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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 International medical course. Pre-course curriculum questions should be addressed by email to [office@wildmedcenter.com](mailto:office@wildmedcenter.com). Curriculum questions during a course should be directed to the course instructor(s). Logistical and 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. Tuition for all courses includes copies of our Patient SOAP notes (for training and documentation) and our Wilderness Medicine Handbook (a waterproof, tear-resistant field manual). *All our courses have a "No refund unless the course is canceled" policy.*

#### Standard Courses

Standard courses are taught completely on-site at the specified Sponsor's location. There are no prerequisites for any of our standard courses. Lectures, skill labs, simulations, and case study reviews are scheduled throughout the course and as a result are longer than our hybrid DLP courses.

#### Hybrid DLP Courses

Our hybrid Distance Learning Project (DLP) courses have a home study component that requires students to successfully complete a series of online exam(s) prior to attending the practical session; due to the home study component, the practical session of all DLP courses are shorter than a corresponding standard course of the same certification level. Hybrid (DLP) course students are given access to a dedicated website with text, animations, and videos to help them prepare for their online tests and practical session. Access to the course website and online tests are sent to registered students via email from our office upon registration and payment; complete directions are on the home page of the course website. If you have registered and paid for a hybrid (DLP) course and did 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 or smartphone capable of measuring seconds (for taking patient vital signs during simulations)
- Cuttable 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 or paper (for taking notes)
- Colored pens or pencils (your instructors will use different colored markers during lectures, case study reviews, and discussions to help organize the material on a white board or SOAP poster; some students find it EXTREMELY helpful to do the same in their notes)
- Two pencils and a pocket sharpener (for writing in the rain on weatherproof patient SOAP notes 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)
- Insect repellent (DEET/Picaridin) and spray insecticide (Permethrin)
- 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 database; your contact information is used only if we need to reach you. If you are registered for a hybrid DLP course, your name and email 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 email address 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 hybrid 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 email shortly thereafter and/or at the start of your course or practical session.

## Site & Sponsor Information

The course sponsor 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

Make sure you have all the required materials for your course. While not included in the cost of your course, all students who own a smartphone or tablet are encouraged to purchase a digital handbook (app) from our [webstore](#). The digital handbook contains significantly more information than the print handbook and includes free updates for life.

Standard course students will receive all their course materials on Day 1 of their course.

Most Hybrid Distance Learning Project (DLP) course students will receive their materials, including login to their online tests within a week of registering and paying for their course. Remember hybrid (DLP) students MUST complete their online tests prior to the start of the practical session to be admitted. It's an excellent idea to register as early as possible for a DLP course to ensure adequate time to complete the home study section and exams.

Below is a list of materials included in your course tuition.

- A course syllabus (all courses) is part of the registration process. It is a general guideline only and subject to change based on student needs during the course. *As you make your travel plans etc., please keep in mind that you must be present and engaged during the entire course in order to be eligible for certification; if for any reason what-so-ever you miss a portion of the course, you will not receive a full 3-year certification. Depending on the time and content of the missed session(s) and your demonstrated skill level, your instructor may award you a shorter or lower level certification, or no certification. Plan accordingly. We cannot be and are not responsible for you missing part of a course.*
- Access to the course website (DLP students ONLY). 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 website.
- Access to online testing (DLP students ONLY). You should receive login information to your online tests shortly after registering and paying for your course. 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 ensure adequate time to complete the online exams on time.
- Wilderness Medicine Handbook (all courses). As soon as you receive your new handbook, put your name on the cover in an obvious place using a permanent marker.
- Patient SOAP Notes (all courses). Paper SOAP notes are used for case study homework and during dry simulations; weatherproof SOAP notes are used during wet simulations.

Contact the course sponsor and the WMTC office if you do not receive access to the course website, your online tests, and a handbook.

