CLS
TCCC

COMBAT LIFESAVER
TACTICAL COMBAT CASUALTY CARE

COURSE PLAN:
A TEACHING GUIDE FOR TRAINERS

26 MAY 2023

Committee on Tactical Combat Casualty Care (CoTCCC)

COURSE PLAN

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I. COURSE OVERVIEW

This teaching guide provides information to help trainers successfully manage and teach the Tactical Combat Casualty Care (TCCC) Combat Lifesaver (CLS) Course.

The proponent for the course is the Joint Trauma System (JTS), which is a part of the Defense Health Agency (DHA), located in Falls Church, Virginia. This is an unclassified course (security classification). The product is releasable to foreign countries and civilians. Therefore, the curriculum is being offered in the public domain to ensure maximum availability to military personnel, international partners, and the public.

This standardized curriculum is available in a digital format for trainers and students. Training materials and resources are available through a DHA-sponsored training platform called Deployed Medicine (DM). DM is accessible through your personal computer or mobile device. Trainers may access the official materials at www.deployedmedicine.com, and through the free DM mobile app for iOS and Android. Learning assets can be downloaded from the website in either a single or bundled training package. They may also be viewed and downloaded separately.

For questions regarding TCCC training standards or the TCCC CLS course curriculum and its use, contact the Joint Trauma Education and Training Branch (JTET-B) at TCCC-CLS@deployedmedicine.com or dha.jbsa.j-3.list.jts-jtet@mail.mil.

PREREQUISITES

- **Trainers:** Trainers should have taken and passed the CLS Student's Course and Trainer Courses. Experienced TCCC instructors and trainers may be exempt from this requirement based on Service-specific standards.
- **Students:** This course is intended for those who have completed the All Service Members (ASM) course or to those whose Service-specific requirements begin with CLS as a foundational level of training. It is primarily intended for nonmedical personnel serving in deployable and combat roles.

COURSE DESCRIPTION

The TCCC Combat Lifesaver (TCCC-CLS) Course is intended to familiarize military personnel with TCCC principles, concepts and critical skills to ensure they are adequately prepared to render medical aid to a trauma casualty.

The course begins with a classroom presentation followed by a series of interactive, hands-on skills training sessions that encompass tactical trauma assessment, bleeding control interventions, airway and respiratory management techniques, rescue drag/carry techniques, prevention and treatment of shock, burns, eye injuries, splints, pain management, critical communication, and medical documentation practices.

The medical skills in which students are trained have been proven safe and effective; they can be performed by an individual with no prior medical training. At the completion of this course, students will have TCCC basic proficiency qualifications.

The academic instruction training is designed to be delivered within a 40-hour timeframe for initial training (40-hour timeframe can be adjusted for smaller class sizes i.e., 5-10 students) and a modified timeframe for refresher training depending on several variables, such as class size and number of trainers. Based on the sample Course Map, the trainers can provide additional time for the students to practice at the various skills stations. The length of time at the skills stations is based on the trainer's discretion and contingent on many factors including time, difficulty of skill, and organization of skill groupings, if applicable. Additionally, trainers have the option whether or not they choose to evaluate the students at the stations.

Adequate training space must be provided to accommodate hands-on TCCC skills training. Optimal conditions would allow enough space for students to break out into multiple small groups to practice skills with access to training aids.

Safety is critical in any training environment. This course is low risk for hazards, but safety conditions should be assessed locally, and appropriate controls established. Every precaution should be taken during training to ensure student safety. Safety is everyone's responsibility; recognize, mitigate, and report hazardous conditions.

After a supervised skill rehearsal, trainers will evaluate students while performing individual skills at testing skills stations. Students will then be formally evaluated using the Tactical Trauma Assessment Skills Checklist. After the skills assessment, trainers **will** provide a written examination comprised of 50 questions. The exam is **only** available online and can be found on Deployed Medicine. You will have to request access by filling out the instructor request form found in the CLS Course description. Subsequently, the students will receive a brief Course Critique consisting of basic questions (with Likert responses and several open-ended response questions to share personal feedback about the course along with future course recommendations).

TRAINER RESPONSIBILITIES

As a trainer, it is your responsibility to meet these requirements:

- Complete the prerequisites to teach this course (e.g., take/pass the CLS Student and Trainer Courses)
- Experienced TCCC instructors and trainers may be exempt from this requirement based on Service-specific standards

- Consistently demonstrate TCCC subject matter knowledge, and be confident and competent in performing and assessing TCCC skills
- Ensure you and your fellow trainers are familiar with the course plan, training materials, medical supplies, and equipment before the course
- Teach using the standardized curriculum by staying up to date on the current TCCC Guidelines and curricula approved by the CoTCCC and JTS.
- Properly assess student abilities to achieve basic competency in the various skill requirements

II. COURSE FOUNDATION AND DESIGN

The TCCC CLS curriculum features a student-centered approach tailored to a novice TCCC learner. The training methods and materials are uniquely designed to accommodate a variety of learning styles and preferences, while also ensuring learning objectives are met efficiently and effectively. In particular, the use of multimedia training content and technology are a key part of the learning strategy.

Overall training goals are to ensure students:

- Understand and value the importance of lifesaving skills and their role in helping eliminate preventable deaths due to trauma, ensuring military readiness and mission success
- Understand and value the importance of how lifesaving skills are used in everyday life
- Can perform lifesaving skills at a basic proficiency level

Trainers must take time to learn about each training audience. Inexperienced TCCC learners may be concerned that they could do something to further harm a casualty and may be reluctant at first to engage in skills training. Trainers should provide a supportive and collaborative setting to enrich the hands-on learning experience and provide reassurance and coaching to improve learner confidence. Positive reinforcement is key to ensuring student success.

The course is primarily focused on skills training, so most of the training time is allotted to interactive hands-on learning. The curriculum is based on a foundation of learning objectives. A Terminal Learning Objective (TLO) or end goal is supported by a set of Enabling Learning Objectives (ELOs). Services/units can add more TLOs/ELOs based on local training requirements.

Core Modules/Lesson Plans

#	LESSON NUMBER	LESSON TITLE
01	TCCC-CLS: 1	Principles and Application of TCCC
02	TCCC-CLS: 2	Medical Equipment
03	TCCC-CLS: 3	Care Under Fire
04	TCCC-CLS: 4	Principles and Application of Tactical Field Care (TFC)

05	TCCC-CLS: 5	Tactical Trauma Assessment
06	TCCC-CLS: 6	Massive Hemorrhage Control in TFC
07	TCCC-CLS: 7	Airway Management in TFC
08	TCCC-CLS: 8	Respiration Assessment and Management in TFC
09	TCCC-CLS: 9	Circulation/Hemorrhage Control in TFC
10	TCCC-CLS: 10	Shock Recognition
11	TCCC-CLS: 11	Hypothermia Prevention
12	TCCC-CLS: 12	Head Injuries
13	TCCC-CLS: 13	Eye Injuries
14	TCCC-CLS: 14	Analgesia Administration & Antibiotic Administration (Pain Medication)
15	TCCC-CLS: 15	Wound Management
16	TCCC-CLS: 16	Burns
17	TCCC-CLS: 17	Fractures
18	TCCC-CLS: 18	Casualty Monitoring
19	TCCC-CLS: 19	Pre-evacuation Procedures, Communication, and Documentation
20	TCCC-CLS: 20	Evacuation Procedures

LEARNING OBJECTIVES

The course is built on a foundation of learning objectives. It includes 23 Terminal Learning Objectives (TLOs), supported by a set of 103 Enabling Learning Objectives (ELOs).

LEARNING OBJECTIVES: (23 TLOs, 103 ELOs)

MODULE 1: PRINCIPLES AND APPLICATION OF TACTICAL COMBAT CASUALTY CARE	
TLO	**ELO (1)**
01 Given a combat or noncombat scenario, perform Tactical Combat Casualty Care (TCCC) in accordance with the Committee on Tactical Combat Casualty Care (CoTCCC) Guidelines.	01 Demonstrate the application of Tactical Combat Casualty Care skills in a combat or noncombat scenario. (Comprehensive Module Practical Exercise)
TLO	**ELO (7)**
02 Describe the practice of TCCC in accordance with CoTCCC Guidelines.	02 Identify the leading causes of preventable death due to traumatic injuries, and the corresponding interventions to help increase chances of survival. (ASM T1:E1)

	03 Describe the TCCC Phases of Care, and how intervention priorities differ in each phase, in accordance with CoTCCC guidelines. 04 Describe the application of TCCC in combat and noncombat settings across different environments. (ASM T1:E4) 05 Describe the role and responsibilities of a nonmedical service member in rendering TCCC care in accordance with Joint Publication (JP) 4-02, Health Services Support, p. 27 (II-1). (ASM T1:E5) 06 Identify the key factors influencing TCCC. 07 Identify the importance of TCCC training. 08 Identify three objectives (or goals) of TCCC.

MODULE 2: MEDICAL EQUIPMENT	
TLO	**ELO (5)**
03 Describe the use of individual medical equipment components in accordance with CoTCCC Guidelines.	09 Describe the use of a first aid kit in accordance with Service policy. (ASM T2) 10 Identify the contents of an individual Joint First Aid Kit (JFAK), and/or other Service-specific first aid kits. (ASM T2:E6) 11 Describe the general maintenance and resupply procedures for trauma materials in a first aid kit in accordance with Service guidelines. (ASM T2:E7) 12 Identify the contents of a combat lifesaver kit, and/or other Service-specific first aid kits. 13 Describe the use of the components of a combat lifesaver kit in accordance with Service policy.

