prepared posters, a full-sized skeleton and anatomical torso, and acting to help explain individual topics. Position yourself to see the material clearly. All of the prepared posters are similar (if not identical) to drawings in your text or handbook. You may find it helpful to make notes in your text when your instructor is using one of the prepared anatomy and physiology posters. If your instructor writes something on a whiteboard it is because they believe it is important. If it's not in your handbook, you may wish to make separate notes. Remember to bring all your books to class, including a notebook.

Remember: you don't need to understand minute details when listening to a presentation. Focus on understanding the concepts. You will get lots of practice and review through homework, quizzes, and simulations.

Instructors commonly use stories to illustrate specific points especially at the end of a difficult topic. Please tell YOUR stories during a break or meal (NOT during class). If you think you have a valuable story for the whole class, please run it by your instructors. If they think it is valuable, they may ask you to present it to the entire class.

## Skills Labs

Like lectures, Skills Labs are a prerequisite for Simulations. Focus your questions on the skills being taught NOT the technical information. You should strive for a high level of mastery of all the skills prior to using them during video simulations. There will NOT be enough time during the lab for this to happen. You must practice on your own time to master each skill. ***Skills practice should take priority over Case Studies and reading during the evenings.***

## Simulations

Simulations are where you will learn the most. It's where everything comes together...or falls apart. There is value in both. You will make mistakes during simulations. Mistakes are part of the learning process. Your goal is to learn from your mistakes (and the mistakes of your fellow students). Ideally everything will come together by the end of the course. Simulations begin on the first day as the Basic Life Support (BLS) Skills Lab leads into a BLS Simulations. Presentations, skills labs, and simulations continue throughout the course. Each simulation gets progressively

more difficult as the course progresses. Many simulations in WFR & WEMT courses are videoed and reviewed. Simulations will ALWAYS take place outside in a realistic environment. While this may be overwhelming at first, you will gradually gain real mastery through this process as the course progresses. There are four phases to each simulation: 1) patient briefing & make-up, 2) rescuer briefing, 3) execution, and 4) debrief.

#### 1. Patient Briefing & Make-up:

Your instructor will review the entire scene with the patients just before the PAS/Simulation then make them up en mass. They will often demonstrate how to act and answer an questions. Finally they will position the patients. It will take 15-30 minutes for an instructor to complete this phase. Rescuers are usually preparing their gear as the instructors are briefing and making-up the patients.

#### 2. Rescuer Briefing:

Once the patients are ready the instructors will brief the rescuers en mass.

- General story and all visible MOI
- The size of the evacuation window.
- The resources available
- When the exercise ends

#### 3. Execution:

Everyone is responsible for the safety during the simulation. Anyone can call a time out for a safety reason. If a time out is called all activity should stop and the instructor consulted. Upon conclusion of the simulation, patients are usually given a few minutes to clean-up as their rescuers attend to the gear.

#### 4. Debrief:

Non-video simulations are debriefed en mass using a whiteboard and the WMTC SOAP poster. Video simulations—used only in the WFR & EMT courses—are debriefed in front of a television or LCD projector and screen.

### General Guidelines for Simulations:

- You will be divided into groups of three whenever possible for all simulations. Within each group there will be a lead rescuer, an assistant rescuer, and a patient. Stay in role unless there is a safety issue. You will rotate roles with each simulation. If enrollment dictates groups of two (or occasionally four), your instructor will either ask for volunteers or make an assignment.
- Rescuers are expected to bring a watch, SOAP note, pens, a snack, water, a first aid kit, and, in some cases, sleeping bags, pads, and tarps, to each simulation.
- Instructors will tell the rescuers if their patient does not have a pulse or respirations.
- All patients must wear underwear, shorts, or bathing suit underneath their cutable simulation clothes.

- Patients should bring a day pack with food, water, and extra clothing to each exercise.
- ***You are responsible for your own emotional and physical safety at all times. If you feel threatened immediately call a time-out (stop the exercise) and then consult your instructor.***
- Patients tell their rescuers their simulation pulses after the rescuer counts it.
- Lead rescuers do all the surveys themselves and they write their own SOAP Notes. They are the primary person in charge of any splinting or spine immobilization and should be directive with their assistant rescuers.
- Assistant rescuers must be told what to do by the lead rescuer and should not offer advice unless specifically requested unless they think there is a safety issue.
- Instructors will draw a line on the patient's skin to indicate the source of a wound. If the instructor uses wax to make the wound more realistic, there will be a line beneath the wax.
- Cut only pants and shirts during a PAS/Simulation. Do not cut a patient's underwear or socks. Limit cutting where possible.
- All rescuers should wear gloves when treating a bleeding patient. ***WMTC uses latex exam gloves during simulations to help keep costs down and add realism. If you are allergic to latex you must bring your own non-latex gloves or make arrangements with the course sponsor to provide them; you may also request that your rescuers DO NOT to use latex gloves during simulations.***
- Occasionally Instructors will stop and "rewind" a scene.
- Do not remove splints until they have been checked by an instructor. If your splint needs work you will probably be asked to redo it before leaving class at the end of the day.
- Lead Rescuers must print their name clearly at the top of their SOAP Note and turn it in before the debrief.

