

FORMAL SCHOOLS LEARNING PROGRAMS

AY25 COURSE CATALOG (AS OF 31 OCT 2024)



2025

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COURSE CATALOG

The Programs of Study schedules in the Course Catalog are subject to environmental conditions; however, they are the intended training progression.

A. SUMMER & WINTER MOUNTAIN LEADERS COURSES, SUMMER & WINTER MOUNTAIN ENGINEER COURSES, BASIC COLD WEATHER ADVISOR COURSE, MOUNTAIN COMMUNICATIONS COURSE, and MOUNTAIN SCOUT SNIPER COURSE are TECOM funded for travel; submit names via S-3 chain of command to respective MARFOR G-3 for MCTIMS enrollment. MTX unit personnel should be annotated during coordination with MARFOR seat sponsors as they have priority.

B. ANIMAL PACKING, MOUNTAIN MEDICINE, COLD WEATHER MEDICINE, and HORMANSHIP & ANIMAL PACKING (SOF or Reconnaissance Community) COURSES are unit funded for travel: **CONTACT MARFOR Seat Sponsor for seat requests to MCMWTC.**

- Scout Skier Course and Assault Climbers Course are scheduled in support of MTX training audiences only to build enablers during the exercise (see MCMWTC SharePoint, Formal Schools for information https://usmc.sharepoint-mil.us/sites/TECOM_MCMWTC/SitePages/Formal-Schools.aspx).
- Academic Chief (760) 932-1818, Academic Director (760) 932-1418, Academics & Training Analyst (760) 932-1419
- For "Blue side" Navy personnel attending MWTC courses, learners must contact the CeTARS Manager: **Michelle L. Goodman** @ michelle.l.goodman3.civ@health.mil for registration consideration and confirmation.

C. TRAVEL: Learners authorized to travel by commercial air will arrive and depart using Reno-Tahoe international airport, no other airport facility is authorized. **The Marine Corps Mountain Warfare Training Center (MCMWTC) will provide transportation from Reno-Tahoe international airport on the day prior to the convening date only, annotated as "Report Date" on the schedule on page 6.** Learners must arrive at the airport NLT 1700; transportation for arriving learners will depart the airport no later than 1930 hours. Units must contact the course staff with flight info via email. Non-standard flight times, delayed, or canceled flights must be coordinated ASAP through the MCMWTC command duty officer (CDO) at 760.932.1401 or DSN 839-1401. Also, Officers and Staff Non-Commissioned Officers assigned to west coast units are recommended to drive personally owned vehicles (POV's). Learners departing the course by commercial air should not schedule return flights prior to 1500 on the last day of the course ("Graduation Date" on page 6) and no later than 24 hours after course graduation. MCMWTC will provide transportation to Reno-Tahoe international airport. Officers and Staff Non-Commissioned Officers traveling by POV will not depart MCMWTC until after the graduation ceremony on the last day of the course.

NOTE: *The MCMWTC is located in a remote area approximately two hours south of Reno, NV. There is no shuttle or bus service from MCMWTC. Learners who do not arrive at the airport by the pick-up time will be required to use commercial taxis (estimated cost of + \$250) or coordinate a rental vehicle through their parent command. Officers and Staff Non-Commissioned Officers are encouraged to bring POV's for travel and liberty purposes. Authorization for Sergeants to bring POV's requires parent command approval.*

Course seat funding can be procured via your official chain of command to the formal schools training branch, training and education command for TECOM funded courses (Section A). Courses that are **unit funded** (Section B above) - parent unit pays for travel; MWTC provides transportation to/from Reno airport, government messing available, and billeting provided for all courses.

D. REPORTING: COMMAND SCREENING CHECKLIST (last 2 pages of this catalog) WILL BE COLLECTED ON TD-1 BY COURSE STAFF. All learners arriving to the MCMWTC via POV must report to the CDO at Bldg. 4048 NLT 2359 on the report date. In the event of a problem, learners should contact the CDO or Course Staff.

E. MESSING AND BILLETING: Government messing and billeting are available. All learners should arrive on TAD orders and dependents are not authorized. All reservists must be joined to active duty by their units prior to reporting to MCMWTC. No dispersing facilities are available at MWTC, but learners will have access to an ATM or cashback at the MCX.

- Chow Hall: **MON-FRI** 0600-0730 Breakfast (\$4.35)
 1130-1300 Lunch (\$7.00)
 1630-1745 Dinner (\$6.05)
 SAT/SUN 0900-1015 Breakfast (\$7.80)
 1545-1700 Dinner (\$9.50)



F. POINTS OF CONTACT

- | | |
|-------------------------------------|--------------|
| MCMWTC CDO: | 760.932.1401 |
| Mountain Leaders: | 760.932.1468 |
| Mountain Scout Sniper: | 760.932.1458 |
| Summer/Winter Mountain Engineer: | 760.932.1490 |
| Mountain Med/Cold Weather Medicine: | 760.932.1527 |
| Mountain Communication: | 760.932.1437 |
| Basic Cold Weather Advisor: | 760.932.1469 |
| Animal Packing/Horsemanship: | 760.932.1469 |

G. OTHER

- Mailboxes on base: Front of PX, CP, & Chow Hall
- Barber Shop: Depends on Barber availability (limited)
- PX: Days and hours vary, briefed upon course check in
 - MON-FRI 0700-1700
 - SAT/SUN 1000-1500
- ATM location: Cashback available at MCX during business hours, ATM located outside base MCX.

FY25 SCHEDULE (as of 31 OCT 2024)

SUMMER MOUNTAIN LEADERS

M24M7A1

CLASS	REPORT	CONVENE	GRADUATE
1-25	6 Jul	7 Jul	22 Aug
2-25	7 Sep	8 Sep	24 Oct

WINTER MOUNTAIN LEADERS

M24M7B1

CLASS	REPORT	CONVENE	GRADUATE
1-25	6 Jan	7 Jan	21 Feb
2-25	3 Mar	4 Mar	18 Apr

MOUNTAIN MEDICINE

M24KAR1

CLASS	REPORT	CONVENE	GRADUATE
1-25	15 Jun	16 Jun	9 Jul
2-25	20 Jul	21 Jul	13 Aug
3-25	24 Aug	25 Aug	17 Sep

COLD WEATHER MEDICINE

M24WAC1

CLASS	REPORT	CONVENE	GRADUATE
1-25	12 Jan	13 Jan	5 Feb
2-25	18 Feb	19 Feb	14 Mar

MOUNTAIN COMMUNICATIONS

M24CXJ1

CLASS	REPORT	CONVENE	GRADUATE
1-25	8 Jan	9 Jan	24 Jan
2-25	18 Feb	19 Feb	5 Mar
3-25	7 Apr	8 Apr	22 Apr
4-25	7 Jul	8 Jul	22 Jul
5-25	3 Sep	4 Sep	18 Sep

MOUNTAIN SCOUT SNIPER

M24UNC1

CLASS	REPORT	CONVENE	GRADUATE
1-25	8 Jul	9 Jul	31 Jul
2-25	2 Sep	3 Sep	25 Sep

***Note: 0321 & IMS have priority**

ANIMAL PACKING

M24MN61

CLASS	REPORT	CONVENE	GRADUATE
1-25	3 Aug	4 Aug	19 Aug
2-25	2 Sep	3 Sep	18 Sep

HORSEMANSHIP & ANIMAL PACKING

M24MMM1

CLASS	REPORT	CONVENE	GRADUATE
1-25	3 Aug	4 Aug	19 Sep
2-25	2 Sep	3 Sep	18 Sep

SUMMER MOUNTAIN ENGINEER

M24MES1

CLASS	REPORT	CONVENE	GRADUATE
1-25	9 Jul	10 Jul	30 Jul
2-25	9 Sep	10 Sep	30 Sep

WINTER MOUNTAIN ENGINEER

M24MEW1

CLASS	REPORT	CONVENE	GRADUATE
1-25	7 Jan	8 Jan	31 Jan

BASIC COLD WEATHER ADVISOR

M2403W1

CLASS	REPORT	CONVENE	GRADUATE
1-25	5 Jan	67Jan	17 Jan
2-25	13 Feb	14 Feb	25 Feb
3-25	2 Mar	3 Mar	14 Mar



Summer Mountain Leaders Course Program of Study M24M7A1

1. SMLC Learning Program Overview: The Mountain Leaders Curricula aboard the Marine Corps Mountain Warfare Training Center are 35 training days that will challenge learners in planning, operating, and sustaining units in complex, compartmentalized terrain as well as tactical employment of units in this challenging environment. Learners are taught tactics, techniques, and procedures (TTPs) across warfighting functions to serve as leaders and train others in these considerations with their parent unit.

2. Course Description: This course is designed to provide company grade officers, SNCOs and Sergeants academic instruction and field application in the use of specialized mountaineering and cold weather equipment, mountain warfare TTPs, including planning considerations across warfighting functions for offensive and defensive operations in complex, compartmentalized mountainous terrain.

Historical case studies are used in highlighting numerous lessons learned. Learners conduct operations in the local training area and further afield to familiarize them with operating in cold temperatures, high altitude, and mountainous terrain.

3. Program Outcomes: To develop subject matter experts on the care and use of mountain and cold weather equipment, environmental and mobility skills (horizontal and vertical obstacle negotiation), and small unit tactics in order to enable them to facilitate company-sized units to conduct offensive and defensive operations in this environment. The desired end state is a course graduate who will increase a unit's endurance, survivability, mobility, sustainability, and assist unit leaders in planning and advising in this environment.

SMLC Phases: Beginning with the orientation of Pre-Environmental Training (PET), through progressive conditioning, equipment familiarization, mobility training, TTP development, planning, environmental considerations, tactical scenarios, TDGs & DFCs, and force on force training; the Summer Mountain Leaders Course will develop attributes as follows: Mountain leaders will demonstrate the abilities to plan, advise, and execute operations in complex, compartmentalized terrain with specific equipment, maintain awareness of planning considerations to conduct and sustain operations in this environment.

Phase I: Mountain Introduction: This phase begins with PET, an immersive experience in understanding the nuances of mountain and cold weather operations. Learners will be shown specifics pertaining to mountain health awareness, mountain weather, cold weather clothing and equipment, warfighting loads, movement in mountainous terrain, and how to mitigate leadership challenges in this environment, as well as TTPs while operating.

Phase II: Technical Skills/Climbing: Learners will be taught the basic principles of knots, systems, anchors, protection, and rappelling. Additionally, learners will be shown how to achieve and provide increased mobility to supported units through specialized mountaineering training. This phase is heavily emphasized, as mobility is a critical requirement in this environment. During this phase learners will receive instruction and practice climbing, establishing steep earth lanes, fixed rope lane installation, aid climbing, rescues, cliff reconnaissance, and route selection and planning.

Phase III: Final Exercise (FEX): As the culminating event of the training program, learners will be issued a tactical scenario complete with operations order and multiple fragmentary orders as the scenario progresses. Over the course of ~96 hours of continuous operations, they will apply all the

skills they have been shown since the beginning of the course in order to assess their abilities to serve as leaders and advisors to commanders in this environment.

Phase IV: Alpine & Mountain Movement: In this phase learners will understand how to plan and employ systems, conduct movement above the tree line, and movement over glaciated terrain and types of rescues in this environment.

Phase V: Graduation: Learners having completed all requirements at this point will attend a graduation ceremony and out-processing in order to return to their units.

4. Participation and Assessments: Due to the depth of knowledge and skills throughout this course, and likelihood of minimal previous experience in this environment, participation is required with successful completion of all successive assessments as they build upon and touch back through to previous topics; these range across the environment, equipment, TTPs, planning, advising, practical application, problem solving, critical thinking, written tests, and mobility.

Scope of Evaluation: Objectives and outcomes are measured by (a) performance examination requiring individuals to perform tasks under conditions similar to those in a combat environment, (b) written examination requiring the individual to retain critical knowledge, (c) peer evaluation where learners evaluate each other's ability to overcome environmental stresses and leadership challenges, and (d) leadership evaluation where facilitators evaluate leadership performance. All four components are weighted and used to calculate the learners overall rank in the course.

Performance Examination: Performance examinations are used to assess proficiency or end result where the learning objective has only one outcome. Process examinations are used to assess procedural learning objectives and outcomes. Performance checklists will be used for process examinations of a technical nature. Learners are provided performance checklists prior to the exam and practical application with coaching. An academic review board may be conducted for any learner who fails two or more performance events and may result in the learner being academically dropped from the course.

Written Examinations: These are used to assess retention and application of knowledge. Eighty percent of the test items assigned to the objectives or stated outcomes must be answered correctly in order to achieve knowledge proficiency of an objective. In the event that an individual does not show proficiency with a written examination, they are retested against a different version of the original examination. Individuals are provided adequate time for study prior to the administration of a written examination. An academic review board may be conducted for any learner who fails two or more written tests and may result in the learner being academically dropped from the course.

Leadership Evaluations: Leadership Evaluations are conducted during the course. Bottom ranked learners are subject to an academic review board per discretion of the faculty advisors. Peers rank members in their squad or platoon based on provided evaluation criteria. Facilitators provide feedback based on provided evaluation criteria. An individual may be dropped for failure to correct leadership issues after receipt of formal written counseling from the course chief.

Demonstration of Course Proficiency: Learners meet or attain course completion criteria when all testable items are satisfied to include the written examinations, all product and process-based performance examinations, and accurate delivery of their assigned teach-backs to demonstrate knowledge retention. All failures to demonstrate proficiency will be allotted additional time to remediate. Learners will be briefed prior to the conduct of any initial or remedial examination. Failure to demonstrate successful remediation of any examination may constitute an academic drop from the course.

5. AARs: Each learner will be assigned to a squad with a faculty advisor. Individual counseling is given by the faculty advisor to each learner on their proficiency during a particular phase. A dedicated period will be given at the culmination of the course to assess the class's overall proficiency of all knowledge, skills, and attitudes evaluated throughout the FEX. The end of course survey provided by a representative from the academics' section will allow for learners to give their unbiased feedback regarding the conduct of the course.

6. Schedule:

Red indicates High Risk Training

Phase I: Mountain Introduction		
TD-1		
AM	WELCOME ABOARD, S-1, LEARNER COUNSELING, FILL OUT IIF SHEETS.	ADMIN-04
AM	ENVIRONMENTAL BRIEF.	ADMIN-06
AM	MOUNTAIN LEADERSHIP CHALLENGES. Learners will have a clear understanding of good and poor leadership attributes in a mountainous/cold weather environment.	MW-003
AM	MOUNTAIN WEATHER. Learners will be able to identify and recognize weather patterns that occur in a mountainous environment.	MW-004
AM	CONDUCT A MOUNTAIN LEADER MEETING. IAW MCTP 12-10A Mountain Warfare Operations, learners will understand the role of the ML and begin to understand advisory & mobility considerations in this environment.	MW-103
PM	PERSONAL COLD WEATHER CLOTHING & EQUIPMENT. Learners can employ personal cold weather clothing & equipment to prevent environmental injuries, understanding the design principles of various cold weather clothing layers through application of the acronym VIP/COLD.	MW-010
PM	MARINE ASSAULT CLIMBERS KIT (MACK). Learners are shown what items comprise the MACK and are exposed to inspection criteria essentials for application throughout the course.	MW-014
PM	ROPE MANAGEMENT. Learners are instructed on the conduct of the knots performance examination and introduced to the testable knots and their function/use, the basics of rope terminology, characteristics, and maintenance.	MW-012
PM	ROPE CORRAL. Familiarization and practice with knots.	MW-012
TD-2		
AM	MOUNTAIN ENDURANCE TEST. Learners will complete a mountain endurance test: A ruck run of Mountain Leader Loop (~3.8 miles) in utilities w/ a 55 lb. dry pack, rock wall pull-ups, and a rope climb. The goal is 70 minutes or less for the movement, minimum of 11 pull-ups, and one rope climb. The score is a part of the learner's overall G.P.A.	MW-032
AM	IIF GEAR ISSUE/ ROPE ROOM ISSUE.	ADMIN-05

PM	MOUNTAIN SAFETY. Learners are able to identify and apply the considerations of safety while operating in a mountainous/cold weather environment.	MW-001
PM	MOUNTAIN WARFIGHTING LOAD REQUIREMENTS. Learners are able to identify and apply specifics to packing a warfighting load in a mountainous and cold weather environment.	MW-011
PM	WATER PROCUREMENT. Learners are able to identify suitable methods to procure water, waterborne hazards, and methods for purification.	MW-130
PM	REQUIREMENTS FOR SURVIVAL. Learners are taught about considerations and required items in this environment.	MW-125
PM	ROPE CORRAL. Familiarization and practice with knots.	MW-012
TD-3		
AM	MOVEMENT IN MOUNTAINOUS TERRAIN. Mountain movement through training areas and discussion on movement TTPs.	ADMIN-01/MW-032
AM-PM	FIXED LANE DEMO. Learners use fixed lanes to ascend fourth class terrain.	MW-051
PM	ROPE CORRAL. Knots and rope management practical application.	MW-012
TD-4		
AM	CASEVAC PLATFORM INTRO / DEMO. Introduction to SKEDCO litter and practical application in this environment.	MW-030
AM	CASEVAC PLATFORM PRAC APP. Practical application with SKEDCO litter.	MW-030
AM	MOUNTAIN CASUALTY EVACUATION. Learners will be given a class on casualty evacuation specific to a snow-covered, mountainous environment.	MW-030
AM-PM	HIKE TO LTA. Trail ~6KM distance.	ADMIN-01/MW-032
PM	LEAVITT TRAINING AREA (LTA) BRIEF.	ADMIN-06
PM	CLIMBING HARNESS. Proper wear/adjustment of climbing equipment, nomenclature, and inspection of a climbing harness.	MW-013
PM	RACK SET UP. Options for individual setup.	MW-013
PM	ROPE CORRAL (Coils). Practical application of mountain rope coils.	MW-012
PM	BIVOUAC ROUTINE. Learners can identify/apply the considerations of a bivouac site in a mountainous/snow covered environment.	MW-063
Phase II: Technical Skills/Climbing		
TD-5		
AM	PLACING PROTECTION. Class, demonstration, and placing protection practical application.	MW-043
PM	NEGOTIATE A RIVER OBSTACLE. Learners are shown how to assess and cross a river obstacle using various methods.	MW-033

PM	TRANSPORT TO LOWER BASE CAMP.	ADMIN-01
PM	ANCHORS. Class and practical application on natural and artificial anchors.	MW-034
TD-6		
AM	MOUNTAIN HEALTH AWARENESS. Learners will understand ways the human body generates and loses heat, cold weather injuries, and high-altitude considerations and injuries.	MW-002
AM	WRITTEN TEST #1 REVIEW:	EXAM-WRITTEN EXAM
AM	HIKE TO LTA.	ADMIN-01/MW-032
AM	KNOTS TEST.	EXAM-TRST EXAM
AM	RAPPELS, SLICK AND PACK CLASS (GROUND SCHOOL). Introduction to rappelling and safety considerations.	MW-040
AM	RAPPELS: SLICK & PACK.	EXAM-TRST EXAM
AM-PM	TRANSPORT TO LOWER BASE CAMP.	ADMIN-01
TD-7		
AM	KNOTS RETEST.	EXAM-TRST EXAM
AM	TRANSPORT TO LTA.	ADMIN-01
AM-PM	TWO ROPE RETRIEVABLE RAPPEL INTRO/PAC APP. Learners are introduced to application of a two-rope retrievable rappel and conduct.	MW-040
PM	BALANCE CLIMBING INTRO / PRAC APP. Learners are introduced to climbing fundamentals.	MW-041
PM	RUN TO LOWER BASE CAMP.	ADMIN-01/MW-032
PM	TIE A PURCELL. Facilitators demonstrate how to tie and the many uses for the versatile knot.	MW-012
PM	SYSTEMS PRAC APP. Facilitators spot check and assist learners.	
TD-8		
AM	KNOTS RETEST, PERFORMANCE REVIEW BOARD.	EXAM-TRST EXAM

AM	TRANSPORT TO LTA.	ADMIN-01
AM	CONDITIONING RUN.	ADMIN-01/MW-032
AM	MECHANICAL ADVANTAGE W/ ONE ROPE BRIDGE INTRO. Learners are introduced to the concept of mechanical advantage and application through the demonstration of a one rope bridge.	MW-035
AM-PM	ONE ROPE BRIDGE PRAC APP.	MW-036
PM	ONE ROPE BRIDGE EXECUTION.	EXAM-TRST EXAM
PM	PLACING PROTECTION, SYSTEMS PRAC APP. placing protection practical application and systems practical application.	MW-043
AM	TRANSPORT TO LOWER BASE CAMP.	ADMIN-01
TD-9		
AM	RUN TO LTA.	ADMIN-01/MW-032
AM-PM	VERTICAL HAULING SYSTEM INTRO/ PRAC APP. Learners are introduced to construction and application of vertical hauling systems.	MW-038
PM	VERTICAL HAULING SYSTEM EXECUTION.	MW-038
PM	BELAY FOR PARTY CLIMBING. Belay procedures and climbing commands.	MW-044
PM	BELAY FOR PARTY CLIMBING TEST-OUT. Learners are tested on belay procedures and climbing commands.	MW-044
PM	TOP ROPING: Practical application.	MW-042
PM	PRACTICAL APPLICATION OF SYSTEMS/SOP Refinement. Application of systems in a tactical environment.	MW-036/MW-030/MW-040/MW-038
PM	BIVOUAC ROUTINE. Learners can identify/apply the considerations of a bivouac site in a mountainous/snow covered environment.	MW-063
TD-10		
AM	PLACING PROTECTION. placing protection practical application.	MW-043
AM	COILS TEST.	MW-012
AM	SYSTEMS TESTING SITE ROUND ROBIN. Learners are shown the testing sites for each system and introduced to the PECL.	EXAM-TRST EXAM
AM	HIKE TO BIG FACE.	ADMIN-01/MW-032
AM	ROUTE SELECTION AND PLANNING. Discussion and iterations on route planning & map work.	MW-104

PM	HIKE TO LOWER BASE CAMP.	ADMIN-01
PM	WRITTEN TEST #1.	EXAM-WRITTEN EXAM
PM	THEORETICAL MECHANICAL ADVANTAGE. Learners are introduced to the concept of theoretical mechanical advantage.	MW-035
TD-11		
AM	WRITTEN TEST #1 RE-TEST.	EXAM-WRITTEN EXAM
AM	RUN TO LTA.	ADMIN-01/MW-032
AM-PM	SYSTEMS TEST.	EXAM-TRST EXAM
PM	SUSPENSION & TRAVERSE. Considerations, principles, and employment for moving equipment, casualties, etc.	MW-039
PM	INSTRUCTOR RAPPEL DEMO AND SOP REFINEMENT CLASS. Night rappels.	TRST
PM	NIGHT RAPPELS.	MW-040
PM	BIVOUAC ROUTINE. Learners can identify/apply the considerations of a bivouac site in a mountainous/snow covered environment.	MW-063
TD-12		
AM	PLACING PROTECTION. placing protection practical application.	MW-043
AM	COILS RETEST.	MW-012
AM	LEAD AND SPORT CLIMBING (INTRO), FALSE LEADS DEMO. Learners are introduced to process and methods of climbing.	MW-048
PM	DETERMINING THE DIFFICULTY OF A CLIMB.	MW-104
PM	FALSE LEADS.	MW-048
PM	RUN TO LOWER BASE CAMP.	ADMIN-01
PM	PRAC APP WITH SKEDCO LITTER AND SOP REFINEMENT.	MW-036/ADMIN-06
TD-13		
AM	RUN TO LTA.	ADMIN-01
AM	PLACING PROTECTION. placing protection practical application.	MW-043
AM	BELAY FOR PARTY CLIMBING, TOP SIDE ANCHOR CLASS. Learners are introduced to belay procedures and climbing commands for party climbing as well as top side belay anchors.	MW-044
AM	TEST FALLS.	MW-048
AM/PM	LEAD CLIMBING. Practical application.	MW-048
PM	SYSTEMS RETEST.	MW-012
PM	TRANSPORT TO LOWER BASE CAMP.	ADMIN-01

TD-14		
AM	SYSTEMS PROFICIENCY REVIEW BOARD.	EXAM-TRST EXAM
AM	EFFECTS OF COLD WEATHER ON WEAPONS AND OPTICS. Learners will understand how CW can affect their unit's organic weapons and how to combat its effects in order to make an operational weapon.	MW-101
AM	AIR CONSIDERATIONS. Class & discussion with MCMWTC AirO.	ADMIN-06
AM	FIRE SUPPORT PLANNING CONSIDERATIONS. Classroom, facilitator led class & discussion.	MW-114
AM	WARFIGHTING FUNCTIONS CONSIDERATIONS. A facilitator led discussion on how a Mountain Leader can provide planning considerations across the warfighting functions during mountain operations.	AM
PM	TRANSPORT TO LTA.	ADMIN-01/MW-032
PM	NIGHT ONE ROPE BRIDGE SOP REFINEMENT/ASSIGN LEADERSHIP DUTIES/POSITIONS.	MW-036/ADMIN-06
AM	GORGE CROSSING. Facilitator led practical application for obstacle negotiation.	MW-036
PM	NIGHT ONE ROPE BRIDGE PRAC APP.	MW-030
PM	BIVOUAC ROUTINE. Learners can identify/apply the considerations of a bivouac site in a mountainous/snow covered environment.	MW-063
TD-15		
AM	PLACING PROTECTION. placing protection practical application.	MW-043
AM	BOTTOM SIDE ANCHORS.	MW0-034
AM	SYSTEMS AND COILS RE-TEST	EXAM-TRST
AM-PM	LEAD CLIMBING.	MW-048
PM	HIKE TO LOWER BASE CAMP.	ADMIN-01/MW-032
TD-16		
AM	HIKE TO LTA.	ADMIN-01/MW-032
AM	LEAD CLIMBING.	MW-048
PM	CLIFF RECONNAISSANCE. Class and discussion for planning considerations.	MW-053
PM	LEAD CLIMBING.	MW-048
PM	NIGHT TWO-ROPE RETRIEVABLE RAPPEL. Learners develop SOP for night two-rope retrievable rappels and practical application.	MW-040
PM	BIVOUAC ROUTINE. Learners can identify/apply the considerations of a bivouac site in a mountainous/snow covered environment.	MW-063
TD-17		