MODULE 3: CARE UNDER FIRE	
TLO	**ELO (9)**
04 Given a combat or noncombat scenario, perform Care Under Fire in accordance with CoTCCC Guidelines.	14 Describe the role of fire superiority and threat containment and the impact of tactical environment on Tactical Combat Casualty Care. 15 Describe the actions required before engaging with a casualty to prevent harm or additional casualties in accordance with CoTCCC guidelines. (ASM T3:E8) 16 Identify appropriate actions and priorities to treat and move casualties in Care Under Fire. 17 Identify the importance of early application of limb tourniquets to control life-threatening bleeding in Care Under Fire. 18 Demonstrate one-handed tourniquet application to self in Care Under Fire.

	19 Demonstrate two-handed tourniquet application to a casualty in Care Under Fire. 20 Describe the principles, advantages, and disadvantages of one-person drag/carry or two-person drag/carry in Care Under Fire. 21 Demonstrate the one-person drags and carries of a casualty in Care Under Fire. 22 Demonstrate two-person drags and carries of a casualty in Care Under Fire.

MODULE 4: PRINCIPLES AND APPLICATION OF TACTICAL FIELD CARE (TFC)	
TLO	**ELO (6)**
05 Given a combat or noncombat scenario, perform Tactical Field Care in accordance with CoTCCC Guidelines.	23 Identify the importance of security and safety in Tactical Field Care. 24 Identify basic principles of removal/extraction of casualties from a unit-specific platform. 25 Identify the importance and techniques of communicating casualty information with unit tactical leadership and/or medical personnel. 26 Identify the relevant tactical and casualty data involved in communicating casualty information. 27 Demonstrate communication of casualty information to tactical leadership and/or medical personnel (in accordance with Service and/or unit standard operating procedures in Tactical Field Care). 28 Identify triage considerations in Tactical Field Care.

MODULE 5: TACTICAL TRAUMA ASSESSMENT	
TLO	**ELO (8)**
06 Given a combat or noncombat scenario, perform a Tactical Trauma Assessment in accordance with CoTCCC Guidelines.	29 Demonstrate the techniques used to assess a casualty for responsiveness. (ASM T3:E9) 30 Identify the common causes of altered mental status in combat or noncombat environments. 31 Identify the importance of disarming and securing communications equipment of a casualty with altered mental status. 32 Identify the importance and techniques of communicating with a casualty in Tactical Field Care. 33 Demonstrate communicating with a casualty in Tactical Field Care. 34 Demonstrate application of body substance isolation (BSI) in Tactical Field Care.

	35 Demonstrate a Tactical Trauma Assessment in the proper order using the MARCH PAWS sequence in accordance with CoTCCC guidelines. **36** Demonstrate the appropriate actions and interventions used during a casualty assessment to render aid to the casualty in accordance with CoTCCC Guidelines.

MODULE 6: MASSIVE HEMORRHAGE CONTROL IN TFC	
TLO	**ELO (8)**
07 Given a combat or noncombat scenario, perform massive hemorrhage control during Tactical Field Care in accordance with CoTCCC Guidelines.	**37** Identify life-threatening hemorrhage (bleed). **38** Identify the importance of early application of limb tourniquets to control life-threatening bleed. **39** Identify anatomical sites for applying direct and indirect pressure to control bleeding. **40** Demonstrate the appropriate application of a CoTCCC-recommended limb tourniquet. **41** Identify risks associated with applying an improvised limb tourniquet. **42** Demonstrate the application of a CoTCCC-recommended hemostatic dressing. **43** Demonstrate an evaluation of previously applied tourniquets for hemorrhage control effectiveness. **44** Demonstrate improvised junctional hemorrhage control with hemostatic dressing and direct pressure.

MODULE 7: AIRWAY MANAGEMENT IN TFC	
TLO	**ELO (5)**
08 Given a combat or noncombat scenario, perform airway management during Tactical Field Care in accordance with CoTCCC Guidelines.	**45** Identify signs of an airway obstruction. (ASM T5:E20) **46** Demonstrate opening the airway with the head-tilt chin-lift or jaw-thrust maneuver. **47** Demonstrate the placement of a casualty in the recovery position in Tactical Field Care. **48** Demonstrate the insertion of a nasopharyngeal airway (NPA) to a casualty in Tactical Field Care. **49** Describe the technique for ventilating with a bag valve mask (BVM) to a casualty in Tactical Field Care.

MODULE 8: RESPIRATION ASSESSMENT AND MANAGEMENT IN TFC	
TLO	**ELO (9)**

09 Given a combat or noncombat scenario, perform assessment and management of respiration and chest trauma during Tactical Field Care in accordance with CoTCCC Guidelines.	**50** Identify the signs and symptoms of respiratory distress. (ASM T5:E23) **51** Identify the signs and symptoms of a life-threatening chest injury. (ASM T5:E24) **52** Identify the signs and symptoms of open pneumothorax (sucking chest wound) in Tactical Field Care. **53** Identify the importance and implications of vented and nonvented chest seals. **54** Demonstrate the application of a chest seal to an open chest wound. **55** Identify the signs, symptoms, and initial treatment of tension pneumothorax in Tactical Field Care. **56** Demonstrate a needle decompression of the chest at the second intercostal space in midclavicular line. **57** Demonstrate a needle decompression of the chest at the fifth intercostal space in the anterior axillary line. **58** Identify the signs of recurring or unsuccessful treatment of tension pneumothorax.

MODULE 9: CIRCULATION/HEMORRHAGE CONTROL IN TFC	
TLO	**ELO (4)**
10 Given a combat or noncombat scenario, perform hemorrhage control during Tactical Field Care in accordance with CoTCCC Guidelines.	**59** Identify the principles of wound packing and applying pressure bandages. **60** Demonstrate wound packing and applying a pressure bandage. **61** Identify progressive strategies, indications, and limitations of controlling external hemorrhage in Tactical Field Care. **62** Identify the signs, symptoms, and considerations of a pelvic fracture.

MODULE 10: SHOCK RECOGNITION	
TLO	**ELO (2)**
11 Describe shock assessment in Tactical Field Care in accordance with CoTCCC Guidelines.	**63** Identify the signs, symptoms, and management steps of shock in a trauma casualty with life-threatening bleeding. (ASM T4:E18) **64** Identify the importance of level of consciousness and radial pulse as indicators of shock in Tactical Field Care.

MODULE 11: HYPOTHERMIA PREVENTION	
TLO	**ELO (3)**

12 Given a combat or noncombat scenario, perform hypothermia prevention measures on a trauma casualty during Tactical Field Care and Tactical Evacuation Care in accordance with CoTCCC Guidelines.	**65** Identify the progressive strategies, indications, and limitations of hypothermia prevention of a trauma casualty in Tactical Field Care. **66** Demonstrate active external warming hypothermia prevention measures on a trauma casualty. **67** Identify passive hypothermia prevention measures on a trauma casualty.

MODULE 12: HEAD INJURIES	
TLO	**ELO (2)**
13 Identify a head injury in accordance with DoDI 6490.11, Change 1. 1 June 2018.	**68** Identify external forces that can cause a head injury in accordance with DODI 6490.11 enclosure 3 Section 1. (ASM T9:E33) **69** Identify signs and symptoms of a head injury in accordance with 6490.11, enclosure 3 Figure IED checklist. (ASM T9:E34) **70** Identify the critical observations that should be reported to medical personnel for trauma casualties with a suspected head injury, in accordance with the Military Acute Concussive Evaluation 2 (MACE 2). (ASM T9:E35)

MODULE 13: EYE INJURIES	
TLO	**ELO (2)**
14 Given a combat or noncombat scenario, perform assessment and initial treatment of penetrating eye trauma during Tactical Field Care in accordance with CoTCCC Guidelines.	**71** Identify basic care of an eye injury in accordance with CoTCCC Guidelines. **72** Demonstrate the application of a rigid eye shield to a trauma casualty in Tactical Field Care.

MODULE 14: PAIN MEDICATION AND ANTIBIOTIC ADMINISTRATION	
TLO	**ELO (4)**
15 Given a combat or noncombat scenario, perform analgesia administration during Tactical Field Care in accordance with CoTCCC Guidelines.	**73** Identify the indications and considerations of the analgesia approaches in Tactical Field Care. **74** Identify the indications, contraindications, and administration methods of analgesics (pain medications) in Tactical Field Care. **75** Demonstrate the administration of a combat wound medication pack in Tactical Field Care.

TLO	ELO (2)
16 Given a combat or noncombat scenario, perform antibiotic administration during Tactical Field Care in accordance with CoTCCC Guidelines.	76 Identify the evidence and considerations for early antibiotic administration in Tactical Field Care. 77 Identify the indications, contraindications, and administration methods of antibiotics in Tactical Field Care.

MODULE 15: WOUND MANAGEMENT	
TLO	**ELO (2)**
17 Given a combat or noncombat scenario, perform assessment and initial management of wounds during Tactical Field Care in accordance with CoTCCC Guidelines.	78 Identify wound management considerations in Tactical Field Care. 79 Demonstrate application of wound dressings on a trauma casualty in Tactical Field Care.

MODULE 16: BURNS	
TLO	**ELO (5)**
18 Given a combat or noncombat scenario, perform assessment and initial treatment of burns during Tactical Field Care in accordance with CoTCCC Guidelines.	80 Identify the specific scene safety issues and actions required of a trauma casualty with burns, before evaluation and care of the casualty. 81 Identify the severity of burn in accordance with the conventional burn classification. 82 Identify how to estimate the body surface area burned using the Rule of Nines. 83 Demonstrate the application of a dry dressing to a burn casualty in accordance with CoTCCC guidelines. 84 Demonstrate techniques used to prevent heat loss in a severe burn casualty in accordance with CoTCCC guidelines.

