

Program of Instruction

Course Syllabus

Course Title: Rope Rescue Technician: Rope Systems and Forces Refresher

Course Duration: 8 Hours

Program: Special Operations Training Program

Course Prerequisites: Rope Rescue Technician

Course Description: Special Operations Training Program Refresher Courses provide hands on training at the technician level. Participants will have the opportunity to refresh critical skills through classroom review, drills and/or scenario exercises. This course provides personnel with the knowledge and skills needed to perform rescues using rope systems. The class will cover the use of rope, rope equipment, hardware, construction of mechanical advantage systems, belay and safety systems, anchor systems along with understanding the principles and physics involved in constructing rope rescue systems. Special consideration will be given to the policies of standard-making agencies such as OSHA, ANSI, NFPA, and others.

Course Requirements and/or Recommendations: These can be divided into three categories: those completed prior to arriving in class (Pre-Course Work), those completed during class, such as homework assignments and quizzes (Course Work), and requirements completed after class but prior to receiving a certificate of completion. (Post-Course Work)

Summary of Directions

Pre-Course Work: Step One learning available online

Course Work: Attend and participate in all lectures and class activities

Post-Course Work: None

Course Policies:

Safety Policy: Students shall understand and follow all instructions pertaining to operational safety, as stated by instructors or as written in course materials. Instructors and students shall be mindful of safety at all times. Conduct judged to be unsafe shall be grounds for dismissal from the course.

Academic Integrity Policy: IFSI has the responsibility for maintaining academic integrity so as to protect the quality of the education provided through its courses, and to protect those who depend upon our integrity. It is the responsibility of the student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions. Any violation of the code of conduct is grounds for immediate dismissal from the course.

American Disabilities Act: As guaranteed in the Vocational Rehabilitation Act and in the American Disabilities Act, if any student needs special accommodations they are to notify their instructor and provide documentation as soon as possible so arrangements can be made to provide for the student's needs.

Course Content:

Module: Systems and Forces Refresher

1. Summarize the safety rules for rope rescue operations.
2. Describe qualities of an anchor.
3. Describe forces that are applied to anchors.
4. Describe the process for selecting an appropriate anchor.
5. Identify the safety factors to consider when using various anchors.
6. Identify the purpose of load distribution anchor systems.
7. Explain the purpose of a directional anchor.
8. Identify the purpose of load sharing anchors.
9. Identify the components of a haul system.
10. Identify characteristics of descent control devices.
11. Identify the characteristics of carabiners.
12. Identify the characteristics of screw links.
13. Identify the characteristics and types of ascenders.
14. Describe the construction and uses of pulleys.
15. Describe the characteristics of rigging plates.
16. Describe the characteristics of edge protectors.
17. Describe the characteristics of a break tube.
18. Describe characteristics of a mechanical advantage hauling system.
19. Identify the commands used during a haul operation.
20. Identify haul team positions.
21. Construct anchors using webbing and straps.
22. Build anchor systems using rope.
23. Tie a tensionless hitch with rope.
24. Construct a 3 Pin Picket system. Construct a dead man anchor using 6x6 timbers or 3 inch schedule 80 pipe.
25. Construct a 3:1 simple inline mechanical advantage haul system.
26. Construct a 3:1 simple attached mechanical advantage haul system. At the conclusion of this module, the student will construct a 4:1 attached Double "J" mechanical advantage haul system.
27. Construct a 4:1 simple inline mechanical advantage haul system and operate the system on a tripod, also as an attached system.
28. Set a change of direction for the main line during operations involving a haul system.

Class Schedule

Introduction	15 minutes
Safety	15 minutes
Rope and Knots Review	2 hour
Anchors and Rigging Review	1 hour
Belay	30 minutes
Lunch	
Station 1: Anchor Systems	1 hour
Webbing and Straps	
Load Distributing Anchors	
Tensionless Hitch	
Picket Systems	
Dead Man Anchor System	
Station 2: Haul Systems	3 hours
Inline Haul Systems	
Attached Haul Systems	
Inline Haul Systems and attached	
Compound Attached Haul Systems	
Change of Direction	