AM	PLACING PROTECTION. placing protection practical application.	MW-043
AM	LEAD CLIMBING.	MW-048
PM	VERTICAL HAULING SYSTEM PRAC APP AND SOP DEVELOPMENT.	MW-038
PM	LEAD CLIMBING WITH ASSAULT LOAD.	MW-048
PM	LEAD CLIMBING TEST BRIEF.	EXAM-ROCK EXAM
PM	RUN TO LOWER BASE CAMP.	ADMIN-01
TD-18		
AM	RUN TO LTA.	ADMIN-01
AM	PLACING PROTECTION. placing protection practical application.	MW-043
AM	LEAD CLIMBING.	MW-048
PM	DETERMINE FALL FACTORS.	
PM	LEAD CLIMBING.	MW-048
PM	TRANSPORT TO LOWER BASE CAMP.	ADMIN-01
TD-19		
PM	TRANSPORT TO LTA.	ADMIN-01
AM	PLACING PROTECTION. placing protection practical application.	MW-043
AM-PM	CLIMBS EVALUATION/RETEST.	EXAM-ROCK EXAM
PM	RESCUE SYSTEMS. Learners are shown the application of rescue systems.	MW-050
PM	MILITARY AID CLIMBING. Ways to assist climbers during challenging routes and or conditions. Discussion and practical application.	MW-049
PM	NIGHT CLIMBS: Top rope.	MW-042
PM	BIVOUAC ROUTINE. Learners can identify/apply the considerations of a bivouac site in a mountainous/snow covered environment.	MW-063
TD-20		
AM-PM	FIXED ROPES: SIMPLE, SEMI-FIXED, FIXED. Learners' practical application of setting fixed lanes.	MW-051
TBD	CLIMBS EVALUATION PROFICIENCY REVIEW BOARD.	EXAM-ROCK EXAM
PM	TRANSPORT TO LOWER BASE CAMP.	ADMIN-01
PM	WRITTEN TEST 2 TEST REVIEW: MACK, Mobility, rope techniques basics.	EXAM-WRITTEN-EXAM
PM	ISSUE FRAGMENTARY ORDER – CLIFF ASSAULT.	ADMIN-06
A-1		
AM	IMPROVISED RESCUE (JSOC TASK).	MW-050

TD-21		
PM	WRITTEN TEST #2.	EXAM-WRITTEN EXAM
AM	RUN TO LTA.	ADMIN-01
AM	CLIFF ASSAULT. Class and discussion for considerations and planning.	MW-102
AM-PM	4 to 6 PERSON DRILL. (Mechanical Ascending) Demonstration and practical application of moving a small team and equipment over a vertical obstacle.	MW-102
PM	CLIFF ASSAULT PRAC APP.	MW-102
PM	BLINDFOLDED KNOTS.	MW-012
PM	NIGHT PROTECTION PLACEMENT PRAC APP. Learners will receive demonstration and practical application of placing protection in low light conditions.	MW0-034
PM	BIVOUAC ROUTINE. Learners can identify/apply the considerations of a bivouac site in a mountainous/snow covered environment.	MW-063
TD-22		
AM	HANGING BELAY. Enables multi-pitch climbing.	MW-047
AM-PM	AID CLIMBING, PITONS. Discussion, demonstration, & practical application.	MW-047
PM	BLINDFOLDED KNOTS.	MW-012
PM	NIGHT CLIMBS: Lead.	MW-042
PM	BIVOUAC ROUTINE. Learners can identify/apply the considerations of a bivouac site in a mountainous/snow covered environment.	MW-063
TD-23		
AM-PM	MULTI-PITCH CLIMB at BIG FACE (Starboard).	MW-047
AM-PM	LEADER PICK OFF/MECHANICAL ASCENSION at LITTE FACE (Port).	MW-050
PM	BIVOUAC ROUTINE. Learners can identify/apply the considerations of a bivouac site in a mountainous/snow covered environment.	MW-063
TD-24		
AM-PM	MULTI-PITCH CLIMB at BIG FACE (Port).	MW-047
AM-PM	INTRO TO LEADER PICK OFF/MECHANICAL ASCENSION at LITTE FACE (Starboard).	MW-050
PM	TRANSPORT TO LOWER BASE CAMP.	ADMIN-01
TD-25		
AM	ISSUE ROAD TO WAR - FEX.	ADMIN-06
AM	TACTICAL ADVISOR DISCUSSION.	MW-120
AM	WRITTEN TEST #2 RE-TEST.	EXAM-WRITTEN EXAM
AM/PM	FEX PREP/PREP FOR COMBAT. Cliff reconnaissance and gear prep.	ADMIN-06
PM	WRITTEN TEST 3 TEST REVIEW. Glaciology & Avalanche danger; MACK Glacier module.	EXAM-WRITTEN EXAM

TD-26		
AM	TRANSPORT TO BROWNIE CREEK.	ADMN-01
AM-PM	PATROLLING/ROUTE SELECTION AND PLANNING.	MW-104
TD-27		
AM-PM	PATROLLING/ROUTE SELECTION AND PLANNING.	MW-104
Phase III: FEX		
TD-28		
AM	TREE CLIMBING: Class and practical application.	MW-055
PM	CLIFF ASSAULT REHEARSAL.	EXAM-FEX
PM	LEARNER ORDER.	EXAM-FEX
PM	FEX: Technical skill sets evaluated during tactical scenarios.	EXAM-FEX
TD-29		
	FEX.	EXAM-FEX
TD-30		
	FEX.	EXAM-FEX
TD-31		
	FEX.	EXAM-FEX
TD-32		
	FEX.	EXAM-FEX
TD-33		
AM	TRANSPORT TO LOWER BASE CAMP.	ADMIN-01
PM	PEER EVALS.	EXAM-LDRSH P
Phase IV: Alpine & Mountain Movement		
TD-34		
AM	MACK GLACIER MODULE, SQUAD STOVES, TENTS: Learners will be shown items used for glacier travel, as well as environmental considerations and how to combat them.	MW-014
AM	GLACIOLOGY: Identify glacier characteristics and naming.	MW-057

AM	AVALANCHE AWARENESS. Learners are able to identify/apply objectives/outcomes of avalanche danger assessment.	MW-100
PM	CRAMPON FITTING AND TECHNIQUES.	MW-059
PM	ICE AXE TECHNIQUES/STEP KICKING AND CUTTING.	MW-058/ MW-072
PM	SNOW AND ICE ANCHORS/GLISSADING AND SELF ARREST.	MW-060/MW-061
PM	GLACIER TRAVEL. Techniques and procedures for movement across glaciers.	MW-062
A-2		
AM	WRITTEN TEST 3: Glaciology & Avalanche danger; MACK Glacier module	EXAM-WRITTE N-EXAM
AM	FEX DEBRIEF.	EXAM-FEX
AM	GEAR MAINTENANCE AND INSPECTION.	ADMIN-05
T-35		
AM	IIF TURN-IN.	ADMIN-05
AM	ROPE ROOM TURN-IN.	ADMIN-05
AM	WRITTEN TEST 3 RE-TEST.	EXAM-WRITTE N-EXAM
AM	END OF COURSE SURVEYS.	ADMIN-08
PM	SOCOM GEAR CLASS/GEAR INSPECTION AND MAINTENANCE CLASS.	MW-014
PM	END OF COURSE SURVEYS DISCUSSION.	ADMIN-08
PM	GEAR MAINTENANCE/FIELD DAY.	ADMIN-07/10
Phase V: Graduation		
A-3		
AM	SQUAD BAY INSPECTION.	ADMIN-10
AM	TURN SQUAD BAY OVER TO S4.	ADMIN-10
AM	S-1 OUTPROCESSING.	ADMIN-03
AM	GRADUATION PRACTICE.	ADMIN-09
AM	GRADUATION.	ADMIN-09
AM	MOVEMENT TO RENO.	ADMIN-01

7. Mandatory Readings:

MCTP 12-10A Mountain Warfare Operations; available at [USMC Doctrine - Home \(sharepoint-mil.us\)](https://www.usmc.mil/USMC-Doctrine-Home) Keywords for search: Mountain Warfare

Chapters 1 & 4 (15 pages)

8. Recommended Readings:

Mountaineering: The Freedom of the Hills

MCRP 12-10A.3 Mountain Leader's Guide to Mountain Warfare Operations, Chapters 4 through 6.; available at [USMC Doctrine - Home \(sharepoint-mil.us\)](https://www.usmc.mil/USMC-Doctrine-Home)

Keywords for search: Mountain Warfare

Watch: <https://www.marinenet.usmc.mil/mvs/Channel/Home.aspx?ld=11> Knot videos

Summer Mountain Leaders Course

REQUIRED ADMIN

Reporting Orders	1	
Command Screening Checklist	1	
*First class PFT required within 30 days of report date		
Identification Card	1	

Gear and Equipment

Item	QTY	Note
USMC Pack w/WP liner & Sustainment Pouches	1	MWTC IIF
Assault Pack w/WP liner	1	MWTC IIF
Sleeping Bag - Tan	1	MWTC IIF
Sleeping Bag - Black	1	MWTC IIF
Bivy Sack	1	MWTC IIF
ISO Mat	1	MWTC IIF
MARPAT Tarp	1	MWTC IIF
Poncho Liner	1	MWTC IIF
Nalgene	2	MWTC IIF
Nalgene Carrier	2	MWTC IIF
Nalgene Cup	1	MWTC IIF
Hydration Bladder - 3Liter	1	MWTC IIF
Hydration Carrier	1	MWTC IIF
IFAK	1	MWTC IIF
Chest Rig/LBV/Belt with Mag pouches	1	

Uniform Items

Item	QTY	Note
Utilities - MARPAT Woodland	4	
GoreTex Top/Bottom - MARPAT Woodland	1	
Garrison Cover - MARPAT Woodland	1	
Boonie Cover - MARPAT Woodland	1	
Skivvie Shirt	3	
Underwear	6	
Socks, Brown, Pair	6	Recommend Wool
Socks, White PT, Pair	4	
USMC Boots	2	
PolyPro Top/Bottom, Set	2	MWTC IIF
Grid Fleece Top/Bottom, Set	1	MWTC IIF
ECW (Happy) Parka	NA	MWTC IIF
ECW (Happy) Trousers	NA	MWTC IIF
ECW (Happy) Booties	NA	MWTC IIF
ECW Mittens (Outdoor Research)	NA	MWTC IIF
Neck Gaiter	1	MWTC IIF
Fleece Cap	1	MWTC IIF
Finger Gloves, Insulated	1	MWTC IIF
Contact Gloves, (personal ok)	2	MWTC IIF
3/4 Gaiters (Outdoor Research)	1	MWTC IIF
Balaclava	1	MWTC IIF
USMC Running Suit/Sweats	1	Optional/ Recommended
PT Shorts	2	
PT Shoes	1	Trail style recommended

Hygiene Kit

Item	QTY	Note
Tooth Brush	1	
Tooth Paste	1	
Floss	1	
Razor w/Extra Blades	1	
Shaving Cream	1	
Chapstick	2	
Sunscreen	1	
Towel	2	
Shower Shoes	1	

MISC

Item	QTY	Note
Notebook	1	For the Classroom
Write-in-the-rain	1	For The Field
Pen	2	
Pencil	2	
Highlighter	1	
Map Pen Set w/Eraser Pen	1	
Protractor	1	
Combination Lock	2	For squad bay
Proper Civilian Attire	1	
Eye Protection w/Clear and Dark Lenses	1	
Red Lens Flashlight or Headlamp W/ Batteries	2	
Knife or Multi-tool (fixed blade and multi tool recommended)	1	
550 Cord	50ft	
Laundry Bag	1	
Personal Electronic Devices (Laptop, Tablet, Cell Phone)		For Electronic Publications
Water profing bags/dry sack/gallon zip locks		
Extra AA/AAA batteries		

Weapons and Optics

Item	QTY	Note
NVG	1	w/SL3, and mounting hardware
Weapons cleaning gear	1	
Compass	1	Recommended

Notes: MWTC IIF will only supply items if you have not been issued from your parent unit IIF. A letter of transmittal is required in regard to your NVGs.



Winter Mountain Leaders Course Program of Study M24M7B1

1. WMLC Learning Program Overview: The Mountain Leaders Curricula aboard the Marine Corps Mountain Warfare Training Center are 35 training days that will challenge learners in planning, operating, and sustaining units in complex, compartmentalized terrain as well as tactical employment of units in this challenging environment. Learners are taught tactics, techniques, and procedures (TTPs) across warfighting functions to serve as leaders and facilitate others in these considerations with their parent unit.

2. Course Description: This course is designed to provide company grade officers, SNCOs, and Sergeants academic instruction and field application in the use of specialized mountain and cold weather equipment, mountain warfare TTPs, including planning considerations across warfighting functions for offensive and defensive operations in complex, compartmentalized, mountainous terrain.

Historical case studies are used in highlighting numerous lessons learned. Learners conduct operations in the local training area to familiarize them with operating in deep snow, wet cold to intense cold temperatures, high altitude, and mountainous terrain.

3. Program Outcomes: To develop subject matter experts on the care and use of mountain and cold weather equipment, environmental and mobility skills, and small unit tactics in order to enable them to facilitate company-sized units to conduct offensive and defensive operations in this environment. The desired end state is a course graduate who will increase a unit's endurance/survivability, mobility, and sustainability and assist unit leaders in planning and advising in this environment.

WMLC Phases: Beginning with the orientation of Pre-Environmental Training (PET), through progressive conditioning, equipment familiarization, mobility training, TTP development, planning, survival, tactical scenarios, TDGs & DFCs, and force on force training; the Winter Mountain Leaders Course will develop attributes as follows: Mountain leaders will demonstrate the abilities to plan, advise, and execute operations in a cold weather environment with specific equipment, planning abilities to conduct and sustain operations in the mountainous and cold weather operating environments.

Phase I: PET and Mountain Introduction: This phase begins with PET, an immersive experience in understanding the nuances of mountain and cold weather operations. Learners will be shown specifics pertaining to mountain health awareness, mountain weather, cold weather clothing and equipment, warfighting loads, military ski equipment, and how to mitigate leadership challenges in this environment, as well as TTPs while operating.

Phase II: Field Introduction: Learners are introduced to cold weather and mountainous field skills. Learners then practice using the equipment in the field during the first shorter field exercise. They are introduced to sustaining themselves in the environment, snowshoe, cross-country ski, basic avalanche knowledge, and both tent systems.

Phase III: TTPs: In this phase learners will conduct shorter tactical scenarios to introduce the TTPs to win in a mountainous environment. Instruction focuses on how they can best advise commanders on cold weather and mountainous operations.

Phase IV: Over the Snow Mobility: Learners will be shown how to achieve and provide mobility to supported units through specialized mountaineering training. This phase is heavily emphasized, as mobility is a critical requirement in this environment. During this phase learners will receive in-

depth instruction and practical application in cross country and downhill ski techniques as well as starting to introduce some advisory classes. They will finish this phase as a Basic Ski Instructor.

Phase V: Final Exercise (FEX)/Graduation: As the culminating event of the training program, the learners will be issued a tactical scenario complete with operations order and multiple fragmentary orders as the scenario progresses. They will spend the longest continuous time in the field, forcing themselves to sustain and apply all the skills they have learned since the beginning of the course in order to assess their abilities to serve as enablers and advisors in this environment. Learners having completed all requirements at this point will attend a graduation ceremony and out-processing in order to return to their units.

4. Participation and Assessments: Due to the depth of knowledge and skills throughout this course, and likelihood of minimal previous experience in this environment, participation is required with successful completion of all successive assessments as they build upon and touch back through to previous topics; these range across the environment, equipment, TTPs, planning, survival, advising, practical application, written tests, and mobility.

Scope of Evaluation: Objectives and outcomes are measured by (a) performance examination requiring individuals to perform tasks under conditions similar to those in a combat environment, (b) written examination requiring the individual to retain critical knowledge, (c) peer evaluation where learners evaluate each other's ability to overcome environmental stresses, and (d) leadership evaluation where facilitators evaluate leadership performance. All four components are weighted and used to calculate the learners overall rank in the course.

Performance Examination: Performance examinations are used to assess proficiency or end result where the learning objective has only one outcome. Process examinations are used to assess procedural learning objectives and outcomes. Performance checklists will be used for process examinations of a technical nature. Learners are provided performance checklists prior to the exam and practical application with coaching. An academic review board may be conducted for any learner who fails two or more performance events and may result in the learner being academically dropped from the course.

Written Examinations: These are used to assess retention and application of knowledge. Eighty percent of the test items assigned to the objectives or stated outcomes must be answered correctly in order to achieve knowledge proficiency of an objective. In the event that an individual does not show proficiency on a written examination, they are retested against a different version of the original examination. Individuals are provided adequate time for study prior to the administration of a written examination. An academic review board may be conducted for any learner who fails two or more written tests and may result in the learner being academically dropped from the course.

Leadership Evaluations: Leadership Evaluations are conducted during the course. Bottom ranked learners are subject to an academic review board per discretion of faculty advisors. Peers rank members in their squad or platoon based on provided evaluation criteria. Facilitators provide feedback based on provided evaluation criteria. A learner may be dropped for failure to correct leadership issues after receipt of formal written counseling from the course chief.

Demonstration of Course Proficiency: Learners meet/attain course completion criteria when all testable items are satisfied to include the written examinations, all product and process-based performance examinations, and accurate delivery of their assigned teach-backs to demonstrate knowledge retention. All failures to demonstrate proficiency will be allotted additional time to remediate. Learners will be briefed prior to the conduct of any initial or remedial examination. Failure to demonstrate successful remediation of any examination may constitute an academic drop from the course.

5. AARs: Each learner will be assigned to a squad with a faculty advisor. Individual counseling is given by the faculty advisor to each learner on their proficiency during a particular phase. A dedicated period will be given at the culmination of the course to assess the class's overall proficiency of all knowledge, skills, and attitudes evaluated throughout the FEX. The end of course survey provided by a representative from the academic's section will allow for learners to give their unbiased feedback regarding the conduct of the course.

6. Schedule:

Red indicates High Risk Training

Phase I: PET and Mountain Introduction		
AD-1		
AM	WELCOME ABOARD.	ADMIN-02-03-04
AM	ENVIRONMENTAL BRIEF.	ADMIN-04
AM	PERSONAL COLD WEATHER CLOTHING. Learners can employ personal cold weather clothing & equipment to prevent environmental injuries, understanding the design principles of various cold weather clothing layers through application of the acronym VIP/COLD.	MW-010
PM	MOUNTAIN WARFIGHTING LOAD REQUIREMENTS. Learners are able to identify and apply specifics to packing a warfighting load in a mountainous and cold weather environment.	MW-011
PM	REQUIREMENTS FOR ENVIRONMENTAL FACTORS / WATER PROCUREMENT / EXPEDIENT SHELTERS / FIRES. Environmental considerations and examples of expedient shelters & fires in this environment.	MW-128/129/130
TD-1		
AM-PM	IIF ISSUE/ROPE ROOM ISSUE.	ADMIN-05
PM	MILITARY SKI EQUIPMENT. Learners receive demonstration and class on military ski bindings and fitting.	MW-017
TD-2		
AM	MOUNTAIN WEATHER. Learners will be able to identify and recognize weather patterns that occur in a mountainous environment.	MW-004
AM	ROUND ROBIN 1: MCCWIK, SUES Stove Test, MRE Cooking: Learners are able to identify the components of the Marine Corps Cold Weather Infantry Kit and successfully employ them in a mountainous/cold weather environment. Learners understand how to safely set up and utilize the Small Unit Expeditionary Stove (SUES).	MW-016/068
AM	ROUND ROBIN 2: 4-Person Tent: Learners receive demonstration and practical application of the 4-person Extreme Cold Weather fire-team tent.	MW-015

AM	ROUND ROBIN 3: 15-person Arctic Shelter, stove/heater: Learners receive demonstration and practical application of the 15-person arctic shelter and SHC60 Heater.	MW-016/019
PM	MILITARY SKI EQUIPMENT. Learners receive demonstration and class on military ski equipment and use.	MW-017
PM	SKI EQUIPMENT PRAC APP. Prepare equipment for use during course.	MW-017
TD-3		
AM	LEADERSHIP CHALLENGES DECISION FORCING CASE.	MW-003
AM	MOUNTAIN SAFETY. Learners are able to identify/apply the considerations of safety while operating in a mountainous/cold weather environment.	MW-001
AM	CONCEPT OF EMPLOYMENT / CONDUCT A ML MEETING. IAW MCTP 12-10A Mountain Warfare Operations, learners will understand the role of the ML and begin to understand advisory & mobility considerations in this environment.	MW-003
PM	ASSESS AVALANCHE DANGER. Learners are able to identify/apply learning outcomes of avalanche danger assessments, rescue, and CASEVAC techniques.	MW-100
PM	MOUNTAIN HEALTH AWARENESS. Learners will understand ways the human body generates and loses heat, cold weather injuries, and high-altitude considerations and injuries.	MW-002
PM	EFFECTS OF COLD WEATHER ON WEAPONS AND EQUIPMENT.	MW-101
Phase II: Field Introduction		
TD-4		
AM	TRANSCEIVER INTRO AND PRAC APP. Demonstration and practical application of avalanche transceivers.	MW-100
AM	MILITARY SNOWSHOES / SLED MOVEMENT / BASIC PROCEDURES AT HALT / TRAIL BREAKING & CUTTING. Learners will understand how to move with MCCWIKs, continuing actions, and roles of trail breaking team to enable movement.	MW-068
PM	WINTER CASUALTY EVACUATION. Learners will be given a class on casualty evacuation specific to a snow-covered, mountainous environment.	MW-031
PM	CASEVAC PRAC APP: Learners conduct casualty evacuation scenario +1km.	MW-031
PM	15-PERSON TENT CONSTRUCTION. Learners will apply the eight site-selection criteria and five special use areas to conduct bivouac site and routine in snow-covered environments.	MW-019/063
PM	TENT CONSTRUCTION AND ROUTINE / WATER PROCUREMENT. Learners are able to identify suitable methods to procure water, waterborne hazards, and methods for purification.	MW-015
PM	FROSTBITE CHECK FACILITATOR DEMO. Learners will be shown and understand criteria and what to look for to prevent cold weather injuries.	MW-002

TD-5		
AM	FUNDAMENTALS OF SKIING: BERP (BALANCE, EDGE CONTROL, ROTARY MOVEMENT, AND PRESSURE), SKI WAX DEMO, INTRO TO SKIING. Introduction to fundamentals of skiing.	MW-074
PM	SNOW PIT ANALYSIS. Demonstration & practical application on methods to conduct analysis of snow layers.	MW-064
PM	MILITARY SKI SEQUENCE. Cross-country ski movement techniques and practical application (station training by technique).	MW-070
TD-6		
PM	FIGHTING POSITIONS AND 4-PERSON TENT PIT DEMO, BIVOUAC IN A SNOW-COVERED ENVIRONMENT. Class, demonstration & practical application.	MW-107
PM	TRACK PLAN CONSTRUCTION AND TENT ROUTINE. Class, demonstration & practical application.	MW-107
PM	TENT ROUTINE / TRACK PLAN REMEDIATION. Class, demonstration & practical application.	MW-015/107
TD-7		
AM	SNOW PIT ANALYSIS. Demonstration & practical application on methods to conduct analysis of snow layers.	MW-064
PM	MILITARY SKI SEQUENCE. Cross-country ski movement techniques and practical application.	MW-070
PM	RESCUE AN AVALANCHE VICTIM PRAC APP. Team practical application followed by class practical application.	MW-066
TD-8		
AM	EFFECTS OF COLD WATER ON BODY, ICE BREAKING. Learners will understand & apply rewarming techniques.	MW-064
PM	ROUTE SELECTION AND PLANNING. Discussion and iterations on route planning & map work.	MW-105
Phase III: TTPs		
TD-9		
AM	MILITARY SKI SEQUENCE. Cross-country ski movement techniques and practical application.	MW-070
PM	SNOW COVERED CAMOUFLAGE TECHNIQUES & SIGNATURE MANAGEMENT. Class, demonstration & practical application.	MW-069
TD-10		
AM	LEARNER LED SKI TOUR.	MW-70
AM	SKIJORING CLASS. Class, demonstration & practical application.	MW-067
AM	CROSSING AVALANCHE PRONE TERRAIN CLASS.	MW-100

PM	MILITARY SKI SEQUENCE. Cross-country ski movement techniques and practical application.	MW-070
PM	NIGHT SKI.	MW-070
PM	LIGHT AND NOISE DISCIPLINE. Facilitator demonstration.	MW-069
TD-11		
AM	LEARNER LED SKI TOUR.	MW-70
AM	SHOOTING POSITIONS, IA/CONTACT DRILLS, AND PRAC APP.	WMLC-FIRE&M VMT
PM	DECEPTION AND DUMMY TRACKS & TRACK PLANS. Facilitator demonstration.	MW-107
PM	AMBUSH CONSIDERATIONS. Class, demonstration & practical application.	WMLC-SKIFIRE POS/M W-116
PM	AMBUSH ORDER.	
TD-12		
AM	GEAR PREP/ORDERS PROCESS.	
AM-PM	SKI MOVEMENT TO AMBUSH POSITION / CONDUCT AMBUSH.	MW-070
TD-13		
AM	RANGE INSPECTION/ SAFETY BRIEF.	ADMIN-01
AM	WEAPON OPTIC ZERO.	WMLC-BZO
AM	BULLET PENETRATION DEMONSTRATION. Learners will be shown and understand the effects of snow and ice relative to defensive positions.	WMLC-PENSH OOT
AM	SKI BORNE SHOOTING POSITIONS. Learners will learn, rehearse, and conduct ski borne shooting positions and immediate action drills.	WMLC-FIRE&M VMT/SK IFIREP OS
PM	BIATHLON EXAM.	EXAM-BIATHL ON
PM	LINE OUT / LIVE TO BLANK TRANSITION 1/ RANGE INSPECTION.	
PM	HOW TO TEACH SKIING / ASSIGN TEACH BACKS. Faults, cues, & corrections for teaching ski fundamentals to new skiers.	MW-074
PM	MILITARY SKI EQUIPMENT PT 2. Learners receive demonstration and class on downhill ski wax.	MW-017

PM	PEER EVALUATION 1. Assess peer performance TD 1-10.	ADMIN-02
AD-2		
AM-PM	INSTRUCTOR PREPARATION AT MAMMOTH.	
PM	GEAR INSPECTION (SKIS).	MW-070
PM	TRANSPORTATION TO MAMMOTH.	ADMIN-01
Phase IV: Over the Snow Mobility		
TD-14		
AM	CROSS-COUNTRY TECHNIQUES.	MW-070
AM	GEAR INSPECTION (SKIS), WARM UP, SKIERS RESPONSIBILITY, GLIDING TO BRAKING WEDGE, RIDING THE LIFT: Learners are shown and understand ski fundamentals and skiing safety (resort right of way, how to get on/exit lift, etc).	MW-070
PM	DOWNHILL SKI SEQUENCE.	MW-070
TD-15		
AM	CROSS-COUNTRY TECHNIQUES.	MW-070
AM-PM	DOWNHILL SKI SEQUENCE.	MW-070
TD-16		
AM	CROSS-COUNTRY TECHNIQUES.	MW-070
AM-PM	DOWNHILL SKI SEQUENCE.	MW-070
TD-17		
AM	CROSS-COUNTRY TECHNIQUES.	MW-070
AM-PM	DOWNHILL SKI SEQUENCE.	MW-070
PM	<u>WRITTEN TEST 1:</u> PET.	EXAM-W1
PM	HOW TO TEACH SKIING PART 2.	EXAM-W1
TD-18		
AM	CROSS-COUNTRY SKI EXAM (P1).	EXAM-SKI MVT
AM	DOWNHILL SKI EXAM (P1).	EXAM-SKI
PM	INFORM LEARNERS OF FAILURES.	