MODULE 17: FRACTURES	
TLO	**ELO (3)**
19 Given a combat or noncombat scenario, perform assessment	85 Identify signs of a suspected fracture. (ASM T7:E29) 86 Demonstrate the basic care of fractures in accordance with CoTCCC Guidelines. (ASM T7)

and initial treatment of fractures during Tactical Field Care in accordance with CoTCCC Guidelines.	**87** Demonstrate proper splint application using a malleable rigid or improvised splint to a suspected fracture in Tactical Field Care.

MODULE 18: CASUALTY MONITORING	
TLO	**ELO (2)**
20 Given a combat or noncombat scenario, perform monitoring of a trauma casualty during Tactical Field Care in combat in accordance with CoTCCC Guidelines.	**88** Identify the methods to assess level of consciousness, pulses, and respiratory rate on a trauma casualty in Tactical Field Care. **89** Demonstrate assessment of radial/carotid pulse and respirations in a trauma casualty in Tactical Field Care.

MODULE 19: PRE-EVACUATION PROCEDURES, COMMUNICATION AND DOCUMENTATION	
TLO	**ELO (4)**
21 Given a combat or noncombat scenario, perform pre-evacuation procedures during Tactical Field Care in accordance with CoTCCC Guidelines.	**90** Identify the importance of and techniques for communicating casualty information with evacuation assets and/or receiving facilities. **91** Identify the information requirements and format of an evacuation request. **92** Identify the recommended evacuation prioritization for combat casualties. **93** Demonstrate the communication of evacuation request information and modified medical information report requirements.
TLO	**ELO (2)**
22 Given a combat or noncombat scenario, perform documentation of care during Tactical Field Care in accordance with CoTCCC Guidelines.	**94** Identify how to document casualty information on the DD Form 1380 TCCC card and the proper placement of that card on the casualty, in accordance with DHA-PI 6040.01. (ASM T10:E37) **95** Demonstrate the proper documentation of care on a trauma casualty in Tactical Field Care.

MODULE 20: EVACUATION PROCEDURES	
TLO	**ELO (8)**
23 Given a combat or noncombat scenario, prepare casualties for evacuation during Tactical Field Care in accordance with CoTCCC Guidelines.	**96** Identify considerations and fundamental procedures for staging casualties for evacuation. **97** Identify the importance of pre-mission evacuation equipment preparation and rehearsals. **98** Identify considerations and precautions required for evacuating casualties with suspected spinal injuries. **99** Identify critical actions and checks to prepare casualties for evacuation. **100** Identify methods of litter selection and evacuation equipment in Tactical Field Care. **101** Identify considerations for evacuating ambulatory/walking wounded casualties in Tactical Field Care. **102** Demonstrate the preparation of a casualty for evacuating in Tactical Field Care. **103** Identify the importance and information considerations of a casualty After Action Review (AAR) submission.

NOTE: Learning objectives with a (ASM T#: E#) designation remain consistent with the Tactical Combat Casualty Care-All Service Members (TCCC-ASM) course learning objectives.

III. GETTING STARTED: COURSE MANAGEMENT

The lead trainer should engage in a co-planning process with other assistant trainers at least three weeks before the training event. To maintain the training standard established by the Joint Trauma System, it is critical that every trainer review the learning objectives and course materials (to include instructional videos) and begin acquiring and organizing/ordering medical supplies and equipment. Also, each trainer must review the curriculum and rehearse the skills and assessment techniques, independently and as a team, to ensure a consistent approach to training.

Here is a recommended four-step process to plan and organize the course:

- **STEP 1: Formulate a course plan.** The course has been designed in a modular fashion, which allows flexibility in course design. Some training environments will dictate an established approach. For example, if you are in a basic training environment, you may not have significant opportunities to be creative with the course design and flow. But Figure 1 provides are a few options to consider.

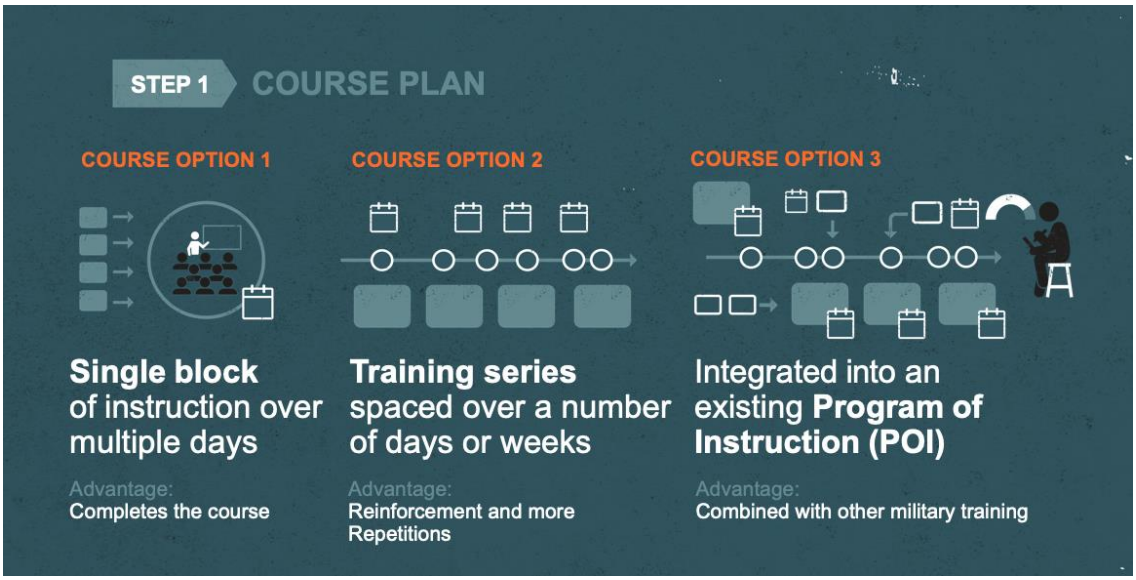

Figure 1: Course Design Options

- **Option 1: Offer the course in a traditional format as a single block of instruction** over several days (~40 hours of instruction), depending on class size and number of trainers. This approach is common and is more typical of a standard course layout. In Appendix B, a recommended course schedule is offered as a "best practice" for trainers to follow when training the entire course in a single day.

- **Option 2: Deliver the training in a series of activities spaced over multiple days or weeks.** This approach is called spaced learning. It makes sense only if you can sustain the *same* group of students over a certain period of time and can track and manage numerous training events. This format can have several advantages, such as offering the ability to reinforce learning and perform additional repetition of skills. This method may also be used as a unit-level sustainment training platform in a garrison, field or deployed setting.

- **Option 3: Integrate this training into an existing curriculum or course.** Module plans and assessment can be folded into a program of instruction. This makes the most sense where this medical training is combined with other military training, for example, a basic training or service-school environment.

Each of these approaches requires varying levels of time and resources. So, choose whatever best suits your unit's needs and training process.

- **STEP 2: Determine your course configuration and appropriate trainer/student ratios.** Trainers should organize and plan each phase of the training. The number of trainers, overall class size, and training environment play a major role in how you will arrange the course and use trainer resources. **Trainer/student ratios: The recommended trainer-to-student ratio for teaching and assessing TCCC skills is 1:6–8 (one trainer per six to eight students).**

Larger class sizes are commonplace in a schoolhouse setting or basic training environment. In these settings, trainer-to-student ratios may be higher, as a fixed number of resources are available. However, there are ways to adjust the use of trainers throughout the training. Figure 2 provides an example of how to modify or flex ratios, should you choose to teach the course in a single day (with a class size of 30). The maximum recommended class size for CLS didactics is 90 students, which would require additional trainers to assist.

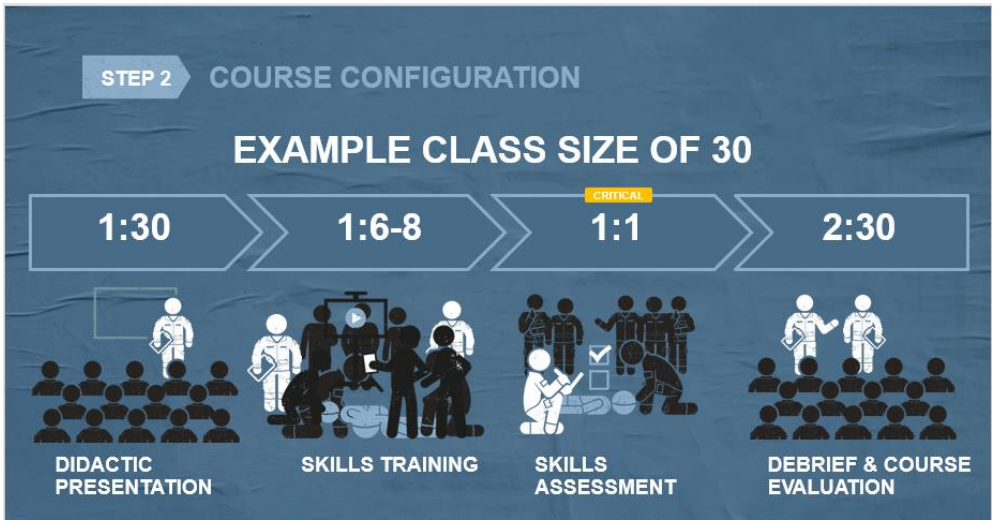

Figure 2: Trainer/student ratios for different phases of training

The trainer can start by training the entire student audience together in one classroom or auditorium for the introductory portion of the course. This can be done with a single, lead trainer, with at least one other trainer to assist.