## Simulation Outlines:

You should be a lead rescuer on each of the following simulations.

### BLS Simulation Outline

- MOI is major trauma plus scene appropriate heat or cold challenge
- All patients are spine injured. Poor handling results in cord damage.
- All patients have a minimum of one laceration
- All patients need to be moved because of a scene glitch or initial assessment problem that requires immediate treatment

- The scene ends when the lead rescuer has completed the first section in the SOAP Note or “time” has been called.

### Basic Simulation (no treatment) Outline

- MOI is major trauma plus scene appropriate heat or cold challenge
- All patients are spine injured
- All patients have a minimum of one laceration
- All patients need to be moved because of a scene glitch or initial assessment problem that requires immediate treatment
- All patients are alert within 5 minutes of the start time
- All patients should have a critical system problem and an unstable musculoskeletal injury
- The scene ends when the lead rescuer has completed the entire SOAP Note or “time” has been called.

### Advanced Simulation & Treatment Outline

- MOI is major trauma plus scene appropriate environmental mechanisms
- There is a MOI for spine injury but it can be ruled out
- All patients have a minimum of one laceration
- Some patients need to be moved because of a scene glitch or initial assessment problem that requires immediate treatment
- All patients are alert within 5 minutes of the start time
- All patients should have a critical system problem, a stable musculoskeletal injury and an unstable musculoskeletal injury
- The scene ends when the lead rescuer has completed the entire SOAP Note, ruled out the spine injury, and splinted the unstable musculoskeletal injury or “time” has been called.

### Tag-team Simulation Outline (all courses)

Tag-team simulations are a bit different than other simulations. In a tag-team simulation an instructor is the patient and class members participate one at a time as “serial rescuers” to assess and treat the patient. A second instructor or a student completes a SOAP note using our SOAP posters as the current student rescuer gathers information and the remainder of the class watches. If a student rescuer stalls out or heads in the wrong direction, they may be tagged-out and replaced by another student. The instructor (who is acting as the patient) may also tag a student rescuer out and ask for a new student rescuer to take their place. Tag-team simulations are used to review environmental and medical emergencies and to teach or improve general patient assessment skills.

### Video Simulation Outline (WFR & WEMT only)

- MOI is major trauma plus scene appropriate environmental & medical mechanisms
- There is a MOI for spine injury but it can be ruled out in most patients. There is one unstable spine injury for every 6-8 students. Poor handling of patients with an unstable spine injury results in cord damage.
- All patients have a minimum of one laceration
- Some patient's need to be moved because of a scene glitch or initial assessment problem that requires immediate treatment
- All patient's are alert within 5 minutes of the start time, in some more advanced simulations patients may develop different acute critical system problems that cause a decrease in their AVPU after their spine injury has been ruled out; at least one dies.
- All patient's should have a critical system MOI (not necessarily a problem), a stable musculoskeletal injury and an unstable musculoskeletal injury
- The scene ends when the lead rescuer has completed the entire SOAP Note, ruled out the spine injury, and splinted the unstable musculoskeletal injury (extremity or spine).
- Depending on their students ability and needs an instructor may choose to present a mass casualty video simulation.
- Some video simulations will require lifting, moving, packaging, and transporting a spine injured patient.

## Evaluation & Testing

Evaluation is an on-going process that begins when you walk in the door and ends when you leave. It encompasses all your statements and actions during the course. Instructors are trained to look for trends and to intervene when they spot ineffective ones. Your instructors will give you feedback when they have it; and, you should ask for more if you need it. You will be asked to turn in some homework assignments, most SOAP notes, and all quizzes and tests. Failure to complete and turn in assignments may result in failing the course. Most students feel overwhelmed in the early part of the course (especially if they have not thoroughly studied the material prior to the course start). This is normal. It takes time for the concepts to sink in. Talk with your instructor if you become unduly concerned about your progress. Instructors gather most of their objective information from homework, quizzes, SOAP notes, tests, and simulations. All Standard courses have a final in-class written exam; you must score 85% or greater to pass. DLP Students have already passed their on-line exams prior to attending their practical session; however, they should keep in mind that there will be homework and written quizzes throughout their practical session.