PM	TRANSPORTATION TO MCMWTC.	ADMIN-01
PM	ASSIGN ORDERS.	WMLC-FEX
PM	<u>WRITTEN TEST 1 (P2):</u> PET.	EXAM-W1
AD-3		
AM	CROSS-COUNTRY SKI EXAM (P2).	EXAM-SKI MVT
AM	DOWNHILL SKI EXAM (P2).	EXAM-SKI
TD-19		
AM	WARFIGHTING FUNCTIONS. Classroom, facilitator led class & discussion.	MW-115/116
PM	AIR CONSIDERATIONS.	
AM	FIRE SUPPORT PLANNING CONSIDERATIONS. Classroom, facilitator led class & discussion.	MW-114
PM	OFFENSIVE AND DEFENSIVE CONSIDERATIONS. Classroom, facilitator led class & discussion.	MW-115/116
PM	ICE RECONNAISSANCE, CROSSING, RESCUE. Classroom, engineer facilitator led class & discussion.	MW-064
PM	SKI EQUIPMENT PRAC APP. Prepare equipment for use during course.	MW-017
PM	ROLE OF THE MOUNTAIN LEADER.	
PM	MILITARY SKI EQUIPMENT. Learners receive demonstration and class on Military Ski System.	MW-017
TD-20		
AM	Air Rehearsals.	
AM	INSERT TO SUMMIT MEADOWS.	ADMIN-01
PM	SKI MOVEMENT TO DEFENSE POSITION/DEFENSE OCCUPATION AND CONDUCT (sustain/continuing actions).	MW-115
TD-21		
AM	TRANSCEIVER AND SNOW PIT ASSESSMENT BLOCK. Facilitator demonstration & learner practical application.	MW-064/100
AM-PM	ICE AXE TECHNIQUES, CRAMPON TECHNIQUES, GLISSADING AND SELF-ARREST. Facilitator demonstration & learner practical application.	MW-058/059/060

PM	MOUNTAIN PICKETS CLASS.	MW-116
PM	CONTINUATION OF DEFENSE.	MW-115
TD-22		
AM	BREAKDOWN OF DEFENSIVE POSITION.	
AM	MOUNTAIN MOVEMENT EXAM: 8km timed movement in 2.5hrs.	EXAM-SKI MVT
PM	ENVIRONMENTAL CONSIDERATIONS (EXPEDIENT SHELTERS AND FIRES): Class and environmental skills practical application.	MW-128/129
TD-23		
AM	END ENVIRONMENTAL CONSIDERATIONS PRACTICAL APPLICATION.	MW-125
PM	ASSIGN FEX ORDERS.	WMLC-FEX
Phase V: FEX/Graduation		
TD-24		
AM	WRITTEN TEST 2: Avalanche, warfighting considerations, etc.	EXAM-W2
AM-PM	GEAR PREP/AIR REHEARSALS/ORDERS PROCESS.	
TD-25		
AM	WRITTEN TEST 2 (P2): Avalanche, warfighting considerations, etc.	EXAM-W2
AM	AIR INSERT.	WMLC-FEX
PM	LEARNERS MOVEMENT TO MOUNTAIN PICKETS.	WMLC-FEX
TD-26		
AM	LEARNERS RETROGRADE FROM MOUNTAIN PICKETS.	WMLC-FEX
AM	SQUAD ICE BREAKING DRILL.	WMLC-FEX
PM	CONDUCT INFILTRATION.	WMLC-FEX
TD-27		
AM-PM	MOVEMENT TO ORP/AMBUSH CONDUCT.	WMLC-FEX
TD-28		

AM-PM	MOVEMENT TO ATTACK POSITION / DELIBERATE ATTACK.	WMLC-FEX
PM	FORCE ON FORCE.	WMLC-FEX
TD-29		
AM-PM	FORCE ON FORCE.	WMLC-FEX
TD-30		
AM-PM	FORCE ON FORCE.	WMLC-FEX
TD-31		
AM-PM	FORCE ON FORCE.	WMLC-FEX
TD-32		
AM-PM	FORCE ON FORCE.	WMLC-FEX
PM	ENDEX.	WMLC-FEX
PM	PEER EVALUATION 2: FEX focused.	ADMIN-02
TD-33		
AM	GEAR MAINTENANCE.	ADMIN-07
AM-PM	FINAL EXERCISE DEBRIEF.	WMLC-FEX
TD-34		
AM	GEAR MAINTENANCE & TURN IN.	ADMIN-05/07
PM	GRADUATION PRACTICE.	ADMIN-09
PM	END OF COURSE SURVEYS.	ADMIN-08
TD-35		
AM	SQUAD BAY INSPECTION.	ADMIN-10
AM	TURN SQUAD BAY OVER TO S4.	ADMIN-10

AM	S-1 OUTPROCESSING.	ADMIN-03
AM	GRADUATION PRACTICE.	ADMIN-09
AM	GRADUATION.	ADMIN-09
AM	MOVEMENT TO RENO.	ADMIN-01

7. Mandatory Readings: During the course, learners will be required to read FMFRP 12-48 *On Winter Warfare* by George Swinzow.

8. Recommended Readings:

The Last Stand of Fox Company by Tom Clavin

Historical Perspective of the Light Infantry by Scott McMichael

Kargil: From Surprise to Victory by V. P. Malik

Not A Good Day to Die by Sean Naylor

The Bear Went Over the Mountain and *The Other Side of the Mountain* by Lester Grau and Ali Jalali

Return of a King by William Dalrymple

Understanding the India China Border by Manoj Joshi

The Winter Army by Maurice Isserman

MCTP 12-10A Mountain Warfare Operations: [USMC Doctrine - Home \(sharepoint-mil.us\)](https://sharepoint-mil.us)

MCRP 12-10A.1 Small Unit Leader's Guide to Mountain Warfare Operations

MCRP 12-10A.2 Mountain Leader's Guide to Winter Operation

MCRP 12-10A.4 Cold Region Operations

ATP 3-90.97 Mountain Warfare and Cold Weather Operations

ATP 3-21.50 Infantry Small-Unit Mountain and Cold Weather Operations

A Blue Arctic

Regaining Arctic Dominance

Winter Mountain Leaders Course

REQUIRED ADMIN

Reporting Orders	1	
Command Screening Checklist	1	
*First class PFT required within 30 days of report date		
Identification Card	1	

Gear and Equipment

Item	QTY	Note
USMC Pack w/Sustainment Pouches	1	MWTC IIF
Assault Pack w/WP liner	1	MWTC IIF
Sleeping Bag - Tan	1	MWTC IIF
Sleeping Bag - Black	1	MWTC IIF
Bivy Sack	1	MWTC IIF
ISO Mat	1	MWTC IIF
MARPAT Tarp	1	MWTC IIF
Poncho Liner	1	MWTC IIF
Nalgene	2	MWTC IIF
Nalgene Carrier	2	MWTC IIF
Nalgene Cup	1	MWTC IIF
Hydration Bladder - 3Liter	1	MWTC IIF
Hydration Carrier	1	MWTC IIF
I/FAK	1	MWTC IIF
Chest Rig/LBV/Belt with Mag pouches	1	

Uniform Items

Item	QTY	Note
Utilities - MARPAT Woodland	4	
GoreTex Top/Bottom - MARPAT Woodland	1	
Garrison Cover - MARPAT Woodland	1	
Boonie Cover - MARPAT Woodland	1	
Skivvie Shirt	3	
Underwear	6	
Socks, Brown, Pair	6	Recommend Wool
Socks, White PT, Pair	4	
USMC Boots	2	
PolyPro Top/Bottom, Set	2	MWTC IIF
Grid Fleece Top/Bottom, Set	1	MWTC IIF
ECW (Happy) Parka	NA	MWTC IIF
ECW (Happy) Trousers	NA	MWTC IIF
ECW (Happy) Booties	NA	MWTC IIF
ECW Mittens (Outdoor Research)	NA	MWTC IIF
Neck Gaiter	1	MWTC IIF
Fleece Cap	1	MWTC IIF
Finger Gloves, Insulated	1	MWTC IIF
Contact Gloves, (personal ok)	2	MWTC IIF
3/4 Gaiters (Outdoor Research)	1	MWTC IIF
Balaclava	1	MWTC IIF
		Optional/ Recommended
USMC Running Suit/Sweats	1	
PT Shorts	2	
		Trail style recommended
PT Shoes	1	

Hygiene Kit

Item	QTY	Note
Tooth Brush	1	
Tooth Paste	1	
Floss	1	
Razor w/Extra Blades	1	
Shaving Cream	1	
Chapstick	2	
Sunscreen	1	
Towel	2	
Shower Shoes	1	

MISC

Item	QTY	Note
Notebook	1	For the Classroom
Write-in-the-rain	1	For The Field
Pen	2	
Pencil	2	
Highlighter	1	
Map Pen Set w/Eraser Pen	1	
Protractor	1	
Combination Lock	2	For squad bay
Proper Civilian Attire	1	
Eye Protection w/Clear and Dark Lenses	1	
Red Lens Flashlight or Headlamp W/ Batteries	2	
Knife or Multi-tool (fixed blade and multi tool recommended)	1	
550 Cord	50ft	
Laundry Bag	1	
Personal Electronic Devices (Laptop, Tablet, Cell Phone)		For Electronic Publications
Water proofing bags/dry sack/gallon zip locks		
Extra AA/AAA batteries		

Weapons and Optics

Item	QTY	Note
NVG	1	w/SL3, and mounting hardware
Weapons cleaning gear	1	
Compass	1	Recommended

Notes: MWTC IIF will only supply items if you have not been issued from your parent unit IIF. A letter of transmittal should be brought with your NVG.



Mountain Communications Course Program of Study M24CXJ1

1. Learning Program Overview: The Mountain Communications Course is designed to provide instruction in the unique aspects and challenges of communications in a mountainous environment. Additionally, the course provides learners awareness and understanding of command-and-control (C2)

challenges, environmental considerations, and mobility in support of MAGTF operations. The desired result is a learner graduate who has an enhanced knowledge base and skills that allow them to operate in austere environments while enabling C2 in support of high altitude, mountainous, and cold weather combat operations.

2. Course Description: This is a 15-day course with subjects inclusive of the use of specific radios in a mountainous environment, antenna types and construction in the mountains, radio wave theory, and retransmission site selection and operations considerations. Graduates are capable of providing mountain communications considerations training for units. Sending learners to this course is recommended for units conducting the Mountain Exercise portion of the MAGTF Warfighting Exercise SLTE to enable C2.

3. Program Outcomes: This learning program is designed to train service members to become proficient in all aspects of mountain communications. Learners are taught basic mountain mobility, communications for employment in a mountainous environment, and communications equipment limitations and capabilities. Graduates will be capable of advising communications operations planning in complex, compartmentalized, mountainous terrain and be able to instruct parent units on the employment considerations of communications equipment.

Learners are organized into squads for study, practical application, and evaluations during the phases of the course.

Phase I: Pre-Environmental (PET)/Communications Basics: PET will provide learners with understanding of mountainous terrain, weather, and environment as well as confidence in specific equipment. Communications basics provides learners a refresher in radio theory, field expedient antenna construction, and capabilities and limitations of communications systems in this environment.

Phase II: Basic Mobility and Communications Practical Application: In this phase learners will focus on utilization of communications basics from the previous phase, understand the challenges of movement in this environment, and conduct practical application for HF communications.

Phase III: Final Exercise (FEX): Learners will demonstrate knowledge of and the abilities to conduct land navigation, field expedient antennas, long-range communications, retransmission site selection, COC operations, and ground CASEVAC considerations.

Phase IV: Administrative: Administrative process for learners (gear maintenance and turn-in/graduation), also second attempt on written test.

4. Participation & Assessments: Due to the depth of knowledge and skills throughout this course, participation is required with successful completion of all successive assessments as they build upon and touch back through to previous topics. Environmental, planning, technical, and field training phases of the course are evaluated through assessments (inclusive of performance, written, and verbal methods). Observation of learners' participation and evaluation (with subsequent coaching and mentoring) occurs throughout all phases.

Performance Examination or end result need be evaluated. Process examination is used to evaluate an outcome. There are two types of performance examinations; they are product and process examinations. Each of the two types of performance examinations are used to demonstrate proficiency of performance outcomes. Product examination is used to assess an outcome when only the final product e when both the end result and the process require assessment. This type of examination will be assessed using a performance evaluation checklist, teach back, or behaviorally anchored rating scale designed to demonstrate proficiency of the outcome. Individuals are provided ample time for practical application prior to being administered a performance examination.

Written Examination. The proficiency of outcomes is identified through the results of a written examination. A written examination consists of test items assigned to one or more outcomes. The types of test items on a written examination may be open ended questions or multiple choice. Eighty percent of the test items must be answered correctly in order to demonstrate proficiency on the test. In the event that an individual does not demonstrate proficiency on a written examination, they will be retested against a different version of the original examination. Individuals are provided adequate time for study prior to being administered a written examination.

Course Completion Criteria: A learner is considered to have completed the course of instruction when the objectives and or outcomes have been completed to standard. Failure to demonstrate proficiency of an objective or outcome in the individual's first attempt results in the individual receiving additional instruction and an additional opportunity to demonstrate proficiency. Failure to demonstrate proficiency of an objective or outcome in the individual's second attempt results in the individual's referral to an Academic Review Board to determine the follow-on course of action.

5. AARs: Informal reviews by training day, completion of phases, and in-stride/by event are conducted to facilitate learning and refinement of the learning program. Specifically, discussions after the communications shots and the final exercise are aimed at solidifying proficiency with the learning outcomes and objectives.

6. Schedule: (am/pm format by day with any associated readings and general outcomes).

Phase I: PET/Communications Basics		
TD-1		
AM	COURSE OVERVIEW / LEARNER COUNSELING.	ADMIN-01, 03
AM	ENVIRONMENTAL BRIEF.	ADMIN-01
AM-PM	MOUNTAIN LEADERSHIP CHALLENGES. Learners will have a clear understanding of good and poor leadership attributes in a mountainous/cold weather environment.	MW-003
PM	PERSONAL COLD WEATHER CLOTHING AND EQUIPMENT. Learners can employ personal cold weather clothing & equipment to prevent environmental injuries, understanding the design principles of various cold weather clothing layers through application of the acronym VIP/COLD.	MW-010
PM	MOUNTAIN WARFIGHTING LOAD REQUIRMENT. Learners are able to identify and apply specifics to packing a warfighting load in a mountainous and cold weather environment,	MW-011
PM	MOUNTAIN SAFETY. Learners are able to identify/apply the considerations of safety while operating in a mountainous/cold weather environment.	MW-001

PM	MOUNTAIN HEALTH AWARENESS. Learners will understand ways the human body generates and loses heat, cold weather injuries, and high-altitude considerations and injuries.	MW-002
PM	MOVEMENT IN MOUNTAINOUS TERRAIN. Familiarize learners with considerations for efficiently moving through a mountainous environment.	MW-032
PM	BIVOUAC ROUTINE. Learners can identify/apply the considerations of a bivouac site in a mountainous/snow covered environment.	MW-063
PM	CASUALTY EVACUATION. Learners will be given a class on casualty evacuation specific to a snow covered/mountainous environment.	MW-031
PM	PET TEST REVIEW. (Learners utilize study guide, notes, and course book).	ADMIN-04
TD-2		
AM	PET TEST. (Written: multiple choice and or short answer).	PET-XW
AM	IIF DRAW. INTRO TO SATCOM OPERATIONS CLASS. Understand the use of USMC Satcom asset.	MW-301
PM	TACTICAL ANTENNA EMPLOYMENT. Understand site selection considerations.	MW-308
PM	MOUNTAIN OPERATIONS OF MAN-PACK RADIO SYSTEMS. Discuss and understand the importance of weatherproofing and limitations of equipment in this environment.	MW-303
PM	FIELD EXPEDIENT ANTENNAS. Understand the types of, discuss and utilize formulae to construct. Learners will construct antennas for basic mobility phase, utilize instructors' skills.	MW-301
Phase II: Basic Mobility and Communication Practical Application		
TD-3		
AM	PET RE-TEST. (Written: multiple choice and or short answer).	PET-XW
AM	Current VHF Operations Class. Discuss and understand data and description as well as use of radio systems for retransmission capabilities.	MW-304
AM	Current VHF Operations Practical Application. Programming and use of radio systems for retransmission capabilities by squad.	MW-304
PM	Current UHF Operations and Tactical Chat Class. Capabilities and practical application (programming and use).	

		MW-306
PM	COMM PLANNING AND MANAGEMENT. Understand communications principles as well as waveforms advantageous in various terrain scenarios.	MW-300
TD-4		
AM-PM	MOVEMENT TO TRAINING AREAS (~1.5KM)/FIELD EXPEDIENT ANTENNA PRAC APP/ ALE PRAC APP. Understand and utilize ALE and field expedient antennas in a field environment.	MW-301
PM	Return to LBC.	
TD-5		
AM	FIELD EXPEDIENT ANTENNA CONSTRUCTION. Learners led field expedient antenna construction.	MW-301
AM-PM	MOVEMENT TO TRAINING AREAS (~2KM)/FIELD EXPEDIENT ANTENNA PRACTICAL AP/ 3G+ PRAC APP. Understand advantages of 3G+ over ALE.	MW-301
PM	Return to LBC/ COMM Test review.	ADMIN-04
TD-6		
AM	SATCOM OPERATIONS CONTINUED. Understand the use of USMC Satcom asset.	MW-301
AM-PM	REPORTS CLASS. Understand the use of USMC reporting process.	MW-301
PM	COMM TEST REVIEW.	
TD-7		
AM	MOVEMENT TO TRAINING AREAS (~9KM)/FIELD EXPEDIENT ANTENNA PRACTICAL AP/ COMMUNICATIONS SHOT TO DISTANT END. Learners will construct antenna and perform HF communications shot.	MW-301
AM-PM	ASSESS AVALANCHE DANGER (WINTER). Learners will conduct snow pit analysis, avalanche rescue procedures and track plan operations if snow is present. ROPE MANAGEMENT (SUMMER). Learners are instructed and conduct knot tying and understand their function and use.	MW-012, 100,
TD-8		
AM	MOVEMENT IN TRAINING AREA. ~4KM / FIELD EXPEDIENT ANTENNA PRACTICAL AP / COMMUNICATIONS SHOT TO DISTANT END. Learners will construct antenna and perform HF communications shot.	MW-301

AMPM	MOVEMENT IN TRAINING AREA. (~2KM).	
PM	ASSESS AVALANCHE DANGER (WINTER). Learners will conduct snow pit analysis, avalanche rescue procedures and track plan operations if snow is present. ROPE MANAGEMENT (SUMMER). Learners are instructed and conduct knot tying and understand their function and use.	MW-012, 100
TD-9		
AM	MOVEMENT IN TRAINING AREA. (~4KM)/FIELD EXPEDIENT ANTENNA PRACTICAL AP/ COMMUNICATIONS SHOT TO DISTANT END. Learners will construct antenna and perform HF communications shot.	MW-301
AM-PM	Return to LBC.	
AM-PM	COMM TEST. (Written and short answer test oriented on discussions to this point of the course).	COMM-XW
Phase III: Communication FEX		
TD-10		
AM	COMM RETEST. (Written and short answer test oriented on discussions to this point of the course)	COMM-XW
AM-PM	FEX BRIEF: Learners understand expectations and evaluation criteria. FEX PREP / IIF GEAR REPLACEMENT / GEAR PACKOUT.	COMM-FEX
TD-11		
AM	PCC / PCI.	COMM-FEX
AM	VEHICLE INSERTION TO TAS.	COMM-FEX
AM-PM	WINTER AND SUMMER. SQUAD 1: COC (POINT OF INSERT). SQUAD 2: RTX ELEMENT will be tasked to set COC set up a relay site or an RTX. SQUAD 3: RECON ELEMENT will be given a second grid and will be tasked to implement site selection criteria for a COC	COMM-FEX
PM	COC TENT SETUP/ROUTE SELECTION PLANNING/ GEAR INSPECTIONS.	MW-104
TD-12		

AM	WINTER AND SUMMER. SQUAD 3: COC (BIVOUAC) SQUAD 1 RTX ELEMENT will be tasked to set COC set up a relay site or an RTX. SQUAD 2: RECON ELEMENT will be given a second grid and will be tasked to implement site selection criteria for a COC.	COMM-FEX
AM-PM	COC TENT SETUP/ROUTE SELECTION PLANNING/ GEAR INSPECTIONS.	MW-104
TD-13		
AM	SQUAD 2:COC (BIVOUAC) SQUAD 3: RTX ELEMENT will be tasked to set COC set up a relay site or an RTX. SQUAD 1: RECON ELEMENT will be given a second grid and will be tasked to implement site selection criteria for a COC	COMM-FEX
AM-PM	SQUAD COMPETITION AND EGRESS TO BASE.	COMM-FEX
Phase IV: Administrative Out-processing and Graduation		
TD-14		
AM-PM	MAINTENANCE, EQUIPMENT RECOVERY, ADMINISTRATION/ COMM RE-TEST.	ADMIN-03 COMM-XW
TD-15		
AM	ADMINISTRATION & COURSE GRADUATION.	ADMIN-06

7. Mandatory Readings: There are no mandatory pre-work or readings, however section 8 of the program of study details recommended MarineNet videos and courses.

8. Recommended Readings & Pre-Course Work:

The Will to Communicate, Retaining freedom of action in a denied/degraded environment, Maj Paul L. Stokes, Marine Corps Gazette, September 2016

Maintaining C2, Controlling the electromagnetic Spectrum, Maj Paul L. Stoke, Marine Corps Gazette, January 2017

Propagation of Radio Waves and Antenna Construction, MARINENET Self-paced Course, Course Code: MCIZ0621ZZ

Radio Wave Characteristics, MARINENET 8 Minute video

MWTC Communication PET, MARINENET Facilitator Led Course (Learners enrolled when registered for MCOMM in MCTIMS)+

Mountain Communications Course Gear List

REQUIRED ADMIN		
Reporting Orders	1	
Command Screening Checklist	1	
Identification Card	1	

Gear and Equipment		
Item	QTY	Note
USMC Pack w/WP liner	1	
Assault Pack w/WP liner	1	
Sleeping Bag - Tan	1	
Sleeping Bag - Black	1	*See Notes
Bivy Sack	1	
ISO Mat	1	
MARPAT Tarp	1	
Poncho Liner	1	
Canteen/Nalgene	2	
Canteen/Nalgene Carrier	2	
Canteen/Nalgene Cup	1	
Hydration Bladder - 3Liter	1	
Hydration Carrier	2	
Sustainment Carrier	2	
IFAK	1	
Chest Rig/LBV/Belt with Mag pouches	1	Optional

Uniform Items		
Item	QTY	Note
Utilities - MARPAT Woodland	2	No FROG
Garrison Cover - MARPAT Woodland	1	
Boonie Cover - MARPAT Woodland	1	
Skivvie Shirt	6	
Underwear	6	
Socks, Brown, Pair	6	Recommend Wool
Goretex, Woodland Top/Bottom, Set	1	
Polypro Top/Bottom, Set	2	
Grid Fleece Top/Bottom, Set	1	*See Notes
ECW (Happy) Parka	1	*See Notes
ECW (Happy) Trousers	1	*See Notes
ECW (Happy) Booties	1	*See Notes
ECW Mittens (Outdoor Research)	1	*See Notes
Neck Gaiter	1	
Fleece Cap	2	
Finger Gloves, Insulated	1	*See Notes
Contact Gloves, (Non-Cotton)	2	*See Notes
Gloves, Leather	1	
3/4 Gaiters (Outdoor Research)	1	*See Notes
Balaclava	1	*See Notes
PT Attire		As required
PT Shoes		As required

Hygiene Kit		
Item	QTY	Note
Tooth Brush	1	
Floss	1	
Razor w/Extra Blades	1	
Shaving Cream	1	
Chapstick	2	
Sunscreen	1	
Towel	2	
Shower Shoes	1	

MISC		
Item	QTY	Note
Notebook	1	For the Classroom
Write-in-the-rain	1	For The Field
Pen	2	
Pencil	2	
Highlighter	1	
Map Pen Set w/Eraser Pen	1	
Protractor	1	
Combination Lock	2	
Proper Civilian Attire	2	
Eye Protection w/Clear and Dark Lenses	1	
Goggles w/Clear and Dark Lenses	1	
Red Lens Flashlight or Headlamp W/ Batteries	1	
Lighter	1	
Knife or Multi-tool	1	
550 Cord	50ft	
Laundry Bag	1	
Personal Electronic Devices (Laptop, Tablet, Cell Phone)		For Electronic Publications

Weapons and Optics		
Item	QTY	Note
Kevlar w/ mount	1	
Compass	1	

Notes: These items are recommended for all courses, required for cold weather season courses. Cold weather season courses are typically from January to April And October. If students do not have access to cold weather gear, it can be issued from MCMWTC IIF on T-Day 2. **IIF WILL NOT DOUBLE ISSUE ANY GEAR.**



MOUNTAIN SCOUT SNIPER COURSE Program of Study M24UNC1

1. Learning Program Overview: This course exposes learners to ballistics, fieldcraft, and operational considerations in a mountainous and cold weather environment.

2. Course Description: The Mountain Scout Sniper Course is a 23-day learning program designed to train Scout Snipers to be tactically and technically proficient in complex, compartmentalized, mountainous terrain. This course includes instruction in advanced marksmanship at high angles with current sniper systems and service weapons. Facilitation in high angle marksmanship includes range estimation, determining slope angle and flat line of distance, effects of vertical and angular distortion, effects of elevation, and the effects of extreme weather. Facilitation focuses on ballistics, fieldcraft, and operational considerations in a mountainous and cold weather environment.

3. Program Outcomes: This learning program focuses on facilitation of learners to become more effective as snipers in a mountainous and cold weather environment. Learners are taught the necessary skills to enable them to engage targets at high angles, communications considerations in this environment, and the effects of weather on weapon systems organic to the 0317/0321 Marine or service equivalent Military Occupational Specialty designators.

Phase I: Pre-Environmental Training (PET). PET will provide learners with an understanding of mountainous terrain, weather, and the environment; learners will understand material, equipment, and techniques and procedures for mitigating impacts to individuals and units in this environment.

Phase II: Mobility. In this phase, learners will be introduced to seasonally specific mobility means in this environment. In summer courses, learners will negotiate Class 1 through 5 terrain; in winter, learners will utilize skis and snowshoes.

Phase III: Field Training. In this phase, learners will be shown and practice patrolling, conduct mission profiles, and conduct team land navigation.

Phase IV: Marksmanship. In this phase, learners demonstrate knowledge of and understanding of ballistics considerations in this environment. Learners will engage moving and stationary targets from alternate shooting positions during both day and night scenarios.

4. Participation & Assessments: Due to the inherent challenges in this environment, participation is required with successful completion of all successive assessments as they build upon and touch back through to previous topics. Environment, planning, technical, and field training phases of the course are evaluated through assessments (inclusive of performance and verbal methods).

There are two types of evaluation used to determine course completion criteria in the Mountain Scout Sniper Course. Objectives and outcomes are measured by performance examination requiring individuals to perform the task under conditions similar to those in a combat environment or by verbal examination requiring the individual to demonstrate their ability to retain critical knowledge. Product examination is used to assess an objective or outcome when only the final product or end-result need be evaluated. Process examination is used to evaluate an objective or outcome when both the end-result and the process require assessment.