As the students move into smaller groups for skills training, more trainers may be needed. Feedback from trainers and students has highlighted improved learning effectiveness when the trainer-to-student ratio is 1:6–8. This allows for direct engagement, and trainers can actively lead skills training with individual coaching and supervision. When a limited number of trainers are available, consider relying heavily on using instructional videos and implementing peer-to-peer coaching during the skills training sessions. In this case, trainer resources are focused on overall course flow management rather than individualized skills training.

For the assessment phase, trainers are needed to guide the scenario-driven tactical trauma casualty assessment exercise and the final evaluation process. This is the time when trainers are most important, so maximize your resources at this stage. Even when class sizes are large, make every effort to keep the assessment proportion to 1:6–8 students. At the end, all of the students can be brought back into a single large group for debriefing and course evaluation. If this is the case, one to two trainers are adequate.

If class sizes are large, it is risky and not advisable to bring in additional, inexperienced trainers. It is recommended that each trainer involved in the course successfully complete the Train-the-Trainer Course and be proctored to become validated trainers. This will minimize 'Trainer drift' (deviation from TCCC training) in any capacity.

- **STEP 3: Select an optimal delivery approach tailored to resources and mission set.**

  The course is designed to be flexible and modular, so it can be delivered in a **no-tech, low-tech, or high-tech** way, depending on the mission, resources available, and local training guidance and processes. It can be delivered in a classroom or in a field setting. The materials are offered in paper and digital formats. Figure 3 depicts the various options.

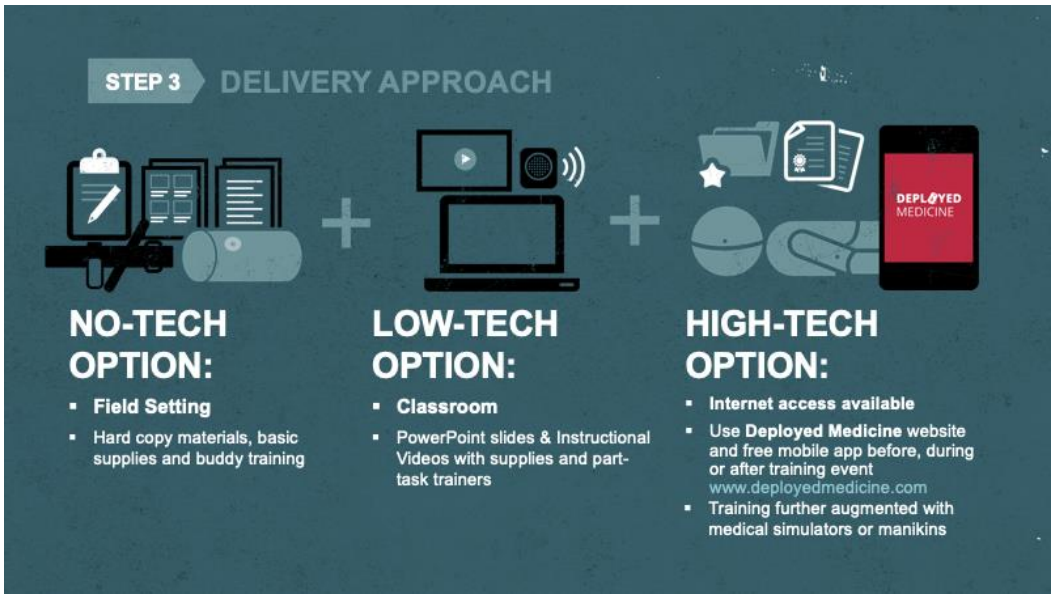

Figure 3: Potential delivery approaches for course delivery

- For the **no-tech environment,** students are provided training materials in a hard-copy format. A training buddy can be used to practice and perform the skills. Trainers provide live skill demonstrations. This type of training can be done easily in a deployed setting. For example, the trainer can provide a spontaneous hip-pocket training at the unit level. No-tech should not be a primary consideration for initial CLS training but may be an option for the deployed setting or for sustainment training.

- For the **low-tech environment**, the trainer uses a computer and projector, and has a screen and audio equipment (preferably external speakers, for showing PowerPoint slides and playing instructional training videos), supplemented by hard-copy materials that are given to the students. Part-task trainers would be used for the hands-on training experience. In this setting, instructional videos should be downloaded in advance. File sizes are large, so it's best to allot ample time to acquire videos from the Deployed Medicine platform for local use ahead of time.

- For a **high-tech environment**, the trainer uses everything in the low-tech scenario, but now may also have Internet access, good telecommunications, and cellular networks, and can have students download and use the Deployed Medicine mobile app to access a digital training support package ahead of training for course

preparation or in real time during the course. The hands-on training can be done using more advanced medical simulators or manikins and make use of more realistic field training environments to run trauma lanes and add special effects. The high-tech environment should be considered the optimal training environment for organizations to establish.

- **STEP 4: Gather course materials, medical supplies, and equipment:** Trainers must acquire the necessary resources. They must understand and become familiar with the materials and equipment in advance.

  Course materials include products to support students and trainers. They consist of a variety of documents, videos, and training aids for use in performing the various skills taught during TCCC-CLS training. Reference the Training Materials and Training Equipment below.

TRAINING MATERIALS

A short description of each training asset is provided below.

- **Course Plan: A Teaching Guide for Trainers** – a comprehensive course plan for trainers to use as a reference to organize and deliver the TCCC CLS Course.
- **Course Map** – a tool for the trainer to communicate the training plan and course schedule for the student and assistant trainers.
- **Didactic PowerPoint Presentation** – a modular presentation that familiarizes students with TCCC concepts and provides foundational knowledge for performing the skills and covers cognitive-based learning objectives.
- **Didactic PowerPoint Speaker Notes** – a set of comprehensive speaker notes that provide a script for the trainer to use in delivering the PowerPoint presentation. The notes include critical learning points that should be emphasized throughout the presentation.
- **Skill Cards** – pictorial illustrations of the procedural steps for each skill. Each can be printed individually.
- **Skill Instructions** – step-by-step text instructions to help guide performance of the Tactical Trauma Assessment and basic lifesaving skills.
- **Skills Checklists** – used to assess skill performance. Trainers should use the "Tactical Trauma Assessment Skills Checklist" with or without the optional "Individual Skills Checklist," depending on the course delivery model selected. Students must pass all the critical tasks on the Tactical Trauma Assessment checklist to meet the basic proficiency standard and successfully complete the course.
- **DD FORM 1380 Tactical Combat Casualty Care Card** – a military form used to document care rendered to a casualty.

- **Student Course Critique** – Immediately after the course has been completed, students will be given a one-page course critique with a variety of questions (both structured and open-ended questions). This information will be used in gathering feedback from students about various aspects of the course to improve future TCCC-CLS courses curriculum and training.

- **Final Assessment/Written or Computer Based Exam –** Students will be given a 50-question multiple choice exam. The student must receive a passing score of 80% or higher to successfully pass this portion of the course. Remediation efforts will be determined by the trainers in accordance with service policies.

- **Instructional Videos –** A video series featuring TCCC medical trainers teaching the skills. Current videos include:

1. Tactical Trauma Assessment How-To
2. Tactical Trauma Assessment – Combat Speed 'Fire Fight' Conscious Casualty
3. Tactical Trauma Assessment – Combat Speed 'Explosion' Unconscious Casualty
4. Introduction to TCCC – Overview
5. Hemorrhage Control in TFC Overview
6. One handed Windlass Tourniquet CUF How-To
7. One handed Ratchet Tourniquet CUF How-To
8. Two-Handed Ratchet Tourniquet CUF How-To
9. Two-Handed Windlass Tourniquet Tactical Field Care How-To
10. Two-Handed Windlass Tourniquet Tactical Field Care How-To
11. Two-Handed Ratchet Tourniquet Tactical Field Care How-To
12. One-Person Drag/Carry How-To
13. Two-Person Drag/Carry How-To
14. Neck Junctional Hemorrhage Control How-To
15. Axillary Junctional Hemorrhage Control How-To
16. Inguinal Pressure Dressing -Pressure Deliver Device(s) PDD How-To
17. Airway Management How-To
18. Nasopharyngeal Insertion How-To
19. Recovery Position How-To
20. Respiration Assessment & Management in Tactical Field Care Overview
21. Needle Decompression of the Chest How-To
22. Chest Seal Application How-To
23. One-Person and Two-Person Bag Valve Mask (BVM) How-To
24. Hypothermia Prevention Overview
25. Radial and Carotid Pulse Assessment How-To
26. Combat Medication Pill Pack How-To
27. Pressure Dressing How-To
28. Burn Treatment How-To
29. Eye Injury How-To
30. Splinting How-To
31. DD1380 Card How-To
32. 9-Line & Mist Report How-To
33. AVPU Assessment How-To
34. Analgesia Administration Overview

TRAINING EQUIPMENT

Student Materials

- ☐ Hemorrhage part-task trainer (determined by site)
- ☐ DD Form 1380 (TCCC Card) – NSN 7540-01-647-6165 (laminate for reuse)
- ☐ Pencils or markers
- ☐ Instructional videos
- ☐ Skill Cards
- ☐ Skill Instructions
- ☐ Skills Checklists (Tactical Trauma Assessment checklist with or without individual skills assessment checklist)
- ☐ Student Course Critique

Student Equipment

- **Massive External Hemorrhage**
  - ☐ Hemorrhage part-task trainer

- **Tourniquet Application**
  - ☐ Combat Application Tourniquet Gen 6 (CAT-6, if supplies are available)
  - ☐ Combat Application Tourniquet Gen 7 (CAT-7)
  - ☐ Ratcheting Medical Tourniquet – Tactical (RMT-T)/TX2/TX3
  - ☐ SAM Extremity Tourniquet (SAM-XT)
  - ☐ Special Operations Forces Tourniquet Wide (SOFTT-W)
  - ☐ Tactical Mechanical Tourniquet (TMT)