## First Aid Supplies

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 and 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 “police” 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. *You must be present and engaged the entire course in order to be eligible for certification; if for any reason what-so-ever you miss a portion of the course, you will not receive a full 3-year certification. Depending on the time and content of the missed portion(s) and your demonstrated skill level, your instructor may award you a shorter or lower level certification.*
- 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 THE COURSE. 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 online 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 off their thought process 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 WMTTC courses is based on practice guidelines published by the Wilderness Medical Society, the National Association of Emergency Medical System Physicians (NAEMSP), the American Heart Association (AHA), and the Wilderness Medicine Education Collaborative (WMEC). 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 subdivided into smaller practical groups. Many of your questions will be better suited and easier to address in your practical group.

## Course Structure

The purpose of formal lecture during standard courses and our hybrid (DLP) website presentations is to provide the basic anatomy, physiology, and pathophysiology necessary for you to understand how to evaluate, assess, and treat your patients.

Instructors in both course formats—standard and hybrid—commonly use stories to illustrate specific points especially when discussing 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.

## Standard Course Lectures

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, a full-sized skeleton and anatomical torso, and acting to help explain individual topics. Position yourself to see the material clearly. 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 or viewing a presentation. Focus on understanding the concepts. You will get lots of practice and review through homework, quizzes, and simulations.

## Hybrid DLP Course Website & Tests

Hybrid course websites address the lecture material covered in a standard course through text, animations, and videos; it is essentially an online textbook. Because there is no direct instructor interaction during the home study portion of the course (unless you fail an application test three times), the sites include case studies (and follow-up discussion) to check your understanding prior to taking the online tests. *Keep in mind that the online tests are both an educational tool as well as an evaluative tool. As such, they are challenging and few students pass on their first attempt.* There are two types of online tests: Content & Application tests and you can review tests you have already taken at any time.

Content tests are easier than the Application tests and may only be taken once. You will receive answers to the Content test questions immediately after submitting them, and while the test is scored, the score doesn't count. That said, your score will give you an idea of how well you understand the material.

The Application test questions are all scenario-based and you need to score  $\geq 80\%$  to pass. You will be able to study for, take, and retake each Application test multiple times. That said, there is a limit to the number of times you may retake a given test. If you reach the test limit, please contact the WMTC office where one of our senior instructors will review your last test, send you detailed written feedback via email, and give you one final opportunity to take that test. You will have the opportunity to review your feedback and ask the instructor questions before taking the test again. If you fail the same Application test again, you may not continue with the course, attend the practical session, or receive a refund for the course; it's important that you know this. Keep in mind that historically 99.9% of the students who failed an Application test, received instructor feedback, and go on to take that test again, have passed that test. Roughly 1-2% of the students who register and pay for a hybrid (DLP) course do not attend the practical session because they: 1) encounter a family or personal emergency, or 2) run out of time and do not complete the online tests prior to the start of the practical session; voluntary procrastination is the primary reason they run out of time with overcommitment a distant second.

## Skills Labs

Like lectures, Skills Labs are a prerequisite for Simulations. Focus your questions on the skills being taught NOT detailed technical information. You should strive for a high level of mastery of all the skills prior to using them during 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 and 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 falls into place by the end of the course. Simulations begin on the first day as the Basic Life Support (BLS) Skills Lab leads into BLS Simulations. Presentations, skills labs, and simulations continue throughout the course. Each simulation gets progressively more difficult as the course progresses. Barring a technical malfunction, 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. Descriptions of each stage follows.

### 1. Patient Briefing & Makeup:

Your instructor will review the entire scene with the patients before applying makeup en mass. They will demonstrate how to act and answer any questions. Finally they will position the patients. It typically takes 15-30 minutes for an instructor to complete this phase. Rescuers use this time to clean up if they were patients in a prior simulation, prepare their first aid kits and equipment, and review general assessment & treatment guidelines.

### 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 their 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. Rescuers are required to complete and turn in for instructor review a full SOAP note on each patient.