Course Completion Criteria: At the completion of all courses of fire, a learner is considered to have completed the course when the objectives and or outcomes have been completed to standard while demonstrating the appropriate level of proficiency.

5. AARs: Informal reviews by training day, completion of phases, and in-stride/by event are conducted to facilitate learning and refinement of the learning program. Specifically, discussions after movements and during the final exercise and at the end of each course of fire are aimed at solidifying learners' proficiency with the learning outcomes and objectives.

6. Schedule: (am/pm format by day with associated general outcomes).

Contact Course Chief for further details 760 932 1458.

Warm Weather Course Schedule:

Red indicates High Risk Training

Phase I: Administrative & PET		
TD-1		
AM	ARMORY TURN IN (Learner).	ADMIN 01
AM	WELCOME ABOARD BRIEF / IN PROCESSING.	ADMIN 01
AM	OIC WELCOME ABOARD.	ADMIN 01
AM	PERSONAL COLD WEATHER CLOTHING. Provide the learner with the knowledge and skills to analyze the weather conditions and select the appropriate clothing and equipment according to the environment.	MW-010
AM	IIF DRAW.	ADMIN 03
PM	ROPE ROOM EQUIPMENT DRAW.	ADMIN 03
PM	MOUNTAIN WEATHER. The purpose of this lesson is to introduce the learner with weather patterns, the invisible aspects of weather and some visible clues to help forecast weather.	MW-004
PM	ROPE MANAGEMENT. Learners are shown rope terminology, knots, utilization, and application of the issued ropes.	MW-012
TD-2		
AM	ARMORY ISSUE.	ADMIN 03
AM	RANGE CARD AND BATTLEFIELD ANALYSIS. Learners will receive a refresher and gain further understanding of proper range cards and battlefield analysis.	
AM	MOUNTAIN HEALTH. Provide the learners the information necessary to help prevent, recognize, and treat various health problems that can arise in a mountainous or cold weather environment.	MW-002
AM	MOUNTAIN LEADERSHIP CHALLENGES. Provide learners with lessons on leadership challenges in mountainous environments.	MW-003
PM	ROPE MANAGEMENT. Learners are shown rope terminology, knots, utilization, and application of the issued ropes.	MW-012
PM	RAPPELLING. Learners are shown the principles and techniques and conduct rappels.	MW-040
Phase II: Mobility		
TD-3		
AM	FOOT MOVEMENT LBC (LOWER BASE CAMP) TO LTA (LEAVITT TRAINING AREA) VIA LTA TRAIL ~6KM.	ADMIN 04
AM	ROUTE SELECTION AND PLANNING. Purpose is to familiarize learners with route selection in a mountainous environment.	MW-104

AM	MOVEMENT IN MOUNTAINOUS TERRAIN. Familiarize learners with considerations for efficiently moving through mountainous terrain.	MW-032
AM	WARFIGHTING LOAD REQUIREMENTS. Learners are taught the required pocket items, survival items, and pack considerations for operating in a mountainous environment.	MW-011
AM	CLIFF RECONNAISSANCE. Learners receive a class on proper cliff reconnaissance reporting procedures.	MW-053
PM	NATURAL AND ARTIFICIAL ANCHORS. Practical Application.	MW-034
PM	RAPPELLING. Learners are instructed on the principles and techniques and conduct rappels.	MW-040
PM	NIGHT RAPPELLING. Learners conduct rappels with night vision devices.	MW-040
TD-4		
AM	FIXED LANES. Learners are instructed on how to establish a fixed lane and conduct practical application.	MW-051
AM	CASEVAC. Learners will be taught mountain CASEVAC procedures and receive instruction on SKEDCO construction and utilization.	MW-030
AM	CASEVAC TDG. Learners will receive a CASEVAC TDG and then perform a CASEVAC movement.	
PM	MOVEMENT TO LBC.	ADMIN 04
PM	ARMORY DRAW/GEAR PREPARATION.	
TD-5		
AM-PM	MISSION. Learners will conduct a full profile mission.	FEX / MW-153 / MW-155
AM-PM	HF COMMUNICATION.	
PM	LAND NAVIGATION. Learners conduct map and compass resection.	
Phase III: Field Training		
TD-6		
AM-PM	LEARNERS CONDUCT FULL MISSION PROFILE.	
AM-PM	WATER PROCUREMENT, SURVIVAL, AND CAMOUFLAGE AND CONCEALMENT.	
TD-7		
AM-PM	LEARNERS CONDUCT FULL MISSION PROFILE.	
AM-PM	LIVE-FIRE STALK, FIXED LANES, TDG.	
TD-8		
AM	LIVE-FIRE STALK.	
TD-9		
AM-PM	LAND NAVIGATION TEAM COMPETITION.	
TD-10		
AM-PM	LAND NAVIGATION TEAM COMPETITION.	
AM-PM	MOTOR TRANSPORT TO LBC.	ADMIN 04
TD-11		
AM	MOUNTAIN MARKSMANSHIP/MOUNTAIN EXTERNAL BALLISTICS. Learners will gain understanding of ballistics in a mountain environment.	

AM	TREMOR3, KESTREL. Learners will receive a refresher and gain further understanding of the sniper optic and kestrel.	
PM	RIFLE SET-UP/GEAR PREPARATION/ARMORY DRAW.	ADMIN 03
Phase IV: Marksmanship		
TD-12 (MCMWTC LIVE-FIRE RANGE/S DAY 1)		
AM	MOVEMENT TO MCMWTC LIVE-FIRE RANGE.	ADMIN 04
AM	SNIPER RIFLE ZERO & CHRONO.	
AM	SNIPER RIFLE FLAT RANGE SHOOT.	
PM	SNIPER RIFLE KNOWN DISTANCE SHOOT.	
PM	UNLOAD VEHICLES AND BIVOUAC SET-UP.	
PM	RANGE ESTIMATION EXERCISE AND DEBRIEF.	
PM	RANGE CARD DEVELOPMENT.	
TD-13 (MCMWTC LIVE-FIRE RANGE/S DAY 2)		
AM	SNIPER SYSTEM SHOOT.	MW-150
PM	SNIPER SYSTEM SHOOT.	MW-150
PM	DEBRIEF/RANGE CARD DEVELOPMENT.	
TD-14 (MCMWTC LIVE-FIRE RANGE/S DAY 3)		
AM	SNIPER SYSTEM SHOOT.	MW-150
PM	SNIPER SYSTEM SHOOT.	MW-150
PM	DEBRIEF/RANGE CARD DEVELOPMENT.	
PM	NOD CLASS.	
TD-15 (MCMWTC LIVE-FIRE RANGE/S DAY 4)		
AM	SNIPER SYSTEM SHOOT.	MW-150
PM	SNIPER SYSTEM SHOOT.	MW-150
PM	DEBRIEF/RANGE CARD DEVELOPMENT.	
TD-16 (MCMWTC LIVE-FIRE RANGE/S DAY 5)		
AM	SNIPER SYSTEM SHOOT.	MW-150
PM	SNIPER SYSTEM SHOOT.	MW-150
PM	DEBRIEF.	
PM	MOVING TARGET CLASS. Learners will gain further understanding of engaging moving targets.	
TD-17 (MCMWTC LIVE-FIRE RANGE/S Day 6)		
AM	SNIPER SYSTEM SHOOT.	MW-150
PM	SNIPER SYSTEM SHOOT.	MW-150
PM	SNIPER SYSTEM MOVING TARGET SHOOT.	MW-150
PM	DEBRIEF.	
TD-18 (MCMWTC LIVE-FIRE RANGE/S Day 7)		
AM	SNIPER SYSTEM SHOOT.	MW-150
AM-PM	SNIPER SYSTEM MOVING TARGET SHOOT.	MW-150
	SNIPER SYSTEM MOVING TARGET SHOOT.	MW-150
PM	SNIPER SYSTEM NIGHT SHOOT / NIGHT MOVING TARGET SHOOT.	MW-150
PM	DEBRIEF.	
TD-19 (MCMWTC LIVE-FIRE RANGE/S DAY 8)		
AM	SNIPER SYSTEM SHOOT.	
PM	RANGE CLEAN UP.	

TD-20 (MCMWTC LIVE-FIRE RANGE/S DAY 9)		
AM	LOAD VEHICLES.	
AM	MOVEMENT TO LBC.	ADMIN 04
TD-21		
AM	ARMORY DE-ISSUE.	
AM	END OF COURSE SURVEY.	ADMIN 03
PM	IIF TURN-IN.	ADMIN 03
PM	ROPE ROOM DE-ISSUE.	ADMIN 03
TD-22		
AM	MISSION PLANNING CONSIDERATION AND DEBRIEF.	
AM	PROCUREMENT / T/O CONSIDERATIONS.	
PM	LEARNER DISC WALKTHROUGH.	
TD-23		
AM	GRADUATION PREPARATION/GRADUATION.	
AM	DEPART FOR AIRPORT.	

7. Mandatory Readings: There are no mandatory pre-coursework or readings.

8. Recommended Readings:

Camouflage SOP: A Guide to Reduce Physical Signature Under UAS
[camouflage sop | Search Results | 2nd Battalion, 5th Marines \(2ndbn5thmar.com\)](#)

EP EMCON SOP: A Guide to Reduce Technical Signature
[ep emcon sop | Search Results | 2nd Battalion, 5th Marines \(2ndbn5thmar.com\)](#)

Mountaineering: The Freedom of the Hills, Paperback – August 25, 2010

The White Sniper: Simo Häyhä, by Tapio Saarelainen-Jan 10, 2020

Modern Advancements in Long Range Shooting: Volume 1-by Bryan Litz

One Shot - One Kill - by Charles W. Sasser, Craig Roberts

Mountain Scout Sniper Course Gear List

Required Administration		
Item	QTY	Note
Reporting Orders	1	
Command Screening Checklist	1	
Basic Sniper Certificate	1	
Identification Card and ID Tags	1	

Gear and Equipment		
Item	QTY	Note
Ruck	1	
Assault Pack	1	
Sleeping Bag	1	
Bivy Sack	1	
ISO Mat	1	
Tarp	1	
Poncho Liner	1	
Waterproofing Bags	2	
Ability to Carry 6 Quarts of Water	1	
Water Filtration System	1	
Bump Helmet (if available) or Ballistic Helmet	1	
Chest Rig/LBV	1	
Pistol Belt	1	
Ghillie Suit/Cobrahood	1	
Field Attire/Boots	1	
IFAK	1	
Ear Protection	1	
Ballistic Rated Eye Protection (Dark & Clear)	1	
Shooting Gloves	1	
Shooting Support Bag	1	
Arm Band/QB Sleeve for DOPE and Wind Cards	1	
Shooting Databook w/Calculator	1	
Sketch Kit w/Range Cards	1	

Uniform Items		
Item	QTY	Note
Utilities - MARPAT Woodland (Field)	2	or Equivalent
Utilities - MARPAT Woodland (Garrison)	1	or Equivalent
GoreTex Top/Bottom - MARPAT Woodland	1	or Equivalent
Garrison Cover - MARPAT Woodland	1	or Equivalent
Boonie Cover - MARPAT Woodland	1	or Equivalent
Rank Insignia	2	
Boot Socks	6	Recommend Wool
PT Gear	1	
USMC Boots	1	
PolyPro Top/Bottom, Set	2	
Grid Fleece Top/Bottom, Set	1	
ECW (Happy) Parka	1	MWTC IIF
ECW (Happy) Trousers	1	MWTC IIF
ECW (Happy) Booties	1	MWTC IIF
ECW Mittens (Outdoor Research)	1	MWTC IIF
Neck Gaiter	1	
Fleece Cap	1	
Finger Gloves, Insulated	1	MWTC IIF
Contact Gloves, (Non-Cotton)	2	MWTC IIF
3/4 Gaiters (Outdoor Research)	1	MWTC IIF
Balaclava	1	MWTC IIF

Hygiene Kit		
Item	QTY	Note
Tooth Brush	1	
Tooth Paste	1	
Foot Care Products	1	
Razor	1	
Shaving Cream	1	
Chapstick	2	
Sunscreen	1	
Towel	1	
Shower Shoes/Crocs	1	

Miscellaneous Items		
Item	QTY	Note
Note Taking Material	1	
Map Pens & Paint Pen	1	
Protractor	2	
Headlamp	1	
Knife or Multi-tool	1	
550 Cord	100ft	
Camo Face Paint	1	
Combination Lock	2	
Civilian Attire	2	
Watch	1	
Whistle	1	
Sewing Kit	1	
Linen	1	
Batteries (for required gear)	1	
Personal Electronic Device or Thumbdrive	1	For Electronic Publications

Weapons and Optics		
Item	QTY	Note
Carbine/5.56 Platform (Current LTI/PFI) & 6 Magazines	1	
Long Rifle/.308 Platform (Current LTI/PFI)	1	
Pistol/9mm Platform (Current LTI/PFI), Holster & 3 Magazine	1	
Kestrel (1x Per Shooting Pair if from Same Unit)	1	
Slings (Long Rifle & Service Rifle)	1	
Shooting Tripod with Hogsaddle or Equivalent	1	
AN/PVS-27MUNS or AN/PVS-22UNS/INOD	1	
Spotting Scope (1x Per Shooting Pair if from Same Unit)	1	
Range Finder	1	
NVG w/SL-3	1	
Compass	1	
Cleaning Kit (Long Rifle, Carbine, Pistol, Optic)	1	

Seasonal FFP		
Item	QTY	Note
Cammie Netting/Veg Blanket	1	
Spider Mesh	1	
White Sheet	1	
White Mesh Laundry Bag	1	
White Medical Tape	1	

Full IIF Issue can be drawn at MWTC. GEAR CANNOT BE DOUBLE ISSUED IF ALREADY ISSUED BY PARENT COMMAND. Students must contact Course Chief at 760-932-1458 (or provided email) at least one week prior to report date with any gear questions/considerations.



Mountain Medicine (Expeditionary Medicine and Evacuation Course) Program of Study M24KAR1

1. Learning Program Overview: This learning program is designed to educate learners to a high standard on technical and medical considerations unique to mountainous environments. The course covers the diagnosis, treatment, prevention of high altitude and cold weather-related illnesses and injuries, technical casualty evacuation techniques, movement, bivouac, and leadership skills in austere environments. The focus of classroom instruction and field mentoring is placed on enhancing the learners' medical knowledge base, clinical competence, self-confidence, and individual resourcefulness.

2. Course Description: This is a 21-day course involving both classroom and field instruction including high-risk training in rappelling, hoist operations, high-angle rescue, and stream crossing techniques. The classroom phase lasts one week and focuses on expanding medical understanding of wilderness and environmental medicine topics as well as providing Pre-Environmental Training (PET) on techniques and procedures necessary for mountainous operations. The field phase covers the next two weeks and focuses on instructing and employing mountainous, compartmentalized, and high-angle casualty rescue and movement techniques as well as applying the medical knowledge from the classroom phase in a field setting. The course culminates with a final field exercise (FEX) where learners will demonstrate the application of knowledge from both the classroom and field phases in various scenarios.

3. Program Outcomes: This learning program produces learner graduates with advanced medical, technical, and field skills necessary to provide medical treatment and casualty evacuation support during combat operations in austere environments and compartmentalized, mountainous terrain.

Phase I: PET. This phase is oriented on expanding medical understanding of wilderness and environmental medicine topics as well as an understanding of mountainous terrain, weather, the environment, leadership challenges, and confidence in cold weather clothing and equipment.

Phase II: Practical Application of Medical & Technical Skills. In this phase, learners will focus on utilizing the medical and technical skills from the previous phase, however, transferred into a field environment. Rope systems and casualty movement techniques are practiced and utilized in an austere, mountainous environment.

Phase III: FEX. Learners will demonstrate knot, SKEDCO Litter System, rope system proficiency, medical assessment, treatment, prolonged patient field care, and casualty evacuation in this environment.

4. Target Population Description: Active Duty and Reserve Navy Line Corpsmen or other Joint or Allied equivalent medical assets operating in support of Ground Combat Elements. Open to Marines who have completed Combat Life Saver/Tactical Combat Casualty Care and other operational non-medical personnel and Medical Staff Officers as course capacity allows.

5. Participation & Assessments: Due to the depth of, and likelihood of exposure to new knowledge and skills throughout this course, participation is required with successful completion of all successive assessments as they build upon and touch back through to previous topics. Environment, planning, technical, and field training phases of the course are evaluated through assessments (inclusive of performance, written, and verbal methods).

Scope of Evaluation: Written and performance examinations are the two types of evaluations used to determine the event, phase, and course completion in the Mountain Medicine Course. Objectives

and outcomes are measured by a performance examination requiring individuals to perform the task (under conditions similar to those in a combat environment) or by written examination requiring the individual to demonstrate their ability to retain and apply critical knowledge.

Written Examination: A written examination consists of test items assigned to one or more terminal learning objectives or outcomes. The types of test items on a written examination may consist of open-ended, short answer, or multiple-choice questions to demonstrate understanding and application of the topics. Individuals are provided adequate study time prior to the administration of a written examination.

Performance Examination: There are two types of performance examinations; they are product and process examinations. Each of the two types of performance examinations are used to demonstrate proficiency of performance outcomes. Product examination is used to assess an outcome when only the final product or end result need be evaluated. Process examination is used to evaluate an outcome when both the end result and the process require assessment. Each of the performance examinations assess competency of performance objectives through the use of a Performance Examination Checklist (PECL) or Personal Qualification Standard (PQS). Both aim to develop the retention of knowledge and applications across various scenarios and are designed to demonstrate understanding and competence of the outcome. Individuals are provided ample time for practical application prior to the administration of a performance examination.

- PECL-assessed skills include knots, rope anchors, the SKEDCO Litter System, and construction of the Raise-and-Lower System.
- PQS-assessed skills include Operational medical briefs, rappelling, Leader Pick-Off Rescue, and execution of roles during the Raise and Lower system.

Course Completion Criteria: A learner is considered to have completed the learning program when the objectives and or outcomes have been completed to standard. Failure to demonstrate proficiency of an objective or outcome in the individual's first attempt results in the individual receiving additional instruction and an additional opportunity to demonstrate proficiency. Failure in the individual's second attempt results in the referral to an Academic Review Board to determine the follow-on course of action.

6. AARs: Informal reviews by training day, completion of phases, and in-stride/by event are conducted to facilitate learning and refinement of the learning program. Specifically, discussions after Phases II & III are aimed at solidifying proficiency with the learning outcomes and objectives.

7. Schedule: (am/pm format by day with general outcomes).

Red indicates High Risk Training

Phase I: Administrative & PET		
TD-1		
AM	COURSE OVERVIEW, AND ADMINISTRATIVE IN PROCESSING. Gear Issue, Warfighting Load Requirements. Learners understand the limitations and capabilities of their equipment in a mountainous environment.	ADMIN 01,02,03, 04, 05 MW-011
PM	CLASSES ON MOUNTAIN LEADERSHIP, SAFETY, AND WEATHER. Learners will understand the PET considerations in this environment for follow on application during the course. Knot familiarization will provide the foundation for later development & applications during Phases II & III.	MW- 001,002, 004
TD-2		

AM	INTRODUCTION TO KNOTS, TCCC/PCC OVERVIEW. Knot familiarization will provide the foundation for later development & applications during Phases II & III. Learners gain increased understanding of medical care in this environment and methods to support casualties & movement.	MW-012
PM	MEDICAL CAPABILITIES, DAMAGE CONTROL, SHOCK, CHEST, AND ABDOMINAL INJURIES. Learners gain increased understanding of medical care in this environment and methods to support casualties & movement.	MW-200,205,228,
TD-3		
AM	PRACTICE KNOTS AND INTRO TO SKEDCO LITTER SYSTEM. Learners will refine knot tying techniques, understand litter system employment, and utilize knots in conjunction with the litter system. ACCLIMATIZATION AND HIGH-ALTITUDE ILLNESSES. Learners understand acclimatization considerations in a mountainous environment and prevention, treatment, and management of high-altitude illnesses.	MW-214
PM	ZOONOTIC INJURIES, ENVENOMATION, POISONING. Learners identify and understand the prevention, treatment, and management of various physiological reactions.	MW-208,225
TD-4		
AM	INTRODUCTION TO ANCHORS. KNOTS PRACTICE AND SKEDCO LITTER SYSTEM. Learners apply knots into anchors and refine knot and SKEDCO techniques proficiency. HEAT AND HYDRATION, WATER PROCUREMENT CLASS. Learners gain an increased understanding of heat related injuries, treatment, and prevention. Learners understand and apply methods for procuring water from various sources.	MW-012,213 KNOT-PA SKED-PA
PM	INTRODUCTION TO ANCHORS. KNOTS PRACTICE AND SKEDCO LITTER SYSTEM. Learners apply knots into anchors and refine knot and SKEDCO techniques proficiency. Hypothermia, Submersion, Freezing and Near Freezing Injuries. Learners gain an increased understanding of cold related injuries, treatment, and prevention.	MW-012,034,215,230 KNOT-PA SKED-PA
TD-5		
AM	ALLERGIES AND ANAPHYLAXIS, HEAD AND NEUROLOGIC INJURIES. Learners identify and understand the prevention, treatment, and management of various physiological reactions.	MW-201,221,222
PM	WILDERNESS WOUND MANAGEMENT, LIGHTNING, AND SPLINTING / ORTHOPEDIC INJURIES. Learners will learn how to properly splint and dress wounds in an austere environment as well as considerations for lightning and the injuries associated with it.	MW-234
TD-6		
AM	CAPABILITIES AND LIMITATIONS OF AIRCRAFT IN A HIGH-ALTITUDE ENVIRONMENT. HOIST OPERATIONS. Learners will gain knowledge on Aircraft Capabilities in a high-altitude environment. Learners will conduct hoist operations utilizing air asset at the Expeditionary Airfield.	MW-235
PM	PRACTICE KNOTS, SKEDCO AND ANCHORS. Learners will continually refine rope management skills.	MW-012 KNOT-PA SKED-PA
TD-7		
AM	HIKE TO LEAVITT TRAINING AREA (LTA). PERFORMANCE EVALUATION ON KNOTS AND SKEDCO LITTER SYSTEM. ~5km movement.	MW-012 EXAM-

		KNOTS ADMIN-06
PM	ROPE THEORY AND CORDAGE FIBER PROPERTIES, RAISE AND LOWER SYSTEM INTRODUCTION, HIKE BACK TO LBC. Learners will learn the safety factors, capabilities and limitations of their ropes and cordage as well as constructing systems for movement in the mountains.	MW-012 MW-RT
TD-8		
AM	Performance evaluation (P2) on knots and SKEDCO litter system. Practice on anchors and systems.	EXAM- KNOTS EXAM- SKED
PM	WRITTEN EXAMINATION REVIEW AND LEARNER SELF-STUDY. Learners have the opportunity to work with facilitators refining understanding of topics from the test.	EXAM- WRITTEN
TD-9		
AM	WRITTEN EXAMINATION. PRACTICE SYSTEMS.	EXAM- WRITTEN
PM	PERFORMANCE EVALUATIONS ON SYSTEMS.	EXAM-RT
TD-10		
AM-PM	SELF-STUDY AND PRACTICE WITH FACILITATORS.	
Phase II: Field Phase / Practical Application of Medical and Technical Skills		
TD-11		
AM	HIKE TO LTA. Demonstration and Instruction of how to conduct rappels utilizing the military rappel seat. Ground school instruction for familiarization and practice. Live rappels conducted off the cliff face.	ADMIN-06 MW-040
PM	DEMONSTRATION AND INSTRUCTION OF HOW TO CONDUCT DIRECT AND EXTENDED RAPPELS. Ground school instruction for familiarization and practice. Live direct and extended rappels. P2 performance evaluation on systems.	MW-040 EXAM-RT
TD-12		
AM	FACILITATOR DEMONSTRATION AND LEARNER PRACTICAL APPLICATION OF TWO ROPE RETRIEVABLE RAPPEL.	MW-RT
PM	DEMONSTRATION AND INSTRUCTION ON HOW TO RAISE AND LOWER A CASUALTY AND ATTENDANTS ON 3RD AND 4TH CLASS TERRAIN. Medical CASEVAC scenario.	MW-038
TD-13		
AM-PM	PERFORMANCE EVALUATION TWO ROPE RETRIEVABLE. Demonstration and instruction on how to raise and lower a casualty on 5th class terrain followed by practical application.	EXAM-RT
PM	PATIENT SCENARIO/ MOVEMENT TO BIG FACE UTILIZING SYSTEMS LEARNED.	MW-224
TD-14		
AM-PM	PATIENT MOVEMENT TO LTA FOLLOWED BY P2 TWO ROPE RETRIEVABLE. Class on Mountain Survival considerations and Stream Crossing considerations.	EXAM-RT MW-125, 033
TD-15		

AM-PM	HIKE BACK TO LBC FOLLOWED BY FEX BRIEF.	ADMIN-06
Phase III: FEX		
TD-16		
AM-PM	SELF-STUDY AND PRACTICE WITH FACILITATORS.	
TD-17		
AM-PM	TRANSPORTATION TO 8K WALL. Long range patient (PT) movement to LZ Bluebird (~5km) followed by Hoist OPS. PCC application.	ADMIN-06 FEX-X
TD-18		
AM-PM	ADDITIONAL CASUALTIES RECEIVED ALONG WITH PT MOVEMENT AND HOIST OPS. PCC application.	MW-235 FEX-X
TD-19		
AM-PM	PT CARE AND CASEVAC FROM LZ BLUEBIRD TO LTA. Transportation to LBC.	EXAM-PE FEX-X
TD-20		
AM-PM	GEAR TURN IN FOLLOWED BY END OF COURSE SURVEYS AND GRADUATION PRACTICE.	ADMIN-07,08,09
TD-21		
AM	SQUAD BAY INSPECTION FOLLOWED BY GRADUATION CEREMONY AND TRANSPORTATION TO RENO AIRPORT.	ADMIN-10

8. Mandatory Readings: TCCC guidelines - Deployed Medicine

<http://deployedmedicine.com>

9. Recommended Readings:

Deployed Medicine Clinical Practice Guidelines (CPGs)

<https://deployedmedicine.allogy.net/learner/collections/29>

Mountain Medicine Gear List

REQUIRED ADMIN		
Reporting Orders	1	
Command Screening Checklist	1	
Identification Card	1	

Gear and Equipment		
Item	QTY	Note
USMC Pack w/WP liner	1	
Assault Pack w/WP liner	1	
Sleeping Bag - Tan	1	
Sleeping Bag - Black	1	Optional
Bivy Sack	1	
ISO Mat	1	
MARPAT Tarp	1	
Poncho Liner	1	
Canteen/Nalgene	2	
Canteen/Nalgene Carrier	2	
Canteen/Nalgene Cup	1	
Hydration Bladder - 3Liter	N/A	
Hydration Carrier	N/A	
IFAK	1	
Chest Rig/LBV/Belt with Mag pouches	1	Optional

Uniform Items		
Item	QTY	Note
Utilities - MARPAT Woodland	2	No FROG
GoreTex Top/Bottom - MARPAT Woodland	1	
Garrison Cover - MARPAT Woodland	1	
Boonie Cover - MARPAT Woodland	1	
Skivvie Shirt	3	
Underwear	6	
Socks, Brown, Pair	6	
Socks, White, Pair	1	
USMC Boots	1	
PolyPro Top/Bottom, Set	N/A	
Grid Fleece Top/Bottom, Set	1	
ECW (Happy) Parka	N/A	
ECW (Happy) Trousers	N/A	
ECW (Happy) Booties	N/A	
ECW Mittens (Outdoor Research)	N/A	
Neck Gaiter	N/A	
Fleece Cap	1	
Finger Gloves, Insulated	1	
Contact Gloves, (Non-Cotton)	N/A	
3/4 Gaiters (Outdoor Research)	N/A	
Balaclava	N/A	
USMC Running Suit/Sweats	1	
PT Shorts	1	
PT Shoes	1	

Hygiene Kit		
Item	QTY	Note
Tooth Brush	1	
Tooth Paste	1	
Floss	1	
Razor w/Extra Blades	1	
Shaving Cream	1	
Chapstick	2	
Sunscreen	1	
Towel	2	
Shower Shoes	1	

MISC		
Item	QTY	Note
Notebook	1	For the Classroom
Write-in-the-rain	1	For The Field
Pen	2	
Pencil	2	Winter Courses
Highlighter	1	
Map Pen Set w/Eraser Pen	1	
Protractor	1	
Combination Lock	2	
Proper Civilian Attire	1	
Eye Protection w/Clear and Dark Lenses	1	
Red Lens Flashlight or Headlamp W/ Batteries	1	
Knife or Multi-tool	1	
550 Cord	50ft	
Reflective Belt	1	
Laundry Bag	1	
Personal Electronic Devices (Laptop, Tablet, Cell Phone)		For Electronic Publications

Weapons and Optics		
Item	QTY	Note
Service Weapon w/ 6x Magazines	N/A	
Optics (Optional)	N/A	
NVG	N/A	
Kevlar w/NVG Mount	N/A	
Compass	N/A	

Notes: MCMWTC IIF will only supply items if you have not been issued from you parent unit IIF.