- **Hemostatic Dressing Application**
  - ☐ Hemostatic dressing (CoTCCC-Recommended)
  - ☐ Kerlix gauze
  - ☐ Elastic bandage
  - ☐ Medical tape
  - ☐ Emergency Trauma Bandage (ETB)

- **Airway**
  - ☐ Airway part-task trainer
  - ☐ Nasopharyngeal airway (NPA)
  - ☐ Water-based lubricant
  - ☐ Bag Valve Mask (BVM)

- **Respiration/Breathing**
  - ☐ Respiration/breathing part-task trainer
  - ☐ 14-gauge, ¾-in needle catheter
  - ☐ 10-gauge, ¾-in needle catheter
  - ☐ Vented chest seal

- **Circulation/Bleeding Control (refer to Massive External Hemorrhage)**

- **Hypothermia Prevention**
  - ☐ Active warming device(s)
- **Penetrating Eye Trauma**
  - ☐ Rigid eye shield

- **Medications**
  - ☐ Combat Medication Wound Pill Pack (CMWP)

- **Burns**
  - ☐ Kerlix

- **Fractures**
  - ☐ Malleable splint
  - ☐ Cravat

- **Communication**
  - ☐ 9-Line/MIST Cards

- **Documentation**
  - ☐ DD Form 1380 TCCC Card

- **Evacuation**
  - ☐ Litter (may be unit/mission-specific equipment)

- **Support Items**
  - ☐ 3-gallon Sharps container
  - ☐ Gloves (S, M, L, XL)
  - ☐ Cravats
  - ☐ Tape
  - ☐ Trauma shears (scissors)
  - ☐ IFAK/JFAK
  - ☐ CLS Kit

COMMON CHALLENGES

After you complete the four-step process, remember that you still need to take time to prepare for the course as a team. The importance of taking time to meet as a training cadre and reviewing the materials and delivery plan cannot be underestimated. Once the course has been executed several times, this may be less time-consuming, but the initial courses may take time and several meetings.

The courses that have had the best feedback include trainer pools where the secondary trainers actively supported the primary trainer, either in the classroom setting or in demonstrating skills in the small group settings.

Some potential challenges you may encounter include the following:

- **Technical challenges displaying presentations and videos:** Some environments (teaching in an austere environment or onboard a ship, for example) are not supportive of a standard classroom approach to delivering PowerPoint presentations and videos. In those cases, consider adapting the training style appropriately, perhaps printing out slides in note pages format and distributing to the students, for example.

- **Audio challenges when using the instructional videos:** The sound coming from internal computer speakers tends to be too low, and extraneous noises from the training environment may be significant. As a result, external speakers may be needed for students to adequately hear the videos. Another option may be having them use their own personal mobile devices to watch the videos.

- **Printing challenges**: Currently, the materials are not available through a DoD printing office and require local resources to print. Adequate time and forethought are needed to provide printed materials for students. Perhaps a better solution will emerge moving forward.

- **Access to training materials:** Before the official rollout of the TCCC-CLS program, support and physical resources may need to be gleaned locally.

IV. COURSE DELIVERY

Several aspects of course delivery require advanced planning and preparation by the entire training team. Trainers should engage in co-planning the course to ensure consistency in their instructional approach and assessment methods.

If some of the trainers are medical personnel (e.g., experienced TCCC trainers or those who have already received some form of TCCC training), they may need to adjust their instructional style to deliver TCCC at a basic proficiency level. This is a new TCCC course, so the curriculum must be reviewed by all medical trainers to ensure the appropriate level of training is provided.

Understanding how to provide training in TCCC-CLS skills to a nonmedical audience can be challenging. Depending on audience members and their backgrounds, students are unlikely to have seen a trauma casualty or to have administered basic first aid. In these situations, close supervision and control of the group is needed using structured formations to ensure students receive the proper training and can perform the skills correctly and to the standard. Repetition of skills will help to reinforce learning and avoid common pitfalls. Each of these areas merits a brief discussion to highlight best practices in course delivery.

ADAPTING YOUR INSTRUCTIONAL STYLE TO THE AUDIENCE

This course is primarily designed to be taught to nonmedical military personnel of varying ages, with different backgrounds and jobs. Also, some may be new to the military and find the material hard to grasp quickly. If taught during basic training, students may face information overload (as they learn a wide range of new military skills at once).

Given the broad range of perspectives and differing learning needs, trainers should prepare to accommodate a variety of learning styles and preferences. Some students may prefer hands-on training while others may be visual learners, more comfortable with viewing videos and looking at skill cards before attempting skills training.

Here are some **additional tips to help those trainers who are existing TCCC trainers** or have a medical background when training a nonmedical audience.

- **Explain any medical jargon, terminology, or abbreviations**
  It is OK to Introduce medical terminology, but always explain it, as Combat Lifesavers are nonmedical personnel. Use the appropriate tone for your audience. The goal is to introduce the CLS to terminology that will be used by medical personnel to help facilitate communicate on the battlefield. For example, say “hemorrhage,” followed by “bleeding,” or when discussing anatomical terms like “cervical spine,” “axillary,” “inguinal,” or “radial pulse,” follow the medical term with the layman's term (neck, armpit, groin, or pulse at the wrist, respectively).

- **Stick to the script and materials.** Provide the basic teaching points and skills consistent with the current standards per the speaker notes, instructional videos, and skills cards provided. Avoid conveying the message that, “I know that the video/skills card demonstrated this, but in my experience, there is a better way to do it.” It’s okay to add in personal experiences or other contextual information to make the course interesting and relevant. Ensure that the information you introduce, however, doesn’t conflict with the standards being taught.

- **Stay within the intended scope of the course**. Experienced TCCC trainers and medical personnel may find it challenging to train at the basic level appropriate for the CLS audience. There is a natural tendency to want to train to a higher standard (consistent with the next higher level of training, such as the Combat Medic/Corpsman-Tier 3). This is especially true when students ask a lot of “what if” questions. *Be vigilant to stay within the scope of TCCC-CLS.*

In summary, here are the strategies for adapting your overall delivery style for this course:

- Whether in a schoolhouse setting or at the installation or unit level, **consider the audience members and their unit’s mission needs.**
- **Be cognizant of your tone, the actual words you use, and your delivery style** to ensure students understand the information and can learn the skills to the standard required.

- **Reassure** the students that these skills can be safely performed by those with no medical experience.

Remember, the goal of the course is for students to acquire **fundamental knowledge**, integrate that knowledge into **performance of skills**, and ultimately, achieve **basic proficiency in Tactical Combat Casualty Care**.

HOW TO ORGANIZE AND CONDUCT TCCC TRAINING IN SMALL GROUPS

After agreeing on an overall delivery approach, you will execute the training. Here is a layout you can follow to organize the students and conduct the training.

After presenting the introductory PowerPoint presentation in a large group, divide students into smaller groups to conduct skills training. As you begin creating groups, avoid having students randomly spread out across a large training area. This can create several challenges:

- Students may not be able to hear or see demonstrations due to distance and/or a noisy environment.
- Students could be practicing a skill incorrectly (e.g., getting “bad practice reps” when a trainer cannot observe directly, which could create a need for remediation later).
- Students may be more prone to socializing or being distracted.

After the groups are evenly divided, it is best to organize these small groups into structured formations, such as a semicircle around the trainer or a straight line in front of the trainer. This ensures the students can be directly observed and supported while practicing.

As described in the course management section, the preferred trainer-to-student ratio for skills training is 1:6–8, or one trainer for every six to eight students. This ratio facilitates effective learning and maximizes training time and efficiencies. If this is not possible, engage more advanced students to provide peer-to-peer support and coaching, or employ other strategies.

Once you have organized students into a formation, **pair them** to facilitate skills training on each other. While part-task trainers are a key part of this training, training with a buddy offers several advantages:

- A more realistic/lifelike experience (feeling and sensation), especially with tourniquet application; it is helpful for students to experience placing a tourniquet on a buddy and having a tourniquet placed on themselves.
- Practicing skills with a partner is more engaging than practicing skills independently on a part-task trainer.
- While functioning as the casualty, the second student begins to anticipate what needs to be done and often helps their partner with reminders about what to do next.

Once set, initiate the skills training session with a brief introduction and instructions. Tell the students what skills you plan to teach, how you will teach, over what time period, and what is expected of them. Allow time for the students to view the instructional videos, review skills checklists and illustrated skills cards or trifolds, and become familiar with the equipment and medical supplies before getting started. Use strategies to keep your students engaged in the skill stations, particularly during downtime. Two additional resources will aid you deciding how to run your course. Refer to Section III, Course Management, for additional discussion about skill stations management recommendations. Additionally, you may refer to the Course Map for suggested skill stations practices and evaluation opportunities by Module.

After the introduction and skill demonstrations are completed, you must continuously guide learning and manage activities and time carefully. This is the one area of TCCC training where time can slip away, so provide frequent time prompts or reminders. For example, tell students that after demonstrations, they will have 10 minutes to review reference materials and 15 minutes to practice, or whatever time periods you have dedicated to the particular skill, and keep them on track by communicating and facilitating activities.

In review, here are the recommendations to run skills training efficiently, stay on time, and make the learning engaging and productive for trainers and students:

- Demonstrate what “right” looks like at the onset through videos and live demonstrations.
- Engage each student by walking around, offering mentorship and targeted feedback in real time. Let them know you are available to answer any questions.
- Provide positive reinforcement and motivate students to learn.
- Observe each student during practice to evaluate learning and provide on-the- spot corrections and additional instruction, as needed.