### 4. Debrief:

Non-video simulations are debriefed en mass using a whiteboard and the WEMT SOAP posters. 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 two or three for most simulations. Groups of three will be subdivided into a lead rescuer, an assistant rescuer, and a patient; groups of two subdivide into a rescuer and 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 or smartphone, 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 a bathing suit underneath their cuttable 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.
- If you are in a group of three, the lead rescuer will do all the surveys themselves and write their own SOAP Notes. They are the primary person in charge of any splinting or spine management 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 simulation. Do not cut a patient's underwear, bathing suit, or socks. Limit cutting where possible.
- All rescuers should wear gloves when treating a bleeding patient.
- 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 may be asked to redo it before leaving class at the end of the day (or come in early the following 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. Simulations in WFR & WEMT courses will be videoed and reviewed during the after-action debrief.

## BLS Simulation Outline

- MOI is major trauma plus scene appropriate heat or cold challenge.
- All patients have an MOI for a spine injury. Poor handling may result in paralysis.
- 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 have a potential spine injury.
- 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 by the instructor.

## Advanced Simulation & Treatment Outline

- MOI is major trauma plus scene appropriate environmental mechanisms.
- All patients have a potential spine injury.
- 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 will 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 potential spine injury, and splinted the unstable musculoskeletal injury or "Time" has been called.

## Evaluation & Testing

Evaluation is an ongoing process that begins when you walk in the door of your standard course or practical session 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 as-

signments, most SOAP notes, and all quizzes and tests. Failure to complete and turn in assignments may result in not being awarded a certification. Most students feel overwhelmed in the early part of the course. 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. Hybrid DLP Students passed their online 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. Please remember, you must be present and engaged throughout the entire course in order to be eligible for certification.

## Infectious Disease Protection

### Insect-borne Infectious Diseases

Wilderness medicine courses taught by WMTC may be sponsored or hosted by organizations both foreign and domestic in different parts of the world. Wilderness medicine courses involve skills practice, demonstrations and simulations that typically require you to be outdoors for significant portions of time in diverse geographical regions; some wilderness medicine courses may be held partially or entirely in a field setting. As a consequence of global warming, many areas or regions around the world have experienced, and may experience in the future, changes in seasonal temperature which may result in an area or region experiencing lower or higher average temperatures, potentially resulting in extended temperate seasons, or other changes in or deviations from historical climate and weather patterns. Such changes in climate may contribute to the unpredictable migration, movement or changes in habitat and behavior of animals and insects carrying infectious disease. You should be aware that there is a potential risk of exposure to animals and insects carrying infectious disease in any season, and it may be possible that you will be exposed to such animal or insect vectors while participating in a course.

You are responsible for your physical health and safety during a course, and should take steps to be informed as to any potential risk of exposure to animal or insect vectors which are known to, or could potentially transmit an infectious disease in the area in which a wilderness medicine course is being held prior to attending that course. You are responsible for taking such precautions as are prudent and reasonable to protect yourself from such exposure while traveling to and from, and while in any outdoor setting during a course. For information on protecting yourself from an infectious disease, please refer to this [blog article](#), the Centers for Disease Control (CDC) [website](#), and the National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) [website](#). It is the responsibility of every individual registering for, and participating in a wilderness medicine course taught by WMTC to be informed about the potential risks associated with the activity and to take the necessary precautions to ensure their personal safety. As a participant in a WMTC course, you have the responsibility to ask questions and address any concerns related to your health and safety prior to and during a course with the course instructor(s), the sponsoring organization and the WMTC office and to work toward a reasonable resolution of those concerns.

### Food- and Water-borne Infectious Diseases

Good personal and group hygiene will help prevent many food- and water-borne diseases: wash hands with soap and water and/or use a hand sanitizer after "patient" contact, before eating, after going to the bathroom, and before food preparation; avoid coughing

on other people; avoid sharing water bottles; avoid putting hands into snack bags; wash all raw fruits and vegetables with soap and potable water; wash all cooking utensils and pots in hot, soapy water and sanitize, do not cook or clean-up if you are sick, etc.