Cold Weather Medicine Course Program of Study M24WAC1

1. Learning Program Overview: This learning program is designed to educate learners to a high standard on technical and medical considerations unique to mountainous and cold weather environments. The course covers the diagnosis, treatment, and prevention of high altitude and cold

weather-related illnesses and injuries, technical casualty evacuation techniques, movement, bivouac, and leadership skills in high altitude, compartmentalized, and snow-covered terrain. The focus of classroom instruction and field mentoring is placed on enhancing the learners' medical knowledge base, clinical competence, self-confidence, and individual resourcefulness.

2. Course Description: This is a 20-day course involving both classroom and field instruction including high-risk training in cold water immersion, hoist operations, and steep earth patient movement techniques. The classroom phase lasts one week and focuses on expanding medical understanding of wilderness and environmental medicine topics with a focus on cold weather injuries and illnesses. The classroom phase also covers Pre-Environmental Training (PET) on field techniques and procedures necessary for cold weather operations. The field phase (two weeks) focuses on instructing, sustainment, movement, casualty care and transport in a high altitude/snow-covered environment as well as applying the medical knowledge from the classroom phase in a field setting. The course culminates with a final field exercise (FEX) where learners will demonstrate the application of knowledge from both the classroom and field phases.

3. Program Outcomes: This learning program produces learner graduates with advanced medical, technical, and field skills necessary to provide medical treatment and casualty evacuation (CASEVAC) support during combat operations in austere, cold weather, snow-covered, and mountainous terrain.

Phase I: PET. This phase is oriented on expanding medical understanding of wilderness and environmental medicine topics as well as an understanding of mountainous terrain, weather, the environment, and confidence in cold weather clothing and equipment.

Phase II: Practical Application of Medical & Technical Skills. In this phase, learners will focus on utilizing the medical and technical skills from the previous phase, however, transferred into a field environment. Rope systems and casualty movement techniques are practiced and utilized in an austere, snow-covered, and mountainous environment.

Phase III: FEX. Learners will demonstrate knot, SKEDCO Litter System, rope system proficiency, medical assessment, treatment, intro to prolonged field care, and CASEVAC in this environment.

4. Target Population Description: Priority: Active Duty and Reserve Navy L03A Corpsmen or other Joint or Allied equivalent medical assets operating in support of Ground Combat Elements. Secondary: Any other NEC Corpsmen, open to Marines who completed Combat Life Saver/Tactical Combat Casualty Care training, and other operational non-medical personnel and Medical Staff Officers as course capacity allows.

5. Participation & Assessments: Due to the depth of exposure to new knowledge and skills throughout this course, participation is required with successful completion of all assessments as they build upon previous topics. Environment, planning, technical, and field training phases of the course are evaluated through written and practical assessments.

Scope of Evaluation: There are two types of evaluation used to determine the event, phase, and course completion in the Cold Weather Medicine Course, written examinations, and performance

examinations (product and process examinations). Objectives and outcomes are measured by performance examination requiring individuals to perform the task (under conditions similar to those in a combat environment) or by written examination requiring the individual to demonstrate their ability to retain and apply critical knowledge. Product examination is used to assess an objective or outcome when only the final product or end-result need be evaluated. Process examination is used to evaluate an objective or outcome when both the end-result and the process require assessment.

Written Examination: A written examination consists of test items assigned to one or more terminal learning objectives or outcomes. The types of test items on a written examination may consist of open-ended, short answer, or multiple-choice questions to demonstrate understanding and application of the topics. Individuals are provided adequate study time prior to the administration of a written examination.

Performance Examination: Each of the performance examinations assess competency of performance objectives through the use of a Performance Examination Checklist (PECL) or Personal Qualification Standard (PQS). Both aim to develop the retention of knowledge and applications across various scenarios and are designed to demonstrate understanding and competence of the outcome. Individuals are provided ample time for practical application prior to the administration of a performance examination.

- PECL-assessed skills include Knots, rope anchors, SKEDCO Litter System, and construction of the Raise-and-Lower System.
- PQS-assessed skills include Operational medical briefs, avalanche rescue, and patient packaging.

6. AARs: Informal reviews by training day, completion of phases, and in-stride/by event are conducted to facilitate learning and refinement of the learning program. Specifically, discussions after Phases II & III are aimed at solidifying proficiency with the learning outcomes and objectives.

7. Schedule: (am/pm format by day with general outcomes).

Red indicates High Risk Training

Phase I: Administrative & PET		
TD-1		
AM	GEAR ISSUE. Course Overview, and Administrative in processing.	ADMIN-01,02,03,04,05
PM	PERSONAL COLD WEATHER CLOTHING, WARFIGHTING LOAD REQUIREMENTS, INTRO TO KNOTS. Learners understand the limitations and capabilities of their equipment in a mountainous, cold weather environment. Knot familiarization will provide the foundation for later development & applications during Phases II & III.	MW-010,011,012
TD-2		
AM	CLASSES ON MOUNTAIN LEADERSHIP, SAFETY, AND WEATHER, PRACTICE KNOTS. Learners will understand the PET considerations in this environment for follow on application during the course.	MW-001,003,004,012

PM	ACCLIMATIZATION, HIGH ALTITUDE ILLNESSES. Learners understand acclimatization considerations in a mountainous environment and prevention, treatment, and management of high-altitude illnesses.	MW-214
TD-3		
AM	KNOTS PRACTICE, AND INTRODUCTION TO SKEDCO LITTER SYSTEM. Learners will refine knot-tying techniques, understand litter system employment, and utilize knots in conjunction with the litter system. TCCC OVERVIEW, WILDERNESS WOUND MANAGEMENT, SHOCK, WHOLE BLOOD TRANSFUSIONS. Learners will gain increased understanding of medical care in this environment and methods to support casualties & movement.	KNOT-PA MW-012,228
PM	ORTHOPEDIC, CHEST, ABDOMINAL, AND NEUROLOGIC INJURIES. Learners will gain an increased understanding of human anatomy and competence in assessing and treating traumatic injuries.	MW-200, 205, 209, 222
TD-4		
AM	INTRODUCTION TO ANCHORS AND RAISE AND LOWER SYSTEM. Practice knots and SKEDCO litter system Learners apply knots into anchors and refine knot and SKEDCO techniques proficiency. HYPOTHERMIA, SUBMERSION, FREEZING AND NEAR FREEZING INJURIES. Learners will gain an increased understanding of cold weather and cold water related injuries, treatment, and prevention.	MW-038, 210, 215, 230
PM	HEAT AND HYDRATION. Learners gain an increased understanding of heat related injuries, treatment, and prevention.	MW-213
TD-5		
AM	HYPOTHERMIA LAB. Learners experience induced hypothermia and conduct active rewarming techniques with issued cold weather clothing and equipment.	MW-215
PM	MARINE CORPS COLD WEATHER INFANTRY KIT (MCCWIK), SMALL UNIT EXPEDITIONARY STOVE (SUES), EXTREME COLD WEATHER (4-MAN) TENT OPERATIONAL CHECK, PRACTICE KNOTS, ANCHORS, RAISE AND LOWER SYSTEM AND SKEDCO. Continued practice of knots, anchors, raise and lower, and SKEDCO litter to prepare for field phase.	MW-012, 015,016, 068 SKED-PA
TD-6		
AM	PRACTICE KNOTS, ANCHORS, RAISE AND LOWER SYSTEM AND SKEDCO. Continued practice of knots, anchors, raise and lower, and SKEDCO litter to prepare for field phase. POISONING, ALLERGIES AND ANAPHYLAXIS. Learners identify and understand the prevention, treatment, and management of various physiological reactions. Reflection on previous day.	MW-012, 038,201, 225
PM	WATER PROCUREMENT AND TREATMENT, TRIAGE METHODS AND FUNDAMENTALS, INTRODUCTION TO SURVIVAL. Learners will gain an increased knowledge in water procurement and treatment, patient triage, survival techniques and equipment.	MW-125 130,217
TD-7		

AM	PERFORMANCE EVALUATION ON KNOTS, AND SKEDCO LITTER.	EXAM-RT, EXAM- SKED
PM	PERFORMANCE EVALUATION ON ANCHORS AND RAISE AND LOWER SYSTEM.	EXAM-RT
TD-8		
AM	PERFORMANCE EVALUATION (P2) ON KNOTS, SKEDCO LITTER, ANCHORS AND RAISE AND LOWER SYSTEM.	EXAM-RT EXAM- SKED
PM	TRAVEL IN AVALANCHE TERRAIN AND RESCUE TECHNIQUES, BEACON FAMILIARIZATION. Learners will gain an increased knowledge in identifying, maneuvering and rescue techniques in avalanche terrain.	MW-099
TD-9		
AM	TUCKER TRANSIT TO LEAVITT LAKE. Travel in avalanche terrain, avalanche rescue and beacon check practical application.	ADMIN-06
PM	MOUNTAIN CASEVAC CLASS AND PRACTICAL APPLICATION AND TUCKER TRANSIT TO LOWER BASE.	MW-031
TD-10		
AM-PM	SELF-STUDY AND PRACTICE WITH FACILITATORS.	
Phase II: Practical Application of Medical and Technical Skills		
TD-11		
AM	CAPABILITIES AND LIMITATIONS OF AIRCRAFT IN A HIGH-ALTITUDE ENVIRONMENT. HOIST OPERATIONS. Learners will gain knowledge on Aircraft Capabilities in a high-altitude environment. Learners will conduct hoist operations utilizing air asset at the Expeditionary Airfield.	MW-235
PM	WRITTEN EXAM.	EXAM- WRITTEN
TD-12		
AM	TUCKER TRANSIT TO TRAINING AREAS. Military snowshoe movement to objective.	ADMIN-06
PM	TRACK PLAN/ ESTABLISH BIVOUAC SITE CLASS AND PRACTICAL APPLICATION. Learners will learn and apply principles of track plan establishment and bivouac considerations in a snow-covered environment.	MW-063
TD-13		
AM	SNOWSHOE TOUR FOLLOWED BY PRACTICAL APPLICATION OF AVALANCHE RESCUE, EMPLOY HYPOTHERMIA WRAPS AND WARMING STATION.	MW-018, 099
PM	RAISE AND LOWERS SYSTEM ON 3RD & 4TH CLASS TERRAIN FOLLOWED BY PATIENT MOVEMENT TO BIVOUAC SITE.	MW-038
TD-14		
AM	PYROTECHNICS CLASS. Learners will gain knowledge and familiarization on pyrotechnics utilized for marking. Class on survival considerations in this environment.	MW-125
PM	GEAR CONFIDENCE EXERCISE. Formerly known as 'survival night' this exercise encompasses Learners using their cold weather clothing and issued equipment to construct field expedient shelters.	MW-125

TD-15		
AM	GEAR CONFIDENCE EXERCISE DEBRIEF. Tucker transit back to lower base camp.	MW-125 ADMIN-06
PM	FEX BRIEF AND PREP.	
TD-16		
AM-PM	SELF-STUDY AND PRACTICE WITH FACILITATORS.	
Phase III: FEX		
TD-17		
AM-PM	TUCKER TO TRAINING AREAS AND SNOWSHOE MOVEMENT TO OBJECTIVE. Patient Scenarios. Learners will demonstrate competency in patient assessment, treatment, and management in a cold weather environment. Hoist Operations. Learners will conduct hoist operations utilizing designated air asset.	FEX-X EXAM-PE MW-235
TD-18		
AM-PM	PATIENT SCENARIOS. Learners will demonstrate competency in patient assessment, treatment, and management in a cold weather environment. Tucker transit to Lower Base Camp.	FEX-X EXAM-PE
TD-19		
AM	GEAR TURN-IN, END OF COURSE SURVEYS AND COURSE DEBRIEF.	ADMIN-07,08,09
PM	GRADUATION PRACTICE.	ADMIN-10
TD-20		
AM	GRADUATION CEREMONY.	ADMIN-10

8. Mandatory Readings: TCCC guidelines - Deployed Medicine

<http://deployedmedicine.com>

9. Recommended Readings

Deployed Medicine Clinical Practice Guidelines (CPGs)

<https://deployedmedicine.allogy.net/learner/collections/29>

Cold Weather Medicine Gear List

REQUIRED ADMIN		
Reporting Orders	1	
Command Screening Checklist	1	
Identification Card	1	

Gear and Equipment			
Item	QTY	Note	
USMC Pack w/WP liner	1		
Assault Pack w/WP liner	1		
Sleeping Bag - Tan	1		
Sleeping Bag - Black	1		
Bivy Sack	1		
ISO Mat	1		
MARPAT Tarp	1		
Poncho Liner	1		
Canteen/Nalgene	2		
Canteen/Nalgene Carrier	2		
Canteen/Nalgene Cup	1		
Hydration Bladder - 3Liter	N/A		
Hydration Carrier	N/A		
IFAK	1		
Chest Rig/LBV/Belt with Mag pouches	1	Optional	

Uniform Items			
Item	QTY	Note	
Utilities - MARPAT Woodland	2	No FROG	
GoreTex Top/Bottom - MARPAT Woodland	1		
Garrison Cover - MARPAT Woodland	1		
Boonie Cover - MARPAT Woodland	1		
Skivvie Shirt	3		
Underwear	6		
Socks, Brown, Pair	6	Recommend Wool	
Socks, White, Pair	1		
USMC Boots	1		
PolyPro Top/Bottom, Set	2	MCMWTC IIF	
Grid Fleece Top/Bottom, Set	1	MCMWTC IIF	
ECW (Happy) Parka	1	MCMWTC IIF	
ECW (Happy) Trousers	1	MCMWTC IIF	
ECW (Happy) Booties	1	MCMWTC IIF	
ECW Mittens (Outdoor Research)	1	MCMWTC IIF	
Neck Gaiter	1	MCMWTC IIF	
Fleece Cap	1	MCMWTC IIF	
Finger Gloves, Insulated	1	MCMWTC IIF	
Contact Gloves, (Non-Cotton)	2	MCMWTC IIF	
3/4 Gaiters (Outdoor Research)	1	MCMWTC IIF	
Balaclava	1	MCMWTC IIF	
USMC Running Suit/Sweats	1		
PT Shorts	1		
PT Shoes	1		

Hygiene Kit		
Item	QTY	Note
Tooth Brush	1	
Tooth Paste	1	
Floss	1	
Razor w/Extra Blades	1	
Shaving Cream	1	
Chapstick	2	
Sunscreen	1	
Towel	2	
Shower Shoes	1	

MISC		
Item	QTY	Note
Notebook	1	For the Classroom
Write-in-the-rain	1	For The Field
Pen	2	
Pencil	2	Winter Courses
Highlighter	1	
Map Pen Set w/Eraser Pen	1	
Protractor	1	
Combination Lock	2	
Propper Civilian Attire	1	
Eye Protection w/Clear and Dark Lenses	1	
Red Lens Flashlight or Headlamp W/ Batteries	1	
Knife or Multi-tool	1	
550 Cord	50ft	
Reflective Belt	1	
Laundry Bag	1	
Personal Electronic Devices (Laptop, Tablet, Cell Phone)		For Electronic Publications

Weapons and Optics		
Item	QTY	Note
Service Weapon w/ 6x Magazines	N/A	
Optics (Optional)	N/A	
NVG	N/A	
Kevlar w/NVG Mount	N/A	
Compass	N/A	

Notes: MCMWTC IIF will only supply items if you have not been issued from your parent unit IIF.



Horsemanship and Animal Packing Program of Study M24MMM1

1. Learning Program Overview: Horsemanship and Animal Packing is a 16-day learning program designed to provide units with a skilled core of personnel capable of working with indigenous personnel operating with riding and/or packing animals in a mountainous environment. This Learning Program covers the following warfighting functions, maneuver, logistics, and force protection. Maneuver will cover horsemanship and riding techniques; packing and transporting crew serve weapons, equipment and supplies will enable sustainment/logistics; transportation of wounded personnel will enable force protection. Learners will conduct multiple pack string and mounted/horse-borne operations covering over 115 kilometers.

2. Course Description: This course is designed to train small units in operating with indigenous personnel who ride and/or pack animals. This includes riding horses and packing animals for supporting combat operations (infiltration, exfiltration, CASEVAC, and moving weapons systems and equipment). The course subjects include animal care, anatomy of working animals, animal packing techniques, casualty evacuation techniques, animal first aid, bivouac/harbor site considerations, and horsemanship techniques.

3. Program Outcomes: This learning program is oriented on facilitating for the learner (SOF population is the target audience) to become more effective as small units and as leaders in a mountainous environment. Learners are taught the necessary skills to enable them to ride horses, load pack animals, and maintain animals in support of military applications.

Phase I: Pre-Environmental Training. Pre-Environmental Training (PET) will provide learners with an understanding of mountainous terrain, weather, safety, leadership challenges, health, and the environment; learners will understand materiel, equipment, and techniques and procedures for mitigating impacts to individuals and units in this environment.

Phase II: Pack Animal Familiarization. In this phase, learners will be introduced to the art and theory of animal packing, pack animal handling and husbandry, conformation, anatomy, animal first aid, and equipment.

Phase III: Packing. In this phase learners will be shown the basic skills of how to construct varying types of loads to transport designated equipment.

Phase IV: Horsemanship. In this phase, learners learn the fundamentals of horsemanship to conduct mounted/horse-borne operations.

Phase V: Planning & Employment. Learners demonstrate knowledge of and the abilities to plan and conduct mounted/horse-borne operations, animal procurement and inspection considerations, advanced packing concepts for alternative or field expedient means to construct loads, and casualty evacuation during field exercises.

4. Participation & Assessments: Due to the depth of and likelihood of exposure to new knowledge and skills throughout this course, participation is required with successful completion of all successive assessments as they build upon and touch back through to previous topics. Environment, planning, technical, and field training phases of the course are evaluated through assessments (inclusive of performance, written, and verbal methods).

Scope of Evaluation: Written and performance examinations are the two types of evaluations used to determine the event, phase, and course completion in Horsemanship and Animal Packing. Objectives and outcomes are measured by a performance examination requiring individuals to perform the task (under conditions similar to those in a combat environment) or by written examination requiring the individual to demonstrate their ability to retain and apply critical knowledge.

Performance Examination. There are two types of performance examinations; they are product and process examinations. Each of the two types of performance examinations are used to demonstrate proficiency of performance outcomes. Product examination is used to assess an outcome when only the final product or end result need be evaluated. Process examination is used to evaluate an outcome when both the end result and the process require assessment. This type of examination will be assessed using a performance evaluation checklist, teach back, or behaviorally anchored rating scale designed to demonstrate proficiency of the outcome. Individuals are provided ample time for practical application prior to being administered a performance examination.

Written Examination. The proficiency of outcomes is identified through the results of a written examination. A written examination consists of test items assigned to one or more outcomes. The types of test items on a written examination may be open ended questions or multiple choice. Eighty percent of the test items must be answered correctly in order to demonstrate proficiency on the test. In the event that an individual does not demonstrate proficiency on a written examination, they will be retested against a different version of the original examination. Individuals are provided adequate time for study prior to being administered a written examination.

Course Completion Criteria: A learner is considered to have completed the course when the objectives and or outcomes have been completed to standard. Failure to demonstrate proficiency of an objective or outcome in the individual's first attempt results in the individual receiving additional instruction and an additional opportunity to demonstrate proficiency. Failure to demonstrate proficiency of an objective or outcome in the individual's second attempt results in the individual being referred to an Academic Review Board to determine the follow-on course of action.

5. AARs: Informal reviews by training day, completion of phases, and in-stride/by event are conducted to facilitate learning and refinement of the learning program. Specifically, discussions after movements and during the final exercise (FEX) are aimed at solidifying proficiency with the learning outcomes and objectives.

6. Schedule: (am/pm format by day with associated general outcomes).

Phases I / II: PET / Pack Animal Familiarization		
TD-1		
AM	INTRODUCTION TO HORSEMANSHIP. Learners are introduced to the history and modern use of equines in military operations.	MW-274
PM	MOUNTAIN HEALTH AWARENESS. Learners understand impacts of the environment.	MW-002
PM	ANATOMY AND CONFORMATION. Understand and identify physical characteristics of healthy and suitable animals for animal packing and mobility.	MW-250
PM	ANIMAL FIRST AID. Understand how to diagnose common injuries/illness and treat them.	MW-251

PM	ORGANIZATION OF A PACKSTRING. Understand key billets and responsibilities.	MW-271
PM	STABLES ROUTINE. Learners are introduced to processes for stowing gear and feeding the animals. Learners will be responsible for this daily effort starting on T-3 under facilitator supervision.	MW-272
Phase III: Packing		
TD-2		
AM	GEAR PREP (SUPPLY DRAW).	ADMIN-05
AM	PREPARE ANIMALS FOR EMPLOYMENT. Learners will learn and understand the daily process for catching, grooming, and handling the animals. Learners will be responsible for this daily effort starting on T-3 under facilitator supervision.	MW-272
AM	TACK AND EQUIPMENT (SADDLING). Learners will be able to identify key components of equipment and understand broader application thereof. Demonstration and practical application of saddling an animal.	MW-273
AM	BUILDING A LOAD (MANTEE). Lesson and practical application on the Mantee Load.	MW-260
PM	HITCHES (BASKET). Demonstration of and practical application of the four types of hitches.	MW-263
PM	HITCHES (BARREL). Demonstration of and practical application of the four types of hitches.	MW-263
PM	STABLES ROUTINE.	MW-272
TD-3		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
AM	TACK AND EQUIPMENT (SADDLING/MANTEE). Demonstration and practical application (MANTEE) time prior to exam.	MW-273
AM	HITCHES (BASKET). Practical application prior to exam	MW-263
PM	PACKING AND SADDLING EXAM (SADDLING/MANTEE/BASKET).	HAPC-XP2
PM	HITCHES (BOX). Demonstration of and practical application of the four types of hitches.	MW-263
PM	MISSION PLANNING CONSIDERATIONS. Learners discuss mission specific planning considerations involving use of the equine.	
PM	NEGOTIATE OBSTACLES. Demonstration and practical application movement for negotiating obstacles.	HAPC-09
PM	STABLES ROUTINE.	MW-272
TD-4		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
AM	HITCHES (BARREL). Demonstration of and practical application of the four types of hitches.	MW-263

AM	PACKING AND HITCHES EXAM (BARREL & BOX).	HAPC-XP2
PM	HORSE-BORNE FORMATIONS/IA DRILLS. Learners will learn and discuss formations and immediate drills whilst mounted.	
PM	EQUINE NUTRITION. Learners understand nutritional requirements to promote herd health.	MW-257
PM	PATROL BASE CONSIDERATIONS. Learners will learn and discuss patrol base site selection, organization, and considerations.	MW-258
PM	STABLES ROUTINE.	MW-272
Phase IV: Horsemanship		
TD-5		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
AM	TACK AND EQUIPMENT (SADDLING AND BRIDLING). Learners learn and demonstrate how to saddle and bridle equines.	MW-273
AM-PM	BASIC HORSEMANSHIP. Learners learn fundamentals of horsemanship (groundwork, mount & dismount, control, rein manipulation)	MW-253
PM	STABLES ROUTINE.	MW-272
TD-6		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
AM-PM	FEX PRAC APP. Learners planned and led ride (with facilitator supervision) ~14km.	HAPC-FEX
AM-PM	BASIC HORSEMANSHIP. Practical application, learner led rides within training areas ~14km.	MW-253
PM	GROUNDWORK. Learners gain increased understanding of controlling the horse and work with facilitators for refinement of techniques.	MW-253
PM	STABLES ROUTINE.	MW-272
TD-7		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
AM-PM	FEX PRAC APP. Learners planned and led ride (with facilitator supervision) ~14km.	HAPC-FEX
PM	PRE-PURCHASE EXAMS/ VET CHECKS. Demonstration of a pre-purchase exam, considerations, and increased awareness for animals' suitability of use.	MW-250
PM	STABLES ROUTINE.	MW-272
TD-8		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272

AM-PM	FEX PRAC APP. Learner planned and led ride (with facilitator supervision) ~26km.	HAPC-FEX
PM	STABLES ROUTINE.	MW-272
Phase V: Planning & Employment		
TD-9		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
AM	BASIC HORSEMANSHIP. Arena refinements of techniques.	MW-253
PM	FEX PRAC APP. Practical application of previously learned packing techniques in the arena.	HAPC-FEX
PM	STABLES ROUTINE.	MW-272
TD-10		
AM	STABLES ROUTINE.	MW-272
PM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
PM	NATIVE RIDING EQUIPMENT/SPECIAL EQUIPMENT. Demonstration of native riding equipment examples and field expedient saddle construction.	MW-273
PM	ADVANCED HORSEMANSHIP / NIGHT RIDE. Learners conduct night, mounted operations.	HAPC-FEX
TD-11		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
PM	GEAR PREP.	ADMIN-05
AM	RIDING EXAM.	HAPC-XP3
PM	CASEVAC. Demonstration and practical application for CASEVAC methods utilizing equines.	MW-268
PM	STABLES ROUTINE.	MW-272
TD-12		
AM	FEX EXAM. Learner infiltration.	HAPC-XP1
AM-PM	FEX EXAM. Animal procurement and movement; bivouac routine.	HAPC-XP1
TD-13		
AM-PM	FEX EXAM. Movement to objective and bivouac routine.	HAPC-XP1

TD-14		
AM-PM	FEX EXAM. Exfiltration and debrief.	HAPC-XP1
PM	STABLES ROUTINE.	ADMIN-06
TD-15		
AM-PM	MAINTENANCE,EQUIPMENT RECOVERY, ADMINISTRATION.	ADMIN-05, 07, 08
TD-16		
AM	ADMINISTRATION & COURSE GRADUATION.	