INSTRUCTIONAL METHODS AND BEST PRACTICES FOR TEACHING TCCC SKILLS

There are 34 TCCC skills you must teach. These skills are used differently, depending on the phase of care. To review, in phase 1 or Care Under Fire/Threat, students are responsible for assessing scene safety, communicating with others, and applying a hasty tourniquet for massive bleeding. No other treatments will be performed while the casualty and responder are under an active threat. In phase 2 of TCCC, or Tactical Field Care, the responder would continue with the assessment and provide medical aid using the MARCH PAWS sequence, again focused initially on bleeding control.

The **MARCH PAWS** sequence is:

M – Massive Bleeding
A – Airway
R – Respiration
C – Circulation
H – Hypothermia/Head
P - Pain
A - Antibiotics
W - Wounds
S - Splint

It's best to follow the MARCH PAWS sequence when conducting training, starting with the **three bleeding control skills** first. Training for two forms of airway maneuvers is provided in this course. The head-tilt/chin-lift is the most common technique used. The jaw-thrust is used for those casualties who have suffered an injury due to a fall or blast, where a neck injury is suspected. If necessary, you must teach students that this technique requires assistance from another responder. They will need to maintain the jaw-thrust to keep the airway open, so a second responder will be required to attend to any other injuries.

Research finds that the hardest skill for students to comprehend is the Tactical Trauma Assessment (TTA). It requires students to integrate and apply their knowledge and skills under pressure. Students must consider scene safety and how to approach and potentially move a casualty, as well as how to assess and deliver medical aid based on use of the MARCH PAWS sequence. The TTA is a series of complex tasks that require the students' complete focus and attention. The key to a good TTA learning experience is using interesting and relevant casualty scenarios.

The overarching strategy recommended to effectively teach this curriculum utilizes the **Whole-Part-Whole** (WPW). The first 'whole' relates to the beginning phases of care leading into the Introduction to Tactical Trauma Assessment [TTA]). The 'part' phase relates to MARCH PAWS. While the last 'whole' relates to the TTA practice and assessment.

SKILLS REPETITION IN ACHIEVING SKILLS PROFICIENCY

Repetition of information and skills enables novice TCCC learners to gain skills proficiency in the limited time available to complete the training. This can be accomplished in several ways, such as watching the skills videos, observing trainer demonstrations, and practicing actual skills.

Students should perform multiple hands-on repetitions of each critical skill. This is particularly critical for tourniquet application. More repetitions build muscle memory and that is what students will rely on when faced with performing these skills under pressure in the real world.

Have students apply tourniquets on arms and legs as many times as possible, on themselves (self-application), and on other students of varying body types and sizes to get a true feel for the differences. Bad reps (which typically occur with unobserved practice by novice learners) must be avoided. It is also important to change the injury site so that students learn to assess the proper site to apply tourniquets and apply at different locations on the limb.

V. FEEDBACK, ASSESSMENT, AND REMEDIATION

Student knowledge and skills will be assessed by a trainer using informal and formal assessment techniques. Both forms of assessments involve communicating with students, so it important to know some techniques that promote interaction and engagement with students. Although some issues can be easily resolved through simple feedback, others will require additional time to review information or retrain in select skills.

Informal assessments are used to help identify opportunities for improvement throughout the training, and a formal assessment validates that a student has attained basic skills proficiency. The formal assessment process requires using a skills assessment checklist (Tactical Trauma Assessment or Individual Skills Assessment).

A learner's abilities are assessed informally in many ways throughout the training process, and a trainer can use those observations and interactions to proactively help the learner progress throughout the training event.

Examples include asking students, individually or as a group, targeted questions to test their comprehension of key concepts or facts or observing their performance during skills practice sessions. Understanding where students are struggling to master knowledge and skills helps trainers tailor their instruction and redirect training emphasis appropriately during the flow of the course. Feedback can be provided in real time, but it can also be given later in the training event, depending on the situation.

A formal assessment occurs when trainers are validating, for their installation or unit, that a Service member can accurately perform all the critical tasks and has met the standard for basic proficiency in Tactical Combat Casualty Care skills.

To do this successfully as a trainer, you must be prepared and proficient in the material and skills that you are assessing and know how to use the skills assessment checklist properly.

The formal assessment process should focus primarily on accuracy of skills and completion of the skills checklist, especially the critical steps.

The end goal is to ensure every student can successfully pass the course, so informal and formal assessment techniques should be used to ensure a good outcome.

PROVIDING EFFECTIVE FEEDBACK

Good feedback begins with being able to **communicate with students**, so it is important to know your audience. Feedback should be supportive and helpful for novice TCCC learners.

Use active listening techniques when learners ask you questions. For example, pay attention to the learner's input and use nonverbal communication cues to show your engagement. Also, encourage your students to actively participate and maintain their attention (for example, use a collaborative learning strategy in which students work together to solve a problem, answer a question, or execute a skill). And, of course, show respect while establishing (and maintaining) a positive rapport with your students.

Enhance learning by interacting with small groups, and if possible, each learner, to provide real-time, formative feedback.

Formative feedback involves several important concepts:

- **Focus feedback on the task, not the learner.** When providing feedback, ensure that any comments address the task and don't refer to the learner.

- **Enhance learning by addressing the specific problem, how to improve, and why that's important.** In addition to highlighting the issue, provide constructive guidance on how to improve (and put it in context) so the learner realized why it is important.
- **Less is more (keep feedback manageable).** Be succinct, so the learner doesn't get lost in a long explanation.
- **Be specific and clear.** Target specific issues that can be improved.
- **Keep it simple and focused.**
- **Align student performance assessment with learning objectives.** Make sure you relate your feedback to the learning objectives.
- **Be unbiased and objective.**
- **Help learners focus on their effort and motivation.**
- **Let learners try (and fail) first before providing feedback.**
- **Be positive.** Give feedback focused on the positive aspects of the problem and provide solutions that emphasize how the learner can succeed.

Two other techniques to consider are providing feedback in the form of plusses and deltas or asking the students to self-reflect and provide their own feedback.

Plusses and deltas refer to a technique where the trainer points out the things that a learner has done well (plusses) and then points out areas for potential improvement (deltas). This process has been proven to be better received by students than focusing only on areas that should be improved. Similarly, ask your students to reflect on their performance and internally review what they did correctly and where they can improve. This technique is usually more powerful than any constructive feedback they receive from others.

FORMAL ASSESSMENT PROCESS USING A SKILLS CHECKLIST

Aside from the multiple-choice summative assessment (didactics), the student must also pass the skills portion of the course by successfully demonstrating proficiency in performing **ALL** the **critical** tasks identified on the Tactical Trauma Assessment Skills Checklist with or without individual skills validation using the Individual Skills Assessment Checklist. Ideally, each student would be assessed individually using a checklist.

To successfully complete the course, each student must meet the minimum passing criteria for both segments of the course: didactic (written or computer-based test) and skills performance (35 skills and their associated critical tasks),

The skills assessment will evaluate a student's ability to accurately perform all of the critical steps associated with the Tactical Trauma Assessment, within any specified timescale required to achieve the standard. For example, a tourniquet must be applied according to the specifications defined on the Skills Checklist within the appropriate timeframe.

Knowledge acquisition and skills performance will be assessed in **two ways**. A custom checklist for each approach is described below:

- **Tactical Trauma Assessment (TTA)**: The skills will be assessed altogether as part of a "culminating event" using a trauma lane–type approach as the final phase of the training day. In this format, students should continuously apply and verbalize

knowledge gains as they perform a tactical trauma assessment based on a casualty scenario presented by the trainer using the MARCH PAWS sequence. Novice learners may find it challenging to listen and process the information in real time. This is further complicated if the training environment is outside or otherwise noisy, and they have difficultly hearing the casualty information. Before testing, give them some time to prepare, even a few minutes to read the scenario in a written format. It can also be presented spontaneously. In either case, moulage is helpful in providing visual cues to rapidly identify injury patterns.

- **Individual Skills Assessment**: Skills will also be evaluated individually one by one, at skill stations. This training will sometimes be woven into other military training courses, so having individual skills checklists may make sense for those settings, for example, a checklist for tourniquet application only, if that module will be taught in isolation, on a particular day in the larger course.

Trainers should visually observe learners as they move through the steps of any skill or scenario during assessment. If errors or deviations are observed, do not take this moment to take corrective action. Corrections should be offered afterwards in a one-on-one feedback session or a group session, depending on whether common mistakes are occurring. If they are, some re-training may be warranted. Either way, students whose demonstration of any critical skill is unsatisfactory should receive additional targeted training and remediation from a trainer.

REMEDIATION TECHNIQUES

Service members need to successfully demonstrate discipline, knowledge, integration of knowledge gains, and appropriate proficiency of skills.

Many of the methods used to provide formative feedback apply also to the remediation process. However, feedback provided during training can provide helpful corrective guidance, whereas feedback after a formal assessment occurs requires a more rigorous remediation process due to a persistent deficiency in knowledge, skills, or abilities.

Here are the steps to perform remediation:

- **Provide feedback**: An approach that has been proven effective in remediation is to use written feedback, in addition to the verbal feedback during the initial discussions (about the assessment results). For this training, the actual Skills Checklist, if properly filled out, will include notes about specific areas in question. That information can be enhanced by expanding on the findings verbally, as appropriate.

- **Allow time for student reflection**: Give the learner time to reflect on this feedback. Also, think about their perspectives about the assessment; respond back with their thoughts on how they performed and what they would need to do to successfully perform the skills. Allow this time for reflection—this is an important step in the process.

