

Montgomery County Community College  
EMP 120  
Search and Rescue  
3-3-0

**COURSE DESCRIPTION:**

This is a skills-based course that will provide the student with practical knowledge concerning the general responsibilities, skills, abilities, and equipment needed by those involved in search and rescue efforts. The course will also provide the student with practical exercises and search missions where they will be required to utilize the proper equipment and methods. The content of the course includes topics in three major areas: survival, support, and search and rescue. The course will afford the opportunity to discuss and investigate the role of search and rescue in relation to incident management as well as the roles and responsibilities of search and rescue leaders. Students will learn from the experiences of others through actual case analysis.

**REQUISITES:**

*Previous Course Requirements*

None

*Concurrent Course Requirements*

None

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Define the components of search and rescue operations and resources.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises



LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
2. List the major responsibilities in search and rescue operations.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises
3. Describe the components of Incident Command System (ICS) and their functions.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises
4. Differentiate between at least three types of maps used in search and rescue.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises



LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
5. Identify and use topographical maps