7. Mandatory Readings: There are no mandatory pre-coursework or readings, however section 8 of the program of study details recommended MarineNet videos and courses.

8. Recommended Readings:

MCMWTC Pre-Environmental Training Horsemanship & Animal Packing, MARINENET Facilitator Led Course (Learners contact course staff to register for PET in MARINENET).

Horsemanship & Animal Packing Coursebook (available in above course).

ATP 3-18.13, Special Forces Use of Pack Animals, 2014,
[ATP 3-18.13 \(army.mil\)](http://army.mil) Limited Distributed, CAC required.

Horse Soldiers: The Extraordinary Story of a Band of US Soldiers Who Rode to Victory in Afghanistan, Doug Stanton, 2011.

Horsemanship and Animal Packing Course

REQUIRED ADMIN		
Reporting Orders	1	
Command Screening Checklist	1	
Identification Card	1	

Gear and Equipment		
Item	QTY	Note
Main Pack w/WP liner	1	or equivalent
Assault Pack w/WP liner	1	
Sleeping Bag - Tan	1	
Sleeping Bag - Black	1	
Bivy Sack	1	
ISO Mat	1	
MARPAT Tarp	1	or equivalent
Poncho Liner	1	
Canteen/Nalgene	2	
Canteen/Nalgene Carrier	2	optional
Canteen/Nalgene Cup	1	optional
Hydration Bladder - 3Liter	1	optional
Hydration Carrier	1	optional
IFAK	1	
Chest Rig/LBV/Belt with Mag pouches	1	

Uniform Items		
Item	QTY	Note
Utilities - MARPAT Woodland	2	or equivalent
GoreTex Top/Bottom - MARPAT Woodland	1	or equivalent
Garrison Cover - MARPAT Woodland	1	or equivalent
Boonie Cover - MARPAT Woodland	1	or equivalent
Skivvie Shirt	6	
Underwear	6	
Socks, Brown, Pair	6	Recommend Wool
USMC Boots	1	or equivalent
PolyPro Top/Bottom, Set	2	optional
Grid Fleece Top/Bottom, Set	1	
ECW (Happy) Parka	1	optional
ECW (Happy) Trousers	1	optional
ECW (Happy) Booties	1	optional
ECW Mittens (Outdoor Research)	1	optional
Neck Gaiter	1	optional
Fleece Cap	1	
Finger Gloves, Insulated	1	optional
Contact Gloves, (Non-Cotton)	2	optional
3/4 Gaiters (Outdoor Research)	1	optional
Balaclava	1	optional
PT Shorts	1	
PT Shoes	1	

Hygiene Kit		
Item	QTY	Note
Tooth Brush	1	
Tooth Paste	1	
Floss	1	
Razor w/Extra Blades	1	
Shaving Cream	1	
Chapstick	2	
Sunscreen	1	
Towel	1	
Shower Shoes	1	

MISC		
Item	QTY	Note
Notebook	1	For the Classroom
Pen	1	
Pencil	1	
Highlighter	1	
Map Pen Set w/Eraser Pen	1	
Protractor	1	
Combination Lock	2	
Proper Civilian Attire	3	for use during liberty hours
Eye Protection w/Clear and Dark Lenses	1	
Red Lens Flashlight or Headlamp W/ Batteries	1	
Knife or Multi-tool	1	
550 Cord	N/A	
Reflective Belt	1	
Sheets, Blanket, Pillow w/ case	N/A	
Laundry Bag	1	
Personal Electronic Devices (Laptop, Tablet, Cell Phone)		For Electronic Publications

Weapons and Optics		
Item	QTY	Note
Service Weapon w/ Sling	1	If participating in MTX
Optics (Optional)	1	
NVG	1	
Bump Helmet w/ nvg mount	1	bump helmet req for riding
Comm equipment (HF capable recommended)	x	Team internal/ tm-TOC
Mission Planning Kit	x	FEX Planning
MG's, Dummy Rockets, Sniper Rifles	x	optional
Compass	1	

Notes: MWTC IIF will only supply items if you have not been issued from your parent unit IIF. A letter of transmittal should be brought with your weapon and NVG.



Animal Packing Program of Study M24MN61

1. Learning Program Overview: Animal Packing is a 16-day learning program designed to provide MAGTF units with a core of Marines who understand and can extend their units culminating point in a mountainous environment by covering the following warfighting functions; maneuver, logistics, force protection, and command and control. Maneuver is oriented on transporting crew served weapons in support of combat operations. Transportation of supplies and equipment will enable sustainment/logistics efforts. The command-and-control warfighting function is focused on planning, organizing, conducting animal packing, and/or providing advice to senior commanders and staffs. Force protection is done through casualty evacuation techniques, animal first aid, and bivouac considerations while employing pack animals. Over the 16 days, learners will move over 70 kilometers while employing a pack string.

2. Course Description: This course is designed to aid Marine Corps units in alternative methods for transporting crew served weapons, equipment and supplies, and wounded personnel to and from areas inaccessible to mechanized and air mobile transportation. The course subjects include introduction to animal packing, planning, anatomy of pack animals, animal packing techniques, casualty evacuation techniques, animal first aid, and bivouac considerations.

3. Program Outcomes: This learning program is designed to teach learners the necessary skills to enable them to plan, organize, and conduct animal packing, and provide advice to commanders and staffs to enable operations in a mountainous environment.

Phase I: Pre-Environmental Training. Pre-Environmental Training (PET) will provide learners with an understanding of mountainous terrain, weather, safety, leadership challenges, health, and the environment; learners will understand materiel, equipment, and techniques and procedures for mitigating impacts to individuals and units in this environment.

Phase II: Pack Animal Familiarization. In this phase, learners will be introduced to the art and theory of animal packing, pack animal handling and husbandry, conformation, anatomy, animal first aid, and equipment.

Phase III: Packing. In this phase, learners will be shown the basic skills of how to construct varying types of loads to transport designated equipment.

Phase IV: Planning & Employment. Learners demonstrate knowledge of and the abilities to advise supported units, plan and conduct pack string support operations, advanced packing concepts for alternative or field expedient means to construct loads, and casualty evacuation during field exercises. During the final exercise learners will lead and conduct multiple pack string operations and move over 60 kilometers.

4. Participation & Assessments: Due to the depth of, and likelihood of exposure to new knowledge and skills throughout this course, participation is required with successful completion of all successive assessments as they build upon and touch back through to previous topics. Environment, planning, technical, and field training phases of the course are evaluated through assessments (inclusive of performance, written, and verbal methods).

Scope of Evaluation: Written and performance examinations are the two types of evaluations used to determine the event, phase, and course completion in Animal Packing. Objectives and outcomes are measured by a performance examination requiring individuals to perform the task

(under conditions similar to those in a combat environment) or by written examination requiring the individual to demonstrate their ability to retain and apply critical knowledge.

Performance Examination. There are two types of performance examinations; they are product and process examinations. Each of the two types of performance examinations are used to demonstrate proficiency of performance outcomes. Product examination is used to assess an outcome when only the final product or end result need be evaluated. Process examination is used to evaluate an outcome when both the end result and the process require assessment. This type of examination will be assessed using a performance evaluation checklist, teach back, or behaviorally anchored rating scale designed to demonstrate proficiency of the outcome. Individuals are provided ample time for practical application prior to being administered a performance examination.

Written Examination. The proficiency of outcomes is identified through the results of a written examination. A written examination consists of test items assigned to one or more outcomes. The types of test items on a written examination may be open ended questions or multiple choice. Eighty percent of the test items must be answered correctly in order to demonstrate proficiency on the test. In the event that an individual does not demonstrate proficiency on a written examination, they will be retested against a different version of the original examination. Individuals are provided adequate time for study prior to being administered a written examination.

Course Completion Criteria: A learner is considered to have completed the course when the objectives and/or outcomes have been completed to standard. Failure to demonstrate proficiency of an objective or outcome in the individual's first attempt results in the individual receiving additional instruction and an additional opportunity to demonstrate proficiency. Failure to demonstrate proficiency of an objective or outcome in the individual's second attempt results in the individual being referred to an Academic Review Board to determine the follow-on course of action.

5. AARs: Informal reviews by training day, completion of phases, and in-stride/by event are conducted to facilitate learning and refinement of the learning program. Specifically, discussions after movements and during the final exercise (FEX) are aimed at solidifying proficiency with the learning outcomes and objectives.

6. Schedule: (am/pm format by day with general outcomes)

Phase I: PET		
TD-1		
AM	SNCOIC WELCOME ABOARD/ SAFETY BRIEF.	ADMIN 01/02
AM	CO'S WELCOME ABOARD BRIEF.	ADMIN 01/02
AM	S1 COLLECT ORDERS.	ADMIN 03
AM	MOUNTAIN SAFETY. Desired outcome is learners establish a baseline proficiency and understanding of these principles in a mountainous environment.	MW- 001

AM	MOUNTAIN HEALTH AWARENESS. Learners understand impacts of the environment.	MW-002
PM	INTRODUCTION TO ANIMAL PACKING. Learners are introduced to the history and modern use of pack animal in military operations.	MW-274
PM	ANATOMY AND CONFORMATION. Understand and identify the physical characteristics of healthy and suitable animals for animal packing.	MW-250
PM	ANIMAL FIRST AID. Understand how to diagnose common injuries/illness and treat them.	MW-251
PM	ORGANIZATION OF A PACKSTRING. Understand key billets and responsibilities.	MW-271
PM	PERSONAL COLD WEATHER CLOTHING. Gear confidence and understanding.	MW-010
PM	MOUNTAIN WARFIGHTING LOAD REQUIREMENTS. Required gear for operations in mountainous and cold weather operating environments.	MW-011
PM	INTRODUCTION TO TACK AND EQUIPMENT. Learners will be able to identify key components of equipment and understand broader application thereof.	MW-273
Phase II: Pack Animal Familiarization		
TD-2		
AM	PREPARE ANIMALS FOR EMPLOYMENT. Learners will understand the daily process for catching, grooming, and handling the animals. Learners will be responsible for this daily effort starting on T-3 under facilitator supervision.	MW-272
AM	TACK AND EQUIPMENT (SADDLING). Lesson and practical application of saddling an animal.	MW-273
PM	BUILDING A LOAD (MANTEE LOAD). Lesson and practical application on the Mantee Load.	MW-260
PM	STABLES ROUTINE. Learners are introduced to processes for stowing gear and feeding the animals. Learners will be responsible for this daily effort starting on T-3 under facilitator supervision.	
Phase III: Packing		
TD-3		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
AM	TACK AND EQUIPMENT (SADDLING). Practical application time prior to exam.	MW-273
AM	BUILDING A LOAD (MANTEE). Practical application time prior to exam.	MW-260
AM-PM	BUILDING A LOAD AND <u>SADDLING EXAM</u> (SADDLING/MANTEE).	ANPK-XP
PM	HITCHES (BASKET). Demonstration of and practical application of the four types of hitches.	MW-263
PM	STABLES ROUTINE.	MW-272
TD-4		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272

AM	HITCHES (BASKET). Practical application time prior to exam.	MW-263
AM	HITCHES EXAM (BASKET).	ANPK-XP
PM	HITCHES (BARREL). Demonstration of and practical application of the four types of hitches.	MW-263
PM	STABLES ROUTINE.	MW-272
TD-5		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
AM	HITCHES (BARREL). Practical application time prior to exam.	MW-263
AM	HITCHES EXAM (BARREL).	ANPK-XP
AM	HITCHES (BOX). Demonstration of and practical application of the four types of hitches.	MW-263
PM	STABLES ROUTINE.	MW-272
TD-6		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
AM	HITCHES (BOX). Practical application time prior to exam.	MW-263
AM	HITCHES EXAM (BOX).	ANPK-XP
PM	NEGOTIATING OBSTACLES. Demonstration and practical application movement for negotiating obstacles.	MW-270
PM	STABLES ROUTINE.	MW-272
TD-7		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
AM	CASEVAC WITH PACK ANIMALS. Class on CASEVAC methods.	MW-253
PM	CASEVAC WITH PACK ANIMALS. Practical application on CASEVAC methods	MW-253
PM	NEGOTIATING OBSTACLES MOVEMENT. ~5km movement throughout the training areas to confidently negotiate obstacles with animals.	MW-270
PM	STABLES ROUTINE.	MW-272
T-8		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
AM	BIVOUAC ROUTINE (HIGHLINE). Movement and class on bivouac considerations and use of a highline.	MW-258

PM	HITCHES (ADVANCED PACKING). Class and practical application on advanced techniques to enable animal packing efforts.	MW-263
PM	STABLES ROUTINE.	MW-272
Phase IV: Planning & Employment		
TD-9		
AM	PREPARE ANIMALS FOR EMPLOYMENT.	MW-272
AM	FEX PRAC APP. Learners prepare loads for field training.	HAPC-FEX
PM	FEX. Insert movement of pack string (~8km).	ANPK-FEX
TD-10		
AM-PM	FEX. Pack string movement (~18km) & bivouac routine.	ANPK-FEX
TD-11		
AM-PM	FEX. Pack string movement (~14km) & bivouac routine.	ANPK-FEX
TD-12		
AM-PM	FEX. Pack string movement (~15km) & bivouac routine.	ANPK-FEX
TD-13		
AM-PM	FEX. Pack string movement (~8km) & bivouac routine.	ANPK-FEX
TD-14		
AM	FEX. Pack string movement (~7km).	ANPK-FEX
PM	TACK AND EQUIPMENT MAINTENANCE.	ADMIN-05
PM	STABLES ROUTINE.	MW-272
TD-15		
AM-PM	MAINTENANCE, EQUIPMENT RECOVERY, ADMINISTRATION,	ADMIN-05, 07, 08
TD-16		
AM	ADMINISTRATION & COURSE GRADUATION.	

7. Mandatory Readings: There are no mandatory pre-coursework or readings, however section 8 of the program of study details recommended MarineNet videos and courses.

8. Recommended Readings:

MWTC Pre-Environmental Training Animal Horsemanship & Packing, MARINENET Facilitator Led Course (Learners contact course staff to register for PET in MARINENET).

Animal Packing Coursebook. (Located on above MARINENET course or https://usmc.sharepoint-mil.us/sites/TECOM_MCMWTC/SitePages/Formal-Schools.aspx).

ATP 3-18.13, Special Forces Use of Pack Animals, 2014, [ATP 3-18.13 \(army.mil\)](#) Limited Distributed, CAC required.

Horse Soldiers: The Extraordinary Story of a Band of US Soldiers Who Rode to Victory in Afghanistan, Doug Stanton, 2011.

Animal Packing Course Gear List

REQUIRED ADMIN		
Reporting Orders	1	
Command Screening Checklist	1	
Identification Card	1	

Gear and Equipment		
Item	QTY	Note
USMC Pack w/WP liner	1	
Assault Pack w/WP liner	1	
Sleeping Bag - Tan	1	
Sleeping Bag - Black	1	optional
Bivy Sack	1	
ISO Mat	1	
MARPAT Tarp	1	or equivalent
Poncho Liner	1	
Canteen/Nalgene	2	
Canteen/Nalgene Carrier	2	
Canteen/Nalgene Cup	1	
Hydration Bladder - 3Liter	1	Recommended
Hydration Carrier	1	Recommended
IFAK	1	
Chest Rig/LBV/Belt with Mag pouches	1	

Uniform Items		
Item	QTY	Note
Utilities - MARPAT Woodland	2	No FROG
GoreTex Top/Bottom - MARPAT Woodland	1	
Garrison Cover - MARPAT Woodland	1	
Boonie Cover - MARPAT Woodland	1	
Skivvie Shirt	6	
Underwear	6	
Socks, Brown, Pair	6	Recommend Wool
Socks, White, Pair	N/A	
USMC Boots	1	
PolyPro Top/Bottom, Set	2	
Grid Fleece Top/Bottom, Set	1	
ECW (Happy) Parka	1	MWTC IIF
Neck Gaiter	1	
Fleece Cap	1	
Finger Gloves, Insulated	N/A	MWTC IIF
Contact Gloves, (Non-Cotton)	N/A	MWTC IIF
3/4 Gaiters (Outdoor Research)	N/A	MWTC IIF
Balaclava	N/A	
USMC Running Suit/Sweats	N/A	
PT Shorts	N/A	
PT Shoes	N/A	

Hygiene Kit		
Item	QTY	Note
Tooth Brush	1	
Tooth Paste	1	
Floss	1	
Razor w/Extra Blades	1	
Shaving Cream	1	
Chapstick	2	
Sunscreen	1	
Towel	2	
Shower Shoes	1	

MISC		
Item	QTY	Note
Notebook	1	For the Classroom
Write-in-the-rain	1	For the Field
Pen	2	
Pencil	2	Winter Courses
Highlighter	1	
Map Pen Set w/Eraser Pen	1	
Protractor	1	
Combination Lock	2	
Proper Civilian Attire	1	
Eye Protection w/Clear and Dark Lenses	1	
Red Lens Flashlight or Headlamp w/Batteries	1	
Knife or Multi-tool	1	
Mechanics Gloves	1	Optional
Laundry Bag	1	
Personal Electronic Devices (Laptop, Tablet, Cell Phone)		For Electronic Publications

Weapons and Optics		
Item	QTY	Note
Service Weapon w/ 6x magazines	1	If participating in MTX
Optics (Optional)	N/A	
Compass	1	

Notes: MCMWTC IIF will only supply items if you have not been issued from your parent unit IIF. A letter of transmittal should be brought with your weapon.



Basic Cold Weather Advisor Program of Study (M2403W1)

1. Learning Program Overview: The Basic Cold Weather Advisor (BCWA) course is a 12-day learning program designed to provide MAGTF units with a skilled core of Marines capable of serving as advisors in basic winter operations. The intent of this course is to build enablers across the MAGTF to conduct sustained operations in a cold weather operational environment.

2. Course Description: To train military personnel from any MOS and rank, to become basically qualified in winter operations. Graduates can sustain themselves, assist, and supervise others, apply considerations, techniques, sustaining routines and procedures, and advise others to enable effective operations in a cold weather, mountainous, and/or snow-covered environments. Graduates can also assist in Pre-Environmental Training (PET) to their unit.

3. Program Outcomes: Beginning with the orientation of PET, through progressive conditioning, equipment familiarization, immersion and cold weather routines during field exercises, and mobility. This learning program develops capabilities and understanding for learners to assist Mountain Leaders in training and advising required actions to sustain MAGTF operations in a cold weather environment. Learners will experience the environment and inherent challenges, employ, and maintain clothing and equipment unique to cold weather environments, understand and apply equipment confidence, sustainment requirements, conduct over-snow mobility, cold weather techniques, routines, and procedures. Graduates of this course will be capable of facilitating and advising their Marines in a cold weather environment and may assist Mountain Leaders in these efforts.

Phase I: PET. PET will provide learners with an understanding of mountainous terrain, weather, safety, leadership challenges, health, and the environment. Learners will understand materiel, equipment, and techniques and procedures for mitigating impacts to individuals and units in this environment.

Phase II: Mountain Mobility. In this phase learners will build confidence moving and sustaining efforts within the training areas; learners will also understand environmental impacts to mobility and identify opportunities to maximize efficiency.

Phase III: Field Exercise (FEX): During this phase learners will demonstrate proficiency in the various elements of fieldcraft (techniques and procedures) that they have been shown and practiced; learners will also conduct the BCWA course of fire in this environment.

4. Participation & Assessments: This learning program successively builds on previous topics and skills throughout the course. Due to the depth of knowledge and likelihood of exposure to new knowledge and skills throughout this condensed course, participation is required with successful completion of all successive activities and assessments as they build upon and touch back through to previous topics.

Scope of Evaluation: Written and performance examinations are the two types of evaluations used to determine the event, phase, and course completion in the BCWA Course. Objectives and outcomes are measured by a performance examination requiring individuals to perform the task (under conditions similar to those in a combat environment) or by written examination requiring the individual to demonstrate their ability to retain and apply critical knowledge.

Performance Examination. There are two types of performance examinations; they are product and process examinations. Each of the two types of performance examinations are used to demonstrate proficiency of performance outcomes. Product examination is used to assess an outcome when only the final product or end result need be evaluated. Process examination is used to evaluate an outcome when both the end result and the process require assessment. This type of examination will be assessed using a performance evaluation checklist, teach back, or behaviorally anchored rating scale designed to demonstrate proficiency of the outcome. Individuals are provided ample time for practical application prior to being administered a performance examination.

Written Examination. The proficiency of outcomes is identified through the results of a written examination. A written examination consists of test items assigned to one or more outcomes. The types of test items on a written examination may be open ended questions or multiple choice. Eighty percent of the test items must be answered correctly in order to demonstrate proficiency on the test. In the event that an individual does not demonstrate proficiency on a written examination, they will be retested against a different version of the original examination. Individuals are provided adequate time for study prior to being administered a written examination.

Demonstration of Course Proficiency. A learner is considered to have demonstrated adequate proficiency of the course of instruction when 100% of the outcomes have been completed to standard. Failure to demonstrate proficiency of a learning outcome in the individual's first attempt, will result in the individual receiving remedial instruction and an additional opportunity to demonstrate proficiency. Failure to demonstrate proficiency of a learning outcome in the individual's second attempt, will result in the individual's referral to an Academic Review Board to determine the future of the learner's status.

5. AARs: Informal reviews by training day, completion of phases, and in-stride/by events are conducted to facilitate learning and refinement of the learning program. Specifically, discussions after Phases II & III are aimed at solidifying proficiency with the learning outcomes and objectives.

6. Schedule: (am/pm format by day with associated general outcomes)

Phase I: PET		
TD-1		
AM	WELCOME ABOARD BRIEF/ IN PROCESSING.	ADMIN 01/02
AM	PERSONAL COLD WEATHER CLOTHING. Provide the learner with the knowledge and skills to analyze the weather conditions and select the appropriate clothing and equipment according to the environment.	MW-010
AM	IIF GEAR DRAW.	
PM	GEAR INSPECTION.	
PM	MOUNTAIN HEALTH. Learners will be taught how to help prevent, recognize, and treat various health problems that can arise in a mountainous and/or a cold weather environment.	MW-002
PM	MOUNTAIN WARFIGHTING LOAD REQUIREMENTS. Learners can successfully construct and employ the six pocket items, a survival kit, assault loads, and combat loads.	MW-011

PM	MOUNTAIN SAFETY. Learners will be able to implement the 12 principles of mountain safety (<i>BE SAFE MARINE</i>) in accordance with MCRP 12-10A.1 to sustain operations in a mountainous and/or a cold weather environment.	MW-001
TD-2		
AM	MOUNTAIN LEADERSHIP CHALLENGES. Learners will have a clear understanding of both strong and poor leadership attributes in a mountainous and/or a cold weather environment.	MW-003
AM	MOUNTAIN WEATHER. Learners will be taught and understand general weather concepts, humidity, pressure, types of winds, clouds, fronts, and indicators of weather patterns.	MW-004
AM	FROSTBITE/SKED CLASS. This frostbite PME is a lesson purpose discussion and is utilized to paint a representation to the learners and the importance of the personal cold weather clothing class and frostbite checks.	MW-002A
AM	EFFECTS OF COLD WX ON INFANTRY WEAPONS AND OPTICS. Learners will understand how cold weather can affect their units' organic weapons, how to combat its effects to make an operational weapon and execute the course of fire.	MW-101
AM	BIVOUAC IN A SNOW-COVERED ENVIRONMENT. While remembering the eight bivouac site selection considerations and the five specific areas, establish an effective bivouac.	MW-063
PM	WINTER CASUALTY EVACUATION. While remembering the eight considerations of conducting a casualty evacuation, learners can effectively prepare and transport a casualty to the next high echelon of medical care.	MW-031
PM	AVALANCHE AWARENESS. Learners have a basic understanding of avalanche prone terrain and red flag meanings. Learners will also know what to do if caught in an avalanche and how to recover a victim.	MW-099
PM	ARCTIC TENT/EXTREME COLD WX TENT SYSTEM. Learners can successfully construct/deconstruct the 15-person arctic tent and 4-person tent.	MW-015/ MW-019 SL-3- 12419A SL-3- 10228A
PM	SMALL UNIT EXPEDITIONARY STOVE (SUES / MSR STOVE). The learners will be taught about the SUES (AKA: MSR XGK), its nomenclature, and how to operate it.	TM 11799A- OR
PM	MARINE CORPS COLD WEATHER INFANTRY KIT (MCCWIK). Learners can identify and inspect for serviceability the 14 components of the MCCWIK and successfully employ them in a mountainous and/or a cold weather environment.	MW-016 SL-3- 10535A
Phase II: Mountain Mobility		
TD-3		
AM	MILITARY SNOWSHOES. Learners can explain the advantages/disadvantages of the military snowshoe and effectively employ them when needed.	MW-018
AM	MOVEMENT IN MOUNTAINOUS TERRAIN. Learners can effectively employ the eight route planning considerations of terrain, weather, avalanche, snow conditions, group's ability, tactical situation and mission, equipment, and time.	MW-032
AM	MOUNTAIN LEADER LOOP HIKE TO DEER RUN TRAIL. ~2k foot mobile movement to Deer Run Trail.	
AM	ESTABLISH SQD TENT SITE.	