- **Provide targeted training**: Once the trainer and student agree on areas for improvement and potential ways to remedy the deficiencies, dedicate time to performing targeted, individualized training sessions with the learner. Trainers typically will conduct remediation, but sometimes, especially in larger groups, other students who have demonstrated mastery of the skills themselves may be used to assist trainers. The student may be asked to review instructional videos in an individual setting and/or with other students.

- **Re-evaluate**: The last step is to require the learner to re-perform the skill or skills until basic proficiency is demonstrated. On rare occasions, a learner will continue to struggle and require continued remediation that may need to be delayed until another training period can be arranged. If so, it is usually more effective to engage their local leadership to provide time and local training support, rather than just recycling them into another training event.

Trainers must understand assessment methods and incorporate a variety of assessment strategies and techniques. Also, they must offer constructive feedback, communicate with learners throughout the training process, and be prepared to remediate, if needed. The goal is to ensure that the students who complete the course have received the proper training, have been formally assessed, and can use the skills to help save lives.

VI. DEBRIEFING STRATEGIES

At the end of the course, the trainer(s) should lead an informal group discussion and spend time reflecting on the experiences with the students during a debriefing session. This discussion is time dependent, and the amount of time spent should be factored into the course schedule. The trainer(s) should highlight specific items they observed throughout the training exercises, keeping in mind that TCCC basic skills proficiency is the goal of the course.

Effective debriefing sessions should reset the tone, provide direction on the high-yield, take-home messages, and transition Service members from the knowledge/skills-building exercises to the real-world environment. Therefore, the primary purposes of this debriefing session are to:

- Revisit the learning objectives.
- Address any misconceptions.
- Provide general performance feedback.
- Make the content relevant for in the day-to-day life of Service members.
- Prepare Service members for their next steps.

To begin, the trainer should highlight what went well and what needs improvement. These are big-picture items that the trainer should highlight for the entire group. Then, the trainer should lead a group discussion while trying to engage as many students as possible to actively participate.

To gain student perspectives on the training, ask these questions:

- How do you feel about your performance during the training sessions?
- What do you feel most comfortable with?
- What could you use more practice with?

At the conclusion of the debriefing, it's important to highlight online TCCC educational resources that are available to support the students' sustainment of knowledge and skills, and continued, lifelong learning.

VII. COURSE EVALUATION

The course concludes with a Student Course Critique. It's important to collect oral and written feedback from students at the end of the course. This provides trainers with valuable information on how the training was received and whether or not students feel they achieved the learning goals and objectives. This is also a good time to identify if the training points, materials, and training aids can be improved to provide a more effective learning experience. It will also help improve the overall course in the future.

While distributing the form, the trainer should thank the Service members for their attention and participation. Give students ample time to complete the form; generally, 10–15 minutes should be adequate. Remind Service members that their feedback is important and will be used to improve upcoming iterations of this course. Collects the completed forms, and dismiss the participants.

The Student Course Critique can be customized to meet Service-specific needs. You may want to check with your local Command to see if there are specific metrics they would like to capture on TCCC training, or for other quality or process improvement initiatives.

From a programmatic standpoint, trainers and relevant stakeholders should consider evaluating the training by collecting information on:

- Accomplishments of the curriculum/course and whether the training met original expectations
- Outcomes that were aligned with original learning objectives and any that were not
- Shortcomings that led to unexpected outcomes
- Suggestions for modifying the program, as appropriate:
  - **Keep** what's working
  - **Fix** what can be fixed
  - **Start** new action items when needed
  - **Stop** what can't be fixed

It is recommended that data collected be used locally to improve the course and shared with the Joint Trauma Education and Training Branch (JTET-B) to inform future changes in curriculum or materials.

VIII. REFERENCES

1. Tactical Combat Casualty Care Guidelines as published by the Committee on Tactical Combat Casualty Care (CoTCCC), August 2019.

2. TCCC Quick Reference Guide, first edition, January 2017.

APPENDIX A: ACRONYMS

ASM-TCCC	All Service Members, Tactical Combat Casualty Care
AV	audio visual
CLS	Combat Lifesaver
CoTCCC	Committee on Tactical Combat Casualty Care
CPG	Clinical Practice Guidelines
CUF/T	Care Under Fire/Threat
DD Form 1380	the current DoD casualty card
DHA	Defense Health Agency
DHA-PI	Defense Health Agency Procedural Instruction
DOD	Department of Defense
ELO	Enabling Learning Objective
JTS	Joint Trauma System
MARCH/H	Massive Bleeding, Airway, Respiration, Circulation, Hypothermia/Head
PAWS	Pain, Antibiotics, Wounds, Splint
TCCC-ASM	Tactical Combat Casualty Care All Service Members
TCCC-AC	Tactical Combat Casualty Care All Combatants
TCCC-CLS	Tactical Combat Casualty Care Combat Lifesaver
TFC	Tactical Field Care
TLO	Terminal Learning Objective
TQ	tourniquet
P/F	pass/fail
PPT	PowerPoint

APPENDIX B: SAMPLE COURSE MAP

This 40-hour course has been planned over a five-day period but may also be delivered in a modular fashion over a **longer** period of time or embedded within existing training. As shown below, the first four days cover 20 modules of didactic materials and associated skills (with optional skills assessment opportunities). Day 5 allows for skills and knowledge assessment. The final day includes a culminating Tactical Trauma Assessment (TTA), a summative formal multiple-choice assessment, and opportunities for remediation/re-assessment. After the assessment, there is a trainer-led debriefing and a course critique (to be completed by both students and trainers).

The following **Course Map** is structured based on Fink's five principles of curriculum design (Fink, 2013). The goal is to develop learning experiences that are structured in such a way that they scaffold student thinking using a whole-part-whole educational strategy and progressively move them toward the desired course outcomes.

DAY 1 (-40-hour course, | Days 1-4 (32 hrs.), Day 5 Assessment Only (8 hrs.)			
WELCOME – 10 MIN			
DIDACTIC	**SKILL**	**VIDEO**	
30 MIN	**-**	**(5:54)**	**MODULE 1: Principles and Application TCCC** (T1:E1, T2:E2-8)
		5:54	**General Welcome & Course Layout Introduction** (slide) **Introduction to TCCC-CLS** - *Intro to TCCC video* **Intro to TCCC Concepts** (slides) • 3 Phases of Care • Roles & Responsibilities of nonmedical service members
10 MIN	**30 MIN**	**N/A**	**MODULE 2: Medical Equipment** (T3:E9-13)
			• Use of a first aid kit • Maintenance and Resupply • JFAK equipment list • CLS kit equipment list Use of the components of the JFAK and CLS kits
			SKILL STATION – *(familiarization with JFAK & CLS Kit)*
30 MIN	**90 MIN**	**(14:45)**	**MODULE 3: Care Under Fire** (T4:E14-22)
		4:41 1:15 1:08	**CUF Concepts** (slides) - *Care Under Fire Overview video* • CUF equipment • Fire superiority/threat containment/impact of tactical environment • Prevent harm or additional casualties • Actions/priorities to treat/move casualties • Early application of Tourniquet(s) (TQ) in CUF • Principles, advantages, and disadvantages of one-person drag/carry or two-person drag/carry in CUF **CUF Tourniquet** (skills) • One-Handed (Windlass) TQ Application in CUF - *One-Handed Windlass TQ video* • One-Handed (Ratchet) TQ Application in CUF - *One-Handed Ratchet TQ video*

		1:02 1:15 3:42 2:22	• Two-Handed (Ratchet) TQ Application in CUF - *Two-Handed Ratchet TQ video* • Two-Handed (Windlass) TQ Application in CUF - *Two-Handed Windlass TQ video* **Drags & Carries** (skills) • One-Person Drag/Carry - *One-Person Drag/Carry videos* • Two-Person Drag/Carry - *Two-Person Drag/Carry videos*
			SKILL STATIONS – PRACTICE
			SKILL STATIONS – INDIVIDUAL SKILLS EVALUATION *(optional)*
30 MIN	**20 MIN**	**-**	**MODULE 4: Principles and Application of Tactical Field Care (TFC)** (T5:23-28)
			TFC Concepts (slides) • TFC equipment • Security & Safety in TFC • Communication • Triage • Casualty Extraction
			SKILL STATIONS – PRACTICE *(communication of casualty info)*
			SKILL STATIONS – INDIVIDUAL SKILLS EVALUATION *(optional)*
30 MIN	**30 MIN**	**(16:40)**	**MODULE 5: Tactical Trauma Assessment (TTA)** (T6:E29-36)
		6:19 5:56 4:25	**Tactical Trauma Assessment (TTA)** (slides) - *Tactical Trauma Assessment How-To video* - *Combat Speed TTA "Fire Fight Conscious Casualty" video* - *Combat Speed TTA" Explosion" Unconscious Casualty video* • Assess responsiveness • Causes of Altered Mental Status (AMS) • Disarming and securing communication equipment in casualties with AMS • Communication • Body Substance Isolation (BSI) • MARCH PAWS sequence • Pulse & Respiration Assessment (overview)
			TRAINER-LED DEMO of Tactical Trauma Assessment
DAY 2			
30 MIN	**120 MIN**	**(19:46)**	**MODULE 6: Massive Hemorrhage Control in TFC** (T7:E37-44)
		2:56 1:27 1:45	**Massive Hemorrhage Control in TFC Concepts** (slides) - *Massive Hemorrhage Control in TFC video* • Identify life-threatening hemorrhage • Early application of TQs in TFC • Pressure points to control bleeding (direct/indirect) • Improvised limb TQ – Risks • Re-evaluation of previously placed TQs • Junctional hemorrhage control **TFC Hemorrhage Control** (skills) • Two-Handed (Ratchet) Tourniquet Application in TFC - *Two-Handed Ratchet TQ TFC video* • Two-Handed (Windlass) Tourniquet Application in TFC - *Two-Handed Windlass TQ TFC video*

		2:18 3:37 3:30 5:33	• Wound Packing with Hemostatic Dressing and Pressure Bandage - *Pressure Dressing video* • Neck Junctional Hemorrhage Control - *Neck Junctional Hemorrhage Control video* • Axillary (Armpit) Junctional Hemorrhage Control - *Axillary Junctional Hemorrhage Control video* • Inguinal (Groin) Hemorrhage Control w/Improvised Junctional Pressure Delivery Device (PDD) - *Inguinal Improvised Junctional Dressing with PDD video*
			SKILL STATION – PRACTICE
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
30 MIN	**60 MIN**	**(9:56)**	**MODULE 7: Airway Management in TFC** (T8:E45-49)
		3:15 3:00 3:41	**Airway Concepts** (slides) - *Head-Tilt/Chin-Lift and Jaw-Thrust Maneuver video* • Airway obstruction (signs/symptoms) • Airway maneuvers and recovery position (description, when to use) • NPA (what is it) • Bag Valve Mask techniques (description) **Airway** (skills) • Head-Tilt/Chin-Lift • Jaw-Thrust Maneuver • Recovery Position • Nasopharyngeal Airway (NPA) - *NPA How-To video* • One-Person Bag Valve Mask (BVM) / Two-Person BVM - *One Person BVM and Two Person BVM How-To video*
			SKILL STATION – PRACTICE
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
30 MIN	**60 MIN**	**(12:51)**	**MODULE 8: Respiration Assessment and Management in TFC** (T9:E50-58)
		4:03 4:25 4:23	**Respiration Concepts** (slides) - *Respiration Assessment and Management in TFC Overview video* • Respiratory distress (sign/symptoms) • Life-threatening chest injury (signs/symptoms) • Open pneumothorax (sign/symptoms) • Vented vs. nonvented chest seals • Tension pneumothorax (sign/symptoms/initial treatment) • Needle decompression of the chest (what is it/indications) • Recurring tension pneumothorax **Respiration** (skills) • Needle Decompression of Chest (NDC) - *NDC How-To video* • Chest Seal - *Chest Seal How-To video*
			SKILL STATION – PRACTICE *(chest seal, NDC, and respiratory rate measurement-refer to Module 18 skill instruction and skill assessment checklist on respiratory rate measurement as needed)*
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
20 MIN	**30 MIN**	**(2:56)**	**MODULE 9: Circulation/Hemorrhage Control in TFC** (T10:E59-62)
			Circulation/Hemorrhage Control Concepts (slides)

		2:56	- *Hemorrhage Control in TFC Overview video* • Principles of wound packing and applying pressure bandages • Strategies, indications, and limitations of controlling external hemorrhage in TFC • Pelvic fractures (signs/symptoms/considerations) **Circulation/Hemorrhage Control** (skills) • Wound Packing with Hemostatic Dressing and Pressure Bandage
			SKILL STATION – PRACTICE *(refer to Module 6 skill instruction & skill assessment checklist on wound packing/pressure bandage as needed)*
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
DAY 3			
20 MIN	-	**(1:45)**	**MODULE 10: Shock Recognition (due to massive hemorrhage)** (T11:E63-64)
		1:45	**Circulation/Shock Concepts** (slides) - *Shock Recognition Overview video* • Shock (sign/symptoms) • Shock (management of shock in life-threatening bleeding) • Shock – importance of LOC and radial pulse as indicators of shock
20 MIN	**20 MIN**	**(1:21)**	**MODULE 11: Hypothermia Prevention** (T12:E65-67)
		1:21	**Hypothermia Prevention Concepts** (slides) - *Hypothermia Prevention Overview video* • Strategies, indications, and limitations of hypothermia prevention • Hypothermia Prevention (passive vs. active) **Hypothermia** (skills) • Active external warming hypothermia prevention
			SKILL STATION – PRACTICE *(shock recognition and hypothermia)*
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
20 MIN	-	**(4:21)**	**MODULE 12 & 13: Head & Eye Injuries** (T13:E68-70) (T14:E71-72)
			Head Injury Concepts (slides) • External forces that can cause head injuries • Head Injury (signs/symptoms) • Critical observations to be reported in a suspected head injury
		3:06 1:15	**Eye Injury Concepts** (slides) - *Eye Injuries Overview video* • Basic care of eye injuries • Application of a rigid eye shield (concepts) **Rigid Eye Shield** (skills) - *Rigid Eye Shield How-To video*
			SKILL STATION – PRACTICE *(eye shield)*
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
15 MIN	**15 MIN**	**(3:36)**	**MODULES 14: Pain Medications and Antibiotic Administration** (T15:E73-75) (T16:E76-77)
		1:35	**Analgesia (Pain Medications) Concepts** (slides) - *Analgesia Administration Overview video* • Analgesia (considerations and indications in TFC) • Indications, contraindications, and administration of pain medications in TFC
		1:47	**Antibiotics Concepts** (slides) - *Antibiotics Overview video*

		:54	• Early antibiotic administration in TFC • Indications, contraindications, and administration of antibiotics in TFC **Analgesia/Antibiotics** (skills) • Combat Wound Medication Pack (CWMP) - *Combat Wound Medication Pack*
			SKILL STATION – PRACTICE *(CWMP)*
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
DAY 4			
20 MIN	**-**	**-**	**MODULE 15 Wound Management** (T17:E78-79)
			Wound Management Concepts (slides) • Wound Management in TFC (check for additional non-life-threatening wounds) • Application of wound dressings in TFC
			SKILL STATION – PRACTICE *(Note: Refer to Module 6 skill instruction & skill assessment checklist on wound packing/pressure bandage as needed.) (optional)*
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
20 MIN	**10**	**(4:31)**	**MODULE 16 Burns** (T18:80-84)
		4:31	**Burn Concepts** (slides) - *Burns Overview video* • Scene safety specific to burns • Burn classification • Rule of nines • Techniques to prevent heat loss to a severe burn **Burns** (skills) • Application of a dry dressing to a burn casualty
			SKILL STATION – PRACTICE *(burn dressings)*
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
20 MIN	**20**	**(5:24)**	**MODULE 17: Fractures/Splinting** (T19:E85-87)
		5:24	**Fractures-Concepts** (slides) • Signs of a suspected fractures • Basic care of fractures • Splints – overview of concepts **Splints** (skills) • Splint application - *Splinting How-To video*
			SKILL STATION – PRACTICE *(splinting)*
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
10 MIN	**30 MIN**	**(4.92)**	**MODULE 18: Casualty Monitoring** (T18:E88-89)
		2:53 2:39	**Casualty Monitoring Concepts** (slides/skills) - *AVPU Video* - *Assessing Pulses How-To video* • Assess level of consciousness • Assess radial pulse • Assess carotid pulse • Assess posterior tibial and dorsalis pedis pulses • Assess respiratory rate • Reassess all previous interventions
			SKILL STATION – PRACTICE

			(AVPU, radial/carotid/posterior tibial pulses, respiratory measurement)
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
20 MIN	**20 MIN**	**(3:23)**	**MODULE 19: Pre-evacuation Procedures, Communication, and Documentation** (T21:E90-93) (T22:E94-95)
		4:23 3:00	**Pre-evacuation Procedures, Communication, and Documentation Concepts** • Communication with evacuation assets and/or receiving facilities • Evacuation requests (requirements and format) • Evacuation prioritization • TACEVAC (load and go) vs. MEDEVAC • *9-Line Report *Note: lines 1-5* • *MIST Report (full MIST report) • Documentation - DD Form 1380 **Communication and Documentation** (skills) - *DD Form 1380 video* - *9-Line & Mist Report video*
			SKILL STATION – PRACTICE *(DD Form 1380 & 9-Line)*
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
20 MIN	**180 MIN**		**MODULE 20: Evacuation Procedures** (T23:96-103)
			Evacuation Procedures - Concepts (slides/skills) • Staging for evacuation • Pre-mission evacuation equipment preparation and rehearsal • Evacuating casualties with suspected spinal cord injuries • Preparing casualties for evacuation • Litter selection and evacuation equipment in TFC • Evacuation of ambulatory casualties in TFC • AAR submission • *9-Line Report *Note: lines 6-9*
			SKILL STATION – PRACTICE *(Casualty Preparation for Evacuation)*
			SKILL STATION – INDIVIDUAL SKILLS EVALUATION *(optional)*
			Tactical Trauma Assessment SKILL STATIONS – STUDENT PRACTICE in preparation for Final Casualty Assessment on Day 5
TOTAL COURSE TIME:		**~32 hours**	**DAYS 1-4**
DAY 5 - ASSESSMENT			
CASUALTY ASSESSMENT (Scenario-based Tactical Trauma Assessment w/Intervention – Culminating Exercise)			
REMEDIATION AND RE-EVALUATION			
SUMMATIVE FORMAL MULTIPLE-CHOICE ASSESSMENT			
DEBRIEF & COURSE CONCLUSION			
STUDENT/TRAINER COURSE CRITIQUE			
ASSESSMENT COURSE TIME:		**~8 hours**	**DAY 5**
~40 Hour Course over 5 days			

Reference:

Fink, L. D. (2013). Creating significant learning experiences: An integrated approach to designing college courses, revised and updated. San Francisco, CA: Jossey-Bass.

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