PM	WATER PROCUREMENT. Learners can effectively procure potable water preventing dehydration	MW-130
PM	PET TEACHBACKS.	
PM	PET TEST REVIEW.	
PM-AM	Overnight in 15 Man Arctic Tent	
TD-4		
AM	AVALANCHE AWARENESS AND SNOW SCIENCE. Discussion on previous class and demonstration of snow pit analysis.	
AM	FOOT MOVEMENT TO LOWER BASE CAMP. Learners will conduct movement over a designated route.	MW-236
AM	IFF RETURNS/EXCHANGES.	
PM	FINAL PET STUDY REVIEW.	
PM	PET EXAM.	CWL-XW
PM	FIELD PREP.	
Phase III: FEX		
TD-5		
AM	ARMORY DRAW.	
AM	GEAR INSPECTION.	
AM	INSERT TO BIVOUC SITE. Insert via Tuckers.	
AM	ESTABLISH BIVOUC SITE. 15-Man Tents.	
PM	MCCWIK/ SUES / COLD WEATHER CLOTHING TEACHBACKS. Learners will demonstrate to facilitators a basic level of understanding of the fundamentals of movement with gear inside the MCCWIK, SUES Stove, and cold weather Clothing.	
PM	LIGHT/NOISE DISCIPLINE. Discussion and demonstration regarding the importance of noise and light discipline while in a mountainous and/or a cold weather environment.	MW-065
TD-6		
AM	FOOT MOVEMENT TO 4-MAN ECW TENT SITE.	
AM	SNOW COVER & CONCEALMENT TECHNIQUES. Learners understand and can effectively employ concealment techniques in a mountainous and/or a cold weather environment.	MW-069
PM	FIELD FORTIFICATION. Learners will have an understanding on how to construct an effective defensive position and force protection considerations in a mountainous and/or a cold weather environment.	MW-107
PM	ESTABLISH TRACK PLAN. Learners will establish a track plan with minimal aid from facilitators.	
PM	CONDUCT AVALANCHE SEARCH. Learners will conduct an avalanche search in a mountainous and/or a cold weather environment.	
TD-7		

AM	PULL POLE DEMO/PRACTICE. Learners will be shown a proper pull pole procedure and then will execute the procedure.	
AM	FOOT MOVEMENT/CASEVAC. Learners will conduct over the snow movement, encountering a CASEVAC drill mid-way through.	
AM	PET TEACHBACKS.	
PM	MCCWIK/SUES/CW CLOTHING TEACHBACKS.	
PM	TRACK PLAN IMPROVEMENT. Facilitators will guide learners on how to improve their initial track plan.	
TD-8		
AM	PULL POLE PROCEDURE. Learners will execute pull pole procedure with minimal guidance from facilitators.	
AM	FOOT MOVEMENT TO SNOW SHELTER SITE.	
AM	EXPEDIANT SNOW SHELTERS. Learners will be able to construct and maintain a manmade shelter.	MW-128
PM	REQUIREMENTS FOR OVERNIGHT GEAR CONFIDENCE. Understanding the eight considerations for overnight gear confidence, learners will know the priorities of work for the first 24 hours if placed in a unplanned overnight situation.	MW-125
PM	EMERGENCY NAVIGATION. Without traditional navigation aids, learners will have a basic understanding of celestial navigation and will move 500m to a designated location.	MW-126
PM	EMERGENCY SIGNALING. Without traditional signaling aids, learners will have a basic understanding of how to signal for recovery by visual and audible means.	MW-127
PM	EMERGENCY FIRES. Learners will have a basic understanding of how to build and maintain fires for emergency situations.	MW-129
PM	ESTABLISH SNOW SHELTERS.	
PM	SNOWSHOE TOUR AND LIGHT & NOISE DISCIPLINE DEMO. Learners will observe a track plan at night for visual and auditory signatures at various distances.	MW-065
TD-9		
AM	SHOOTING POSITIONS. Facilitators will demonstrate shooting positions utilizing ski poles and snowshoes.	
AM	DRY FIRE SHOOTING POSITIONS (PA).	
AM	SET UP RANGE. Learners will set up bullet pen/IA drill positions for the range.	
AM	RANGE BRIEF.	
PM	BZO/CONFIRMATION. Learners will BZO rifles at 25m.	
PM	OVER THE SNOW FIRING POSITIONS/IA DRILLS. Learners will demonstrate an understanding of over the snow firing positions while shooting at the different forms of snow fortifications and while manipulating their weapon.	MW-SSFIREP OS
PM	BULLET PENETRATION DEMO. Learners will observe how different field fortification methods are affected by direct fire.	MW-PENSHO OT
PM	GEAR CONFIDENCE XP BRIEF.	
PM	GEAR CONFIDENCE XP.	
TD-10		

AM	PULL POLE/SHELTER BREAK DOWN/SANITIZE TRACK PLAN.	
AM	FOOT MOVEMENT & CULMINATING EVENT.	
AM	CULMINATING EVENT. On order, learners will conduct an avalanche search and rescue and CASEVAC movement. Upon arrival to lower base camp, learners will execute rewarming techniques following submersion.	
AM	WEAPONS CLEANING/ARMORY TURN IN.	
PM	PET TEST P2 (IF NECESSARY).	
PM	COURSE GEAR INVENTORY.	
TD-11		
AM	IIF TURN IN.	
AM	END OF COURSE SURVEYS.	
PM	GRADUATION REHEARSAL.	
PM	SQUAD BAY FIELD DAY.	
TD-12		
AM	SQUAD BAY INSPECTION.	
AM	GRADUATION REHEARSAL.	
AM	GRADUATION.	

7. Mandatory Readings: There are no mandatory pre-work or readings, however section 8 of the program of study details recommends reading and additional resources before, during, or after participation in the course.

8. Recommended Readings:

Cold Weather Training- Embrace the Cold, Steven Decker, Northern Warfare Training Center, Fort Wainwright, Alaska October 2, 2017

https://www.army.mil/article/194712/cold_weather_training_embrace_the_cold

A Cold Weather LCE, the justification, By Maj Mark Wlaschin, Marine Corps Gazette, October 2017 <https://mca-marines.org/wp-content/uploads/A-Cold-Weather-LCE.pdf>

Lessons in Winter Warfare from the Ukrainian War Zone – A Case Study for America’s Arctic Pivot, By Nolan Peterson, March 13, 2021 <https://coffeordie.com/lessons-winter-warfare/>

Every Clime and Place? A call to action for all logisticians, By Maj Mark Wlaschin & Capt’s Gaetano Bettinelli and Jon Thomas, Marine Corps Gazette, April 2017

<https://mca-marines.org/wp-content/uploads/2018/12/Marine-Corps-Gazette-April-2017.pdf>

Basic Cold Weather Advisor Gear List

REQUIRED ADMIN		
Reporting Orders	1	
Command Screening Checklist	1	
Identification Card	1	

Gear and Equipment		
Item	QTY	Note
USMC Pack w/WP liner	1	
Assault Pack w/WP liner	1	
Sleeping Bag - Tan	1	
Sleeping Bag - Black	1	
Bivy Sack	1	
ISO Mat	1	
MARPAT Tarp	1	
Poncho Liner	1	
Canteen/Nalgene	2	
Canteen/Nalgene Carrier	2	
Canteen/Nalgene Cup	1	
IFAK	1	
Chest Rig/LBV/Belt with Mag pouches	1	

Uniform Items		
Item	QTY	Note
Utilities - MARPAT Woodland	1	No FROG
GoreTex Top/Bottom - MARPAT Woodland	1	
Garrison Cover - MARPAT Woodland	1	
Boonie Cover - MARPAT Woodland	1	
Skivvie Shirt	4	
Underwear	6	
Socks, Brown, Pair	6	Require Wool
Socks, White, Pair	2	
USMC Boots	1	
PolyPro Top/Bottom, Set	2	
Grid Fleece Top/Bottom, Set	1	
ECW (Happy) Parka	1	MWTC IIF
ECW (Happy) Trousers	1	MWTC IIF
ECW (Happy) Booties	1	MWTC IIF
ECW Mittens (Outdoor Research)	1	MWTC IIF
Neck Gaiter	1	
Fleece Cap	1	
Finger Gloves, Insulated	1	MWTC IIF
Contact Gloves, (Non-Cotton)	2	MWTC IIF
3/4 Gaiters (Outdoor Research)	1	MWTC IIF
Balaclava	1	
USMC Running Suit/Sweats	1	
PT Shorts	1	
PT Shoes	1	

Hygiene Kit		
Item	QTY	Note
Tooth Brush	1	
Tooth Paste	1	
Floss	1	
Razor w/Extra Blades	1	
Shaving Cream	1	
Chapstick	2	
Sunscreen	1	
Towel	2	
Shower Shoes	1	

MISC		
Item	QTY	Note
Notebook	1	For the Classroom
Write-in-the-rain	1	For The Field
Pen	2	
Pencil	2	
Highlighter	1	
Map Pen Set w/Eraser Pen	1	
Protractor	1	
Combination Lock	2	
Proper Civilian Attire	1	
Eye Protection w/Clear and Dark Lenses	1	
Red Lens Flashlight or Headlamp W/ Batteries	1	
Knife or Multi-tool	1	
550 Cord	50ft	
Reflective Belt	1	
Laundry Bag	1	
Personal Electronic Devices (Laptop, Tablet, Cell Phone)		For Electronic Publications

Weapons and Optics		
Item	QTY	Note
Service Weapon w/ 6x Magazines	1	
Optics (including NVDs)	1	

Notes: MWTC IIF will only supply items if you have not been issued from your parent unit IIF. A letter of transmittal should be brought with your weapon.



Winter Mountain Engineer Course Program of Study (M24MEW1)

1. Learning Program Overview: The Winter Mountain Engineer course is a 24-day Learning Program designed to enhance the skills of Combat Engineers operating in complex, compartmentalized, snow-covered, and mountainous environments.

2. Course Description: This learning program is designed to provide the Combat Engineer Officer and NCO academic instruction and field practical application in mountain warfare engineering tactics, techniques, and procedures; to include engineer planning considerations for maneuver and force protection warfighting functions for combat operations in complex, compartmentalized, mountainous, and snow-covered environments.

3. Program Outcomes: Graduates are capable of conducting pre-environmental and engineer specific training for their units from the Mountain Warfare Training and Readiness Manual, as well as serving as force-multipliers and advisors to their units operating in combat in steep to vertical, snow-covered, high altitude, and mountainous terrain.

Phase I: Pre-Environmental Training: Pre-Environmental Training (PET) consists of an immersive experience in understanding the nuances of mountain and cold weather operations. Learners will be taught specifics pertaining to mountain health awareness, mountain weather, cold weather clothing, warfighting loads, movement in mountainous terrain, and how to mitigate leadership challenges in this environment, as well as techniques, tactics, and procedures while operating in a mountainous environment.

Phase II: Mobility: Learners will be taught how to achieve and provide mobility to supported units through specialized mountaineering training. During this phase learners will receive in-depth instruction and practical application in snowshoe implementation, military skiing, and assessing snowpack and avalanche conditions.

Phase III: Counter-Mobility/Survivability: Learners will enhance the techniques of counter-mobility and survivability that they are already familiar with by adding in mountainous and cold weather considerations. Learners will participate in obstacle integration planning/wargaming, learn to safely and effectively operate and maintain chainsaws in a cold-weather environment, conduct fell-standing timber operations, and construct field fortifications and obstacles with logs, ice, and snow.

Phase IV: Field Exercise (FEX): As the culminating event of the training program, learners will be issued a tactical scenario complete with operations order and multiple fragmentary orders as the scenario progresses. Over the course of 72 hours of continuous operations, they will apply all the skills they have been taught and practiced since the beginning of the course in order to assess their abilities to apply the functional tenets of combat engineering in a mountainous environment.

4. Participation & Assessments: The design of this course is oriented in technical application and problem-solving. Being that the target population is NCOs and Officers in a highly technical MOS, full participation and demonstration of proficiency of events by phase is crucial to the learners' abilities to demonstrate proficiency in assessment.

Scope of Evaluation: Evaluation of the PET skillset mastery will be determined via a written examination that will take place in the transition from Phase I to Phase II. This will identify the individual learner's ability to retain and apply critical thinking and knowledge of topics covered during PET. An additional written examination will be administered that will cover specifics of avalanche hazard identification, snow-covered environment bivouac, and over-the-snow-mobility. For the

remainder of the course, evaluations will be performance exams identifying the learners' abilities to execute the desired outcome given a scenario in which the procedures taught will be graded accordingly.

Performance Examination: There are two types of performance examinations; they are product and process examinations. Each of the two types of performance examinations are used to demonstrate proficiency of performance outcomes. Product examination is used to assess an outcome when only the final product or end result need be evaluated. Process examination is used to evaluate an outcome when both the end result and the process require assessment. Examples of Product Examinations are ice, demolitions, and engineer reconnaissance. Examples of Process Examinations include any engineer reconnaissance task or mission, fell-standing timber operations, and the final exercise. For all examinations, learners will be thoroughly briefed on proficiency criteria, timelines, and remediation. Facilitator demonstration and practical application will be allotted prior to any examination.

Written Examination: The written examinations are designed to assess the learner's ability to retain the information given throughout the first and second phases of the course. Testable items will be based on terminal learning objectives and outcomes and tested in the form of an applicable scenario. The test consists of open-ended short answer questions, fill-in-the-blank, matching, and a few multiple-choice items. The test consists of a learner entering the information given in their own words and defending their answer. This method has been determined to have a positive effect on knowledge-retention, requires more dedicated study and understanding of terminal learning objectives and outcomes, and virtually eliminates the possibility of integrity violation during the test. Individuals will be made aware of the date for the written examinations at the beginning of the course. An eighty percent score must be achieved to pass both written examinations. Learners who fail to pass either of the written examinations will be allotted an additional attempt, given a new version of the test.

Demonstration of Course Proficiency: Learners meet/attain course completion criteria when all testable items are satisfied to include the written examinations and all product and process-based performance examinations to demonstrate knowledge retention. All failures to demonstrate proficiency will be allotted additional time to remediate. Learners will be formally briefed prior to the conduct of any initial or remedial examination. Failure to demonstrate successful remediation of any examination will constitute an academic drop from the course.

5. AARs: Each learner will be assigned to a squad with a faculty advisor. Individual counseling is given by the faculty advisor to each learner on the learner's proficiency during a particular phase. A dedicated period will be given at the culmination of the course to assess the class's overall proficiency of all knowledge, skills, and attitudes evaluated throughout the final exercise. The end of course survey provided by a representative from the academics section will allow for learners to give their unbiased feedback regarding the conduct of the course.

6. Schedule: (am/pm format by day with associated general outcomes).

Red indicates High Risk Training

Phase I: PET		
TD-1		
AM	WELCOME ABOARD BRIEF/ IN PROCESSING.	ADMIN-02/04
AM	MOUNTAIN SAFETY. Learners are able to identify/apply the considerations of safety while operating in a mountainous environment.	MW-001

AM	PERSONAL COLD WEATHER CLOTHING/EQUIPMENT. Learners can employ personal cold weather clothing & equipment to prevent environmental injuries, understanding the design principles of various cold weather clothing layers through application of the acronym VIP/COLD.	MW-010
AM	MOUNTAIN WARFIGHTING LOAD REQUIREMENTS. Learners are able to identify and apply specifics to packing a warfighting load in a mountainous and cold weather environment.	MW-011
PM	IIF/ROPE ROOM ISSUE. Learners receive individual/mountaineering issue.	ADMIN-05
PM	MOUNTAIN HEALTH AWARENESS. Learners will understand ways the human body generates and loses heat, cold weather injuries, and high-altitude considerations and injuries.	MW-002
PM	MILITARY SNOWSHOES. Learners are able to use military snowshoes to move through snow-covered, mountainous terrain.	MW-018
PM	MARINE CORPS COLD WEATHER INFANTRY KIT (MCCWIK). Learners are able to identify the components of the MCCWIK and successfully employ them in a mountainous/cold weather environment.	MW-016
TD-2		
AM	MOVEMENT IN MOUNTAINOUS TERRAIN. A discovery-learning method of selecting and applying terrain negotiation will be conducted. Learners will be able to identify and apply all terminal learning objectives and outcomes associated with the lesson.	MW-032
AM	WATER PROCUREMENT. Learners are able to identify suitable methods to procure water, waterborne hazards, and methods for purification.	MW-130
AM	ICE RESCUE. Learners are able self-rescue from water hazards and gain confidence in the issued equipment.	MW-064
PM	MOUNTAIN WEATHER. Learners will be able to identify and recognize weather patterns that occur in a mountainous environment.	MW-004
PM	Route selection and planning.	
PM	COLD WEATHER TENT SYSTEM. Learners receive demonstration and practical application of the 4-person Extreme Cold Weather fire team tent and the 15-person arctic shelter.	MW-015
Phase II: Mobility		
TD-3		
AM	PRE-ENVIRONMENTAL TEST. PET examination.	XW-01
AM	MOVEMENT TO LZ SPARROW. Vehicle movement to LZ Sparrow	MW-032
PM	SNOW-COVERED CONCEALMENT TECHNIQUES. Learners understand and can effectively employ concealment techniques in this environment.	MW-069
PM	BIVOUAC IN A SNOW-COVERED ENVIRONMENT. Learners will apply the eight site-selection criteria and five special use areas to conduct bivouac routine for snow-covered environments.	MW-063
PM	FROSTBITE CHECK PME. Learners will receive demonstration and instruction on how to conduct frostbite checks in a cold-weather environment.	MW-002A

PM	EVENING FIELD ROUTINE.	MW-063
PM	MOUNTAIN/COLD WEATHER (M/CW) ENGINEER CONSIDERATIONS (LIGHT AND NOISE DISCIPLINE). Learners receive a demonstration on light and noise signatures in this environment.	MW-352
TD-4		
AM	MORNING FIELD ROUTINE.	MW-063
AM	MILITARY SKI EQUIPMENT. Learners receive demonstration and class on military ski equipment and use.	MW-070
PM	DISPLACE TO NEW BIVOUAC. Learners will use all skills taught to this point to conduct a tactical movement to the destination, given a fragmentary order (~1 km).	MW-032
PM	EVENING FIELD ROUTINE.	MW-063
TD-5		
AM	MORNING FIELD ROUTINE.	MW-063
AM-PM	MILITARY SKIING. Learners will be divided into squads; faculty advisor will teach basic ski techniques.	MW-070
AM	ASSESS AVALANCHE DANGER. Learners are able to identify/apply terminal learning objectives/outcomes of avalanche danger assessment.	MW-100
AM	SNOWPACK ANALYSIS. Learners receive instruction, demonstration, and conduct practical application of snowpack analysis.	MW-100
PM	ASSESS AVALANCHE DANGER (AVALANCHE RESCUE). Learners conduct avalanche rescue practical application using specialized mountaineering equipment.	MW-100
PM	CROSSING AVALANCHE TERRAIN. Learners understand specific considerations for crossing avalanche prone slopes to mitigate danger to the element.	MW-100
PM	EVENING FIELD ROUTINE.	MW-063
TD-6		
AM	MORNING FIELD ROUTINE.	MW-063
AM-PM	DISPLACE TO LZ OWL. Learners will use all skills taught to this point to conduct a tactical movement to the destination, given a fragmentary order (~3 km).	MW-032
PM	EVENING FIELD ROUTINE.	MW-063
TD-7		
AM	MORNING FIELD ROUTINE.	MW-063
PM	MILITARY SKIING. Learners practice basic downhill ski techniques to prepare themselves for future tactical movements.	MW-070
PM	WINTER MOUNTAIN CASEVAC. Learners conduct a shattering event: a practical application of a scenario to move a casualty. Learners will be given a class on CASEVAC specific to a snow-covered, mountainous environment.	MW-031
PM	DISPLACE TO R600. Learners will use all skills taught to this point to conduct a tactical movement to a specified destination, given a fragmentary order (~3 km).	MW-032
PM	EVENING FIELD ROUTINE.	MW-063

TD-8		
AM	MORNING FIELD ROUTINE.	MW-063
AM-PM	MILITARY SKIING. Learners conduct a faculty-supervised ski tour using military skiing skills.	MW-070
AM	ENGINEER RECONNAISSANCE REPORTS. Learners receive a class and copies of engineer reconnaissance reports to be used throughout the course.	MW-355
AM-PM	M/CW ENGINEER CONSIDERATIONS (ROUTE/AREA RECON). Learners conduct engineer reconnaissance during a movement to an objective (~4 km).	MW-352
PM	MOVEMENT TO LBC. ~4 km movement.	MW-032
PM	EVENING ROUTINE. Learners allotted time to prep gear, study, and coordinate for the following field evolution.	
Phase III: Counter-Mobility/Survivability		
TD-9		
AM	MORNING FIELD ROUTINE.	XW-2
AM	CHAINSAW OPERATIONS. Learners receive instruction on chainsaw operation, maintenance, and tree felling.	MW-363
AM	CW DEMOLITIONS CONSIDERATIONS. Learners receive instructions on application and considerations of employment of military demolitions in a cold weather environment.	MW-361
AM	ICE RECONNAISSANCE. Learners receive instruction to be able to identify/classify ice conditions.	MW-064
AM	AVALANCHE INITIATION. Learners receive instruction on avalanche initiation.	MW-362
PM	M/CW ENGINEER CONSIDERATIONS (OBSTACLE INTEGRATION PLANNING). Learners receive class and Tactical Decision Game (TDG) covering obstacle integration in a snow-covered, mountainous environment.	MW-352/358
PM	FIELD FORTIFICATION. Learners are able to construct effective defensive positions and employ force protection considerations in a snow-covered environment.	MW-107
PM	MCM OBSTACLE BREACHING CONSIDERATIONS. Learners discuss specialized considerations for obstacle breaching in a cold weather, snow covered environments.	MW-352
TD-10		
AM	WRITTEN EXAM 2. Topics: avalanche considerations, bivouac in snow-covered environment, survival, and over-the-snow mobility.	XW-2
PM	VEHICLE MOVEMENT TO LZ HAWK. Administrative movement to drop-off point at LZ Hawk.	ADMIN-01
PM	EVENING FIELD ROUTINE.	MW-063
TD-11		
AM	MORNING FIELD ROUTINE.	MW-063
AM-PM	MILITARY SKIING. Learners conduct a faculty-supervised ski tour using military skiing skills.	MW-070

AM	M/CW ENGINEER CONSIDERATIONS (EXPLOSIVE TREE-FELLING). Learners conduct demolitions to fell-standing timber.	MW-352
PM	FIELD FORTIFICATION. Learners construct field fortifications and obstacles utilizing explosively felled timber.	MW-107
PM	EVENING FIELD ROUTINE	MW-063
TD-12		
AM	MORNING FIELD ROUTINE.	MW-063
AM-PM	MILITARY SKIING. Learners conduct a faculty-supervised ski tour using military skiing skills.	MW-070
AM	M/CW ENGINEER CONSIDERATIONS (EXPLOSIVE TREE-FELLING). Learners conduct demolitions to breach log obstacles	MW-352
PM	VEHICLE MOVEMENT TO R1000. Administrative movement to drop-off point at R1000.	ADMIN-01
PM	ICE-CRETE CONSTRUCTION. Learners demonstrate field fortification and construct ice-crete for follow-on use.	MW-352
PM	EVENING FIELD ROUTINE.	MW-063
TD-13		
AM	MORNING FIELD ROUTINE.	MW-063
AM	WINTER BULLET PENETRATION SHOOT. Learners will participate in bullet penetration shoot to observe effects of small arms fire against snow/ice fortifications.	BULPEN
AM-PM	DISPLACE TO LEAVITT LAKE. Learners will use all skills taught to this point to conduct a tactical movement to a specified destination, given a fragmentary order (~7km)	MW-032
PM	EVENING FIELD ROUTINE.	MW-063
TD-14		
AM	MORNING FIELD ROUTINE.	MW-063
AM	SKI TOUR. Learners conduct a faculty-supervised ski tour using military skiing skills.	MW-070
AM	ICE RECONNAISSANCE EXAM. Performance examination of ice reconnaissance.	XP-ICE RECON
AM-PM	ICE BREACHING. Learners construct demolition charges to breach ice.	MW-350
PM	EVENING FIELD ROUTINE.	MW-063
TD-15		
AM	MORNING FIELD ROUTINE.	MW-063
AM-PM	AVALANCHE INITIATION. Learners construct demolition charges and initiate an avalanche.	MW-362
PM	AVALANCHE INITIATION EXAM. Performance examination of avalanche initiation.	XP-AVY INITIATION

PM	MOVEMENT IN MOUNTAINOUS TERRAIN. Learners will move across snow-covered, mountainous terrain to a specified objective (~3 km).	MW-032/070
PM	EVENING ROUTINE.	MW-063
TD-16		
AM	MORNING FIELD ROUTINE.	MW-063
AM	IMPLEMENTING ENGINEERS IN CW PATROLLING. Learners will practice patrolling in a winter environment utilizing discovery learning to develop SOPs in an explosive hazard environment.	
AM	IMMEDIATE ACTION REFINEMENT. Learners divide into squads to implement their SOPs in complex situations to prepare for future events during the course.	
PM	COLD WEATHER DEMOLITIONS RECON. Learners conduct reconnaissance for employment in the defense.	MW-361
PM	GEAR CONFIDENCE PRACTICAL APPLICATION. Learners rely on the issued equipment and a snow shelter to bivouac for the night.	MW-063
TD-17		
AM	MORNING FIELD ROUTINE.	MW-063
AM	M/CW ENGINEER CONSIDERATIONS (ROUTE/AREA RECON). Learners conduct engineer reconnaissance during a movement to a specified objective (~3 km).	MW-352
PM	M/CW ENGINEER CONSIDERATIONS (OBSTACLE INTEGRATION PLANNING). Learners conduct a TDG to determine how to defend the area they reconnoitered.	MW-352/358
PM	VEHICLE MOVEMENT TO LBC. Administrative movement to drop-off point at LBC.	ADMIN-01
PM	EVENING ROUTINE. Learners allotted time to prep gear, study, and coordinate for the following field evolution.	
TD-18		
AM	MOUNTAINOUS COMMUNICATION CONSIDERATIONS. Learners are instructed on special considerations for operating the PRC-160 in a mountainous environment.	
PM	MOUNTAINOUS COMMUNICATION CONSIDERATIONS. Learners conduct a practical application in establishing comms using expedient antennas and the PRC-160 between elements.	
PM	FEX OPERATIONS ORDER. Learners will receive final exercise operations order and will be allotted time for preparation, RFI/RFS.	
Phase IV: FEX		
A-DAY 1		
AM-PM	FEX PREP. Learners are allowed time to prepare for the FEX and issue their order.	
TD 19-21		

AM-PM	FEX.	
A-DAY 2 Out Processing		
AM	MORNING ROUTINE.	
AM	IIF/ROPE ROOM DE-ISSUE. Learners will return all issued gear.	ADMIN-05
AM	END OF COURSE SURVEY. Learners administered End of Course Survey	ADMIN-08
AM	S-1 OUT-PROCESSING/ORDERS. Learners receive endorsement orders back to their units.	ADMIN-03
AM-PM	FINAL COUNSELING. Squad facilitators will administer final counseling.	
PM	GRADUATION PRACTICE. Learners will conduct Graduation practice.	
PM	FIELD DAY. Learners conduct field day of squad bay.	ADMIN-07
A-DAY 3 Graduation		
AM	MORNING ROUTINE.	
AM	GRADUATION.	ADMIN-09
AM	TRANSIT TO RENO-TAHOE INT'L AIRPORT. Learners will receive transport to RNO to return to home station.	ADMIN-02

7. **Mandatory Readings:** N/A

8. **Recommended Readings:**

“Lessons from the Winter War: Frozen Grit and Finland’s Fabian Defense” By Iskander Rehman July 20, 2016 <https://warontherocks.com/2016/07/lessons-from-the-winter-war-frozen-grit-and-finlands-fabian-defense/>

“Lessons in Winter Warfare from the Ukrainian War Zone, A Case Study for America’s Arctic Pivot.” By Nolan Peterson, March 13, 2021 <https://coffeordie.com/lessons-winter-warfare/>

MCWP 3-34 Engineer Operations, Chapter 7 Operational Situations and Environments [USMC Doctrine - Home \(sharepoint-mil.us\)](https://sharepoint-mil.us) Keyword: Engineer Operations

“Mountain Warfare—The Need for Specialized Training” by Major Muhammad Asim Malik, Pakistan Army. <https://smallwarsjournal.com/documents/malik.pdf>

Winter Mountain Engineer Course Gear List

REQUIRED ADMIN		
Reporting Orders	1	
Command Screening Checklist	1	
Identification Card and DOG TAGS	1	

Gear and Equipment		
Item	QTY	Note
USMC Pack w/WP liner	1	
Assault Pack w/WP liner	1	
Sleeping Bag - Tan	1	
Sleeping Bag - Black	1	
Bivy Sack	1	
ISO Mat	1	
MARPAT Tarp	1	
Poncho Liner	1	
Canteen/Nalgene	2	
Canteen/Nalgene Carrier	2	
Canteen/Nalgene Cup	1	
Hydration Bladder - 3Liter	1	
Hydration Carrier	1	
IFAK	1	
Flak	1	
*Chest Rig/LBV/Belt with Mag pouches	1	

Uniform Items		
Item	QTY	Note
Utilities - MARPAT Woodland	2	No FROG
GoreTex Top/Bottom - MARPAT Woodland	1	
Garrison Cover - MARPAT Woodland	1	
Boonie Cover - MARPAT Woodland	1	
Skivvie Shirt	6	
Underwear	6	
Socks, Brown, Pair	6	Recommend Wool
Socks, White, Pair	4	
USMC Boots	2	
PolyPro Top/Bottom, Set	2	
Grid Fleece Top/Bottom, Set	1	
WindPro Fleece, Cold Weather	1	
ECW (Happy) Parka	1	MCMWTC IIF
ECW (Happy) Trousers	1	MCMWTC IIF
ECW (Happy) Booties	1	MCMWTC IIF
ECW Mittens (Outdoor Research)	1	MCMWTC IIF
Neck Gaiter	1	
*Fleece Cap	1	
Finger Gloves, Insulated	1	MCMWTC IIF
Contact Gloves, (Non-Cotton)	2	MCMWTC IIF
3/4 Gaiters (Outdoor Research)	1	MCMWTC IIF
Balaclava	1	
USMC Running Suit/Sweats	1	
PT Shorts	1	
PT Shoes	1	

Hygiene Kit		
Item	QTY	Note
Tooth Brush	1	
Tooth Paste	1	
Floss	1	
Razor w/Extra Blades	1	
Shaving Cream	1	
*Chapstick	2	
*Sunscreen	1	
Towel	2	
Shower Shoes	1	

MISC		
Item	QTY	Note
Notebook	1	For the Classroom
*Write-in-the-rain	1	For The Field
Pen	2	
Pencil	2	
Highlighter	1	
*Map Pen Set w/Eraser Pen	1	
*Protractor	1	
Combination Lock	2	
Proper Civilian Attire	1	
*Eye Protection w/Clear and Dark Lenses	1	
*Red Headlamp W/ Batteries	1	
*Knife or Multi-tool	1	
*550 Cord	50ft	
Reflective Belt	1	
Laundry Bag	1	
*Signaling device (day/night)	1	ex.whistle or mirror
Personal Electronic Devices (Laptop, Tablet, Cell Phone)		For Electronic Publications

Weapons and Optics		
Item	QTY	Note
Issued body armour	1	
Kevlar	1	
NVD w/ SL3	1	
*Compass	1	

Notes: Items with "*" are typically forgotten by students and are highly important and NOT OPTIONAL Flaks are only required for winter courses. MWTC IIF will only supply items if you have not been issued from your parent unit IIF. A letter of transmittal should be brought with your optic.



Summer Mountain Engineer Course Program of Study (M24MES1)

1. Learning Program Overview: The Mountain Engineer course is a 24-day Learning Program designed to enhance the skills of Combat Engineers operating in complex, compartmentalized, subterranean, and mountainous environments.

2. Course Description: This learning program is designed to provide the Combat Engineer Officer and NCO academic instruction and field practical application in mountain warfare engineering tactics, techniques, and procedures; to include engineer planning considerations for maneuver and force protection warfighting functions for combat operations in complex, compartmentalized, mountainous, and subterranean environments.

3. Program Outcomes: Graduates are capable of conducting pre-environmental and engineer specific training for their units from the Mountain Warfare Training and Readiness Manual, as well as serving as force-multipliers and advisors to their units operating in combat in steep to vertical, subterranean, high altitude, and mountainous environments.

Phase I: Pre-Environmental Training (PET): PET consists of an immersive experience in understanding the nuances of mountainous operations. Learners will be taught specifics pertaining to mountain health awareness, mountain weather, cold weather clothing, warfighting loads, movement in mountainous terrain, and how to mitigate leadership challenges in this environment, techniques, tactics, and procedures while operating in a mountainous environment.

Phase II: Mobility: Learners will be taught how to achieve and provide mobility to supported units through specialized mountaineering training. During this phase learners will receive in-depth instruction and practical application in rope techniques, engineer reconnaissance, and mountain/cold weather engineer considerations.

Phase III: Counter-Mobility/Survivability: Learners will enhance the techniques of counter-mobility and survivability they are already familiar with by adding mountainous considerations. Learners will participate in obstacle integration planning/wargaming, construct rock fortifications, learn how to operate and maintain chainsaws, conduct fell standing timber operations, and construct log obstacles and field fortifications safely and effectively.

Phase IV: Final Exercise (FEX): As the culminating event of the training program, the learners will be issued a tactical scenario complete with operations order and multiple fragmentary orders as the scenario progresses. Over the course of 48 hours of continuous operation they will apply the skills they developed during the course in order to assess their abilities to apply the functional tenants of combat engineering in a mountainous environment.

Phase V: Subterranean Operations: Learners will venture off-site to the *Star of the West* Mine located in Lone, Nevada to apply critical skills of subterranean engineering operations in a live venue. Here they will learn key elements to operating in subterranean environments to include subterranean reconnaissance and mapping, maintaining a subterranean complex, conducting confined space rescue systems utilizing the skills they learned in the mobility phase and conducting a subterranean reconnaissance performance examination.

4. Participation & Assessments: The design of this course is oriented in technical application and problem-solving. Being that the target population is Noncommissioned Officers and Officers in

an already highly technical MOS, full participation, and demonstration of proficiency of events by phase is crucial to the learners' abilities to pass follow-on assessments.

Scope of Evaluation: Evaluation of skillset mastery of PET will be determined via a written examination that will take place in the transition from Phase I to Phase II. This will identify the individual learner's ability to retain and apply critical thinking and knowledge of topics covered during PET. For the remainder of the course, evaluations will be performance exams identifying the learner's ability to execute the desired outcome given a scenario in which the procedures taught will be graded accordingly.

Performance Examination: There are two types of performance examinations; they are product and process examinations. Each of the two types of performance examinations are used to demonstrate proficiency of performance outcomes. Product examination is used to assess an outcome when only the final product or end result need be evaluated. Process examination is used to evaluate an outcome when both the end result and the process require assessment. Examples of Product Examinations include the knots exam, one-rope bridge, three-rope bridge, and any engineer reconnaissance task/mission. Examples of Process Examinations include any engineer reconnaissance task/mission, fell-standing timber operations, and the final exercise. For all examinations, learners will be thoroughly briefed on proficiency criteria, timelines, remediation, and the process of proficiency review boards. Facilitator demonstration and practical application will be allotted prior to any examination.

Written Examination: The written examination is designed to assess the learner's ability to retain the information given throughout the first phase of the course. Testable items will be based on terminal learning objectives and outcomes and tested in the form of an applicable scenario. The test consists of open-ended short answer questions, fill-in-the-blank, matching, and a few multiple-choice questions. The majority of the test consists of a learner entering the information given in their own words and defending their answer. This method has been determined to have had a positive effect on knowledge-retention, requires more dedicated study and understanding of terminal learning objectives and outcomes, and virtually eliminates the possibility of integrity violation during the conduct of the test. Individuals will be made aware of the date and conduct of the written examination at the beginning of the course. An eighty percent score must be achieved to pass the written examination. Learners who fail to pass the written examination will be allotted an additional attempt, given a new version of the test.

Demonstration of Course Proficiency: Learners achieve course completion criteria when all testable items are satisfied to include the written examination and all product and process-based performance examinations to demonstrate knowledge retention. All failures to demonstrate proficiency will be allotted additional time to remediate. Learners will be formally briefed prior to the conduct of any initial or remedial examination. Failure to demonstrate successful remediation of any examination will constitute an academic drop from the course.

5. AARs: Each learner will be assigned to a squad with a faculty advisor. Individual counseling is given by the faculty advisor to each learner on not only the learner's proficiency during a particular phase, but learners are also given journaling prompts to demonstrate learning and level of understanding of the course. A dedicated period will be given at the culmination of the course to assess the class's overall mastery of all knowledge, skills, and attitudes evaluated throughout the final exercise. The end of course survey provided by a representative from the academics section will allow for learners to give their unbiased feedback regarding the conduct of the course.

6. Schedule: (am/pm format by day with associated general outcomes).

Red indicates High Risk Training

Phase I: PET		
TD-1		
AM	WELCOME ABOARD BRIEF/ IN PROCESSING.	ADMIN-02/04
AM	MOUNTAIN SAFETY. Learners are able to identify/apply the considerations of safety while operating in a mountainous environment.	MW-001
AM	PERSONAL COLD WEATHER CLOTHING AND EQUIPMENT. Learners are able to employ personal cold weather clothing/equipment to prevent environmental injuries, understanding the design principles of various cold weather clothing layers through application of the acronym VIP/COLD.	MW-010
AM	MOUNTAIN WARFIGHTING LOAD REQUIREMENTS. Learners are able to identify and apply specifics to packing a warfighting load in a mountainous environment.	MW-011
PM	IIF/ROPE ROOM ISSUE.	ADMIN-05
PM	ROPE MANAGEMENT. Learners are instructed on the conduct of the knots performance examination and introduced to the testable knots and their function/use.	MW-012
TD-2		
AM	MOUNTAIN ENDURANCE TEST. Learners will complete a mountain endurance test: A ruck run of Mountain Leader Loop (~3.8 miles) in utilities w/ a 55 lb. dry pack, rock wall pull-ups, and a rope climb. The goal is 70 minutes or less for the movement, minimum of 11 pull-ups, and one rope climb. The score is a part of the learners overall G.P.A.	MW-032
PM	MOUNTAIN HEALTH AWARENESS. Learners are able to identify/apply considerations of mountain/high altitude and cold weather injuries.	MW-002
PM	MOUNTAIN WEATHER. Learners will be able to identify and recognize weather patterns that occur in a mountainous environment.	MW-004
PM	ROUTE SELECTION. An administrative time with route selection considerations provide the learners with an initial comprehension of mountain navigation/route selection.	ADMIN-01
PM	ROPE MANAGENMENT. Learners will receive demonstration and practical application of knots, coils, and instruction for the following training day.	MW-012
Phase II: Mobility		
TD-3		
AM	MOVEMENT TO LEAVITT TRAINING AREA (LTA). Learners will conduct a class-paced ~5-kilometer movement from LBC to LTA using LTA trail. Coaching and mentoring by facilitators will take place on the move in mountainous terrain.	MW-032
AM	NEGOTIATE A RIVER OBSTACLE. Given a period of instruction, learners will conduct practical application of negotiating a river obstacle.	MW-033
PM	WATER PROCUREMENT. Learners are able to identify suitable methods to procure water, waterborne hazards, and methods for purification.	MW-130

PM	ROPE MANAGEMENT/SKED. Learners will be given instruction on performance examination criteria for the SKED casualty litter and allotted practical application time.	MW-012
PM	EVENING FIELD ROUTINE. Evening field routine will consist of learner's personal time to study, practice, journal, and receive individual counseling from facilitators as needed.	
TD-4		
AM	MORNING FIELD ROUTINE. Morning field routine will consist of learner's personal time to prepare their gear for the training day and receive journaling feedback.	
AM	ROPE MANAGEMENT. Learners will conduct practical application of knots, anchors, and SKED.	MW-012/034
AM-PM	STEEP EARTH LANES. Learners will receive instruction and conduct practical application in establishing steep earth lanes to negotiate class 4 terrain for follow on forces.	MW-012
AM	SUMMER MOUNTAIN CASEVAC. Learners are instructed on specific considerations for evacuating casualties in a summer mountainous environment.	MW-031
PM	ROPE MANAGEMENT. Learners will conduct practical application of knots, anchors, and SKED.	MW-012/034
PM	EVENING FIELD ROUTINE. Evening field routine will consist of learner's personal time to study, practice, journal, and receive individual counseling from facilitators as needed.	
TD-5		
AM	MORNING FIELD ROUTINE. Morning field routine will consist of learner's personal time to prepare their gear for the training day and receive journaling feedback.	
AM	ROPE MANAGEMENT. Practical application of all rope management items.	MW-012/034
AM-PM	ROPE MANAGEMENT (RAPPELS). Deploy rope/rappels. Learners will complete a series of practical application rappels.	MW-012
PM	EVENING FIELD ROUTINE.	
TD-6		
AM	MORNING FIELD ROUTINE.	
AM	ROPE MANAGEMENT. Knots review.	MW-034
AM	KNOTS EXAM. Knots Performance Exam.	XP-ROPE
AM	MECHANICAL ADVANTAGE. Learners receive a class on mechanical advantage and rope properties/rope theory.	MW-035
PM	ONE-ROPE BRIDGE. Learners will receive a class/demonstration and opportunity for practical application of the one-rope bridge.	MW-036
PM	ROPE MANAGEMENT. Practical application of all knots performance exam.	MW-012
PM	EVENING FIELD ROUTINE.	
TD-7		
AM	MORNING FIELD ROUTINE.	
AM	ROPE MANAGEMENT. Practical application of systems performance exam.	MW-012

AM	KNOTS EXAM P2. Knots Performance Exam P2	XP-ROPE
AM	TWO-ROPE BRIDGE. Practical application of Two-Rope Bridge.	MW-036
PM	GORGE CROSSING. Coached practical application of conducting a gorge crossing.	MW-012
PM	ROPE MANAGEMENT. Practical application of all Systems performance exam.	MW-012
PM	EVENING FIELD ROUTINE.	
TD-8		
AM	MORNING FIELD ROUTINE.	
AM	ROPE MANAGEMENT (RAPPELS). Deploy rope/rappels. Learners will complete a series of practical application rappels.	MW-012
AM	COMMUNICATION PRACTICAL APPLICATION. Learners will get instruction on using a PRC-160 as well as construction of field expedient antennas.	
PM	ROPE MANAGEMENT EXAM. Practical application of all Systems performance exam.	MW-012
PM	SKED AND ANCHOR EXAM. Sked and anchors performance examination	XP-ROPE
PM	SUMMER MOUNTAIN CASEVAC. An event will take place to assess the learners' abilities to evacuate a casualty given a scenario. Upon completion, learners will be able to identify and apply terminal learning objectives and outcomes associated with mountain CASEVAC.	MW-031
PM	EVENING ROUTINE. Learners are allotted time to prepare gear and rest.	
Phase III: Counter Mobility/Survivability		
TD-9		
AM	PRE-ENVIRONMENTAL TEST. PET written examination.	XW-01
AM	SKED AND ANCHOR EXAM P2. Sked and anchors performance examination.	XP-ROPE
PM	CHAINSAW OPERATIONS AND MAINTENANCE. Learners receive a class on chainsaw operation, maintenance, and tree felling.	MW-363
PM	MOUNTAIN/COLD WEATHER (M/CW) ENGINEER CONSIDERATIONS (OBSTACLE INTEGRATION PLANNING). Learners receive class and Tactical Decision Game (TDG) covering obstacle integration in a snow-covered, mountainous environment.	MW-352/358
PM	FIELD FORTIFICATION. Learners are able to construct effective defensive positions and employ force protection considerations in a snow-covered environment.	MW-107
PM	CW DEMOLITIONS CONSIDERATIONS. Learners receive instructions on application and considerations of employment of military demolitions in a CW environment.	MW-361
PM	EVENING ROUTINE. Faculty advisor time.	
TD-10		
AM	PRE-ENVIRONMENTAL TEST RETEST. PET written examination retest.	XW-01
AM	ALL SYSTEMS P3. Learners will retest with academic section on all rope systems.	XP-ROPE
PM	ADMIN MOVEMENT TO LZ DODO. Administrative movement to LZ DODO.	ADMIN-01
PM	MOVEMENT TO GRACKLE. ~2 km movement.	MW-032

PM	ROPE MANAGEMENT. Practical application of 1 Rope Bridge.	MW-012
PM	EVENING FIELD ROUTINE.	
TD-11		
AM	MORNING FIELD ROUTINE.	
AM	CHAINSAW OPERATIONS. Demonstration and practical application of chainsaw operations.	MW-363
AM-PM	ENGINEER CONSIDERATIONS (ROUTE/AREA RECON). Learners conduct engineer reconnaissance during a movement to an objective (~2 km).	MW-352
PM	EVENING FIELD ROUTINE.	
TD-12		
AM	MORNING FIELD ROUTINE.	
AM	CHAINSAW OPERATIONS. Demonstration and practical application of chainsaw operations.	MW-363
PM	ENGINEER CONSIDERATIONS (GAP/RIVER). Learners will conduct engineer reconnaissance on a gap/river (~2 km).	MW-352
PM	EVENING FIELD ROUTINE.	
TD-13		
AM	MORNING FIELD ROUTINE.	
AM	CHAINSAW OPERATIONS. Demonstration and practical application of chainsaw operations.	MW-363
PM	MOVEMENT TO SILVER SUMMIT JUNCTION. Learners conduct a foot movement applying all skills learned to this point to negotiate mountainous terrain.	MW-032
PM	EVENING FIELD ROUTINE.	
TD-14		
AM	MORNING FIELD ROUTINE.	
AM	ONE-ROPE BRIDGE. Learners will be allotted time to conduct practical application before examination on 1 rope bridge.	MW-036
PM	ONE-ROPE BRIDGE. Learners conduct a performance examination on the 1 rope bridge over a live gap.	MW-036
PM	EVENING FIELD ROUTINE.	
TD-15		
AM	MORNING FIELD ROUTINE.	
AM	THREE-ROPE BRIDGE. Learners receive class and demonstration of three-rope bridge installation.	MW-351
PM	ONE-ROPE BRIDGE P2. Learners conduct a performance examination retest on the 1 rope bridge over a live gap.	MW-036
PM	EVENING FIELD ROUTINE.	
TD-16		
AM	MORNING FIELD ROUTINE.	

AM	ENGINEER RECONNAISSANCE EVALUATION. Zone reconnaissance conducted near Silver Summit Junction (~4 km).	MW-352
PM	SUSPENSION TRAVERSE. Learners receive class and demonstration of system construction to negotiate horizontal obstacle/class 3 and 4 terrain.	MW-039
PM	EVENING FIELD ROUTINE.	
TD-17		
AM	MORNING FIELD ROUTINE.	
PM	SUMMER MOUNTAIN CASEVAC. An event will take place to assess the learners' abilities to evacuate a casualty given a scenario. Upon completion, learners will be able to identify and apply terminal learning objectives and outcomes associated with mountain CASEVAC.	MW-031
PM	FEX OPERATIONS ORDER. Learners will receive the final exercise operations order and will be allotted time for preparation, RFI/RFS.	
PM	EVENING ROUTINE.	
Phase IV: FEX		
A-Day 1		
AM-PM	FEX PREPARATION. Learners will be allotted time to prepare for FEX and issue order.	
TD 18-19		
AM-PM	FEX.	
Phase V: Subterranean Operations		
TD-20		
AM	VEHICLE MOVEMENT TO STAR OF THE WEST MINE. Administrative movement to subterranean (Sub-T) venue.	ADMIN-01
PM	SUBTERRANEAN ORIENTATION. Learners will receive orientation to subterranean environment.	MW-365
PM	MAINTAIN SUB-T COMPLEX. Learners will conduct practical application covering maintaining a sub-t complex.	MW-353
PM	SUBTERRANEAN RESCUE. Learners will receive a fragmentary order and be tasked to complete a subterranean rescue.	MW-366
PM	EVENING FIELD ROUTINE.	
TD-21		
AM	MORNING FIELD ROUTINE.	
AM	SUBTERRANEAN RECONNAISSANCE. Learners will receive a class and practical application on instruments and equipment used to conduct subterranean reconnaissance.	MW-353
PM	VEHICLE MOVEMENT TO MWTC. Administrative movement to MWTC.	ADMIN-01
A-DAY 2 Out Processing		
AM	MORNING ROUTINE.	

AM	IIF/ROPE ROOM DE-ISSUE. Learners will return all issued gear.	ADMIN-05
AM	END OF COURSE SURVEY. Learners administered End of Course Survey.	ADMIN-08
AM	S-1 OUT-PROCESSING/ORDERS. Learners receive endorsement orders back to their units.	ADMIN-03
PM	GRADUATION PRACTICE. Learners will conduct Graduation practice.	
PM	FIELD DAY. Learners conduct field day of squad bay.	ADMIN-07
A-DAY 3 Graduation		
AM	GRADUATION. Learners graduate.	
AM	TRANSIT TO RENO-TAHOE INT’L AIRPORT. Learners will receive transport to RNO to return to home station.	ADMIN-02

7. Mandatory Readings/Pre-Course Assignments:

“ATP 3-34.81/MCRP 3-34.3 Engineer Reconnaissance.” *Marines.mil - Official Website of the United States Marine Corps*, Mar. 2016, [Chapter 1 \(army.mil\)](#)

8. Recommended Readings:

Richmond, Melvin. “*Combat Operations in Mountainous Terrain-Are United States Army Light Infantry Divisions Preparing Properly*” School of Advance Military Studies, U.S. Army Command and General Staff College. 1987.

MCWP 3-34 Engineer Operations, Chapter 7 Operational Situations and Environments. [USMC Doctrine - Home \(sharepoint-mil.us\)](#) Keyword: Engineer Operations

Govan, Thomas P. “*Training for Mountain and Winter Warfare-Army Ground Forces Study No. 23.*” U.S. Army c 1946. www.history.army.mil/books/agf/agf23.htm

“*Mountain Warfare–The Need for Specialized Training*” by Major Muhammad Asim Malik, Pakistan Army. <https://smallwarsjournal.com/documents/malik.pdf>

Summer Mountain Engineer Course Gear List

REQUIRED ADMIN		
Reporting Orders	1	
Command Screening Checklist	1	
Identification Card and DOG TAGS	1	

Gear and Equipment			
Item	QTY	Note	
USMC Pack w/WP liner	1		
Assault Pack w/WP liner	1		
Sleeping Bag - Tan	1		
Sleeping Bag - Black	1		
Bivy Sack	1		
ISO Mat	1		
MARPAT Tarp	1		
Poncho Liner	1		
Canteen/Nalgene	2		
Canteen/Nalgene Carrier	2		
Canteen/Nalgene Cup	1		
Hydration Bladder - 3Liter	1		
Hydration Carrier	1		
IFAK	1		
Flak	1		
*Chest Rig/LBV/Belt with Mag pouches	1		

Uniform Items			
Item	QTY	Note	
Utilities - MARPAT Woodland	2	No FROG	
GoreTex Top/Bottom - MARPAT Woodland	1		
Garrison Cover - MARPAT Woodland	1		
Boonie Cover - MARPAT Woodland	1		
Skivvie Shirt	6		
Underwear	6		
Socks, Brown, Pair	6	Recommend Wool	
Socks, White, Pair	4		
USMC Boots	2		
PolyPro Top/Bottom, Set	2		
Grid Fleece Top/Bottom, Set	1		
WindPro Fleece, Cold Weather	1		
ECW (Happy) Parka	1	MCMWTC IIF	
ECW (Happy) Trousers	1	MCMWTC IIF	
ECW (Happy) Booties	1	MCMWTC IIF	
ECW Mittens (Outdoor Research)	1	MCMWTC IIF	
Neck Gaiter	1		
*Fleece Cap	1		
Finger Gloves, Insulated	1	MCMWTC IIF	
Contact Gloves, (Non-Cotton)	2	MCMWTC IIF	
3/4 Gaiters (Outdoor Research)	1	MCMWTC IIF	
Balaclava	1		
USMC Running Suit/Sweats	1		
PT Shorts	1		
PT Shoes	1		

Hygiene Kit			
Item	QTY	Note	
Tooth Brush	1		
Tooth Paste	1		
Floss	1		
Razor w/Extra Blades	1		
Shaving Cream	1		
*Chapstick	2		
*Sunscreen	1		
Towel	2		
Shower Shoes	1		

MISC			
Item	QTY	Note	
Notebook	1	For the Classroom	
*Write-in-the-rain	1	For The Field	
Pen	2		
Pencil	2		
Highlighter	1		
*Map Pen Set w/Eraser Pen	1		
*Protractor	1		
Combination Lock	2		
Proper Civilian Attire	1		
*Eye Protection w/Clear and Dark Lenses	1		
*Red Headlamp W/ Batteries	1		
*Knife or Multi-tool	1		
*550 Cord	50ft		
Reflective Belt	1		
Laundry Bag	1		
*Signaling device (day/night)	1	ex:whistle or mirror	
Personal Electronic Devices (Laptop, Tablet, Cell Phone)		For Electronic Publications	

Weapons and Optics			
Item	QTY	Note	
NVG w/ SL3	1		
*Compass	1		

Notes: Items with "*" are typically forgotten by students and are highly important and NOT OPTIONAL Flaks are only required for winter courses. IIF will only supply items if you have not been issued from your parent unit IIF. A letter of transmittal should be brought with your optic.

MCMWTC FORMAL SCHOOLS COMMAND SCREENING CHECKLIST

For all MWTC Formal Schools

Purpose: To ensure Marines selected to attend Mountain Warfare Training Center courses are fully qualified.

Information: Schools are not screening institutions. In order to preclude Marines from being turned away upon arrival, it is necessary that parent commands ensure their Marines satisfy enrollment prerequisites set forth in this checklist. A failure to satisfy any of the prerequisites on the checklist disqualifies a Marine from attending the course.

Action: One copy will be turned in to the Course Chief with the Marine's orders on TD-1 of the course.

LEARNER NAME (LAST, FIRST, MI) _____	
RANK/GRADE: _____	EDIPI: _____
UNIT: _____	
COURSE TITLE: _____	COURSE NUMBER: _____

	PREREQUISITES	YES/ NO	REMARKS
1	Appropriate grade and MOS.		See Course TPD on MCTIMS.
2	Learners must have 12 months remaining on service contract.		
3	There are no existing family or financial hardships that would preclude this individual from completing the course.		
4	Possess appropriate field uniforms and equipment for the course per the learner gear list for the course.		
5	Meets height and weight standards per MCO 6110.3A w/Ch-3		

6	<p>Medically qualified to participate in a demanding physical training program at high altitude and cold weather (no previous frostbite/cold weather injuries), and capable of handling live ammunition and firearms.</p> <p>In full duty status.</p> <p>Medical Officer, Nurse, or Corpsman signature:</p> <p>_____</p>		
7	<p>Learner must be physically capable of participation in a progressive, demanding physical training program at high altitude through mountainous terrain; a First-Class PFT score (or service equivalent) at home station within 30 days of the course convening is required to attend all MCMWTC courses.</p> <p>Date last PFT: _____</p> <p>Score last PFT: _____</p>		
8	<p>Proficient in Land Navigation skills.</p>		
9	<p>Contact Course Chief to give sizes for gear issue. (If required)</p>		Page 4 for contact numbers.
10	<p>The individual is aware that he/she is required to turn in a copy of this checklist on T-1 of the course.</p>		

Company 1stSgt _____ PHONE _____ SIGNATURE _____ DATE

Company Commander _____ PHONE _____ SIGNATURE _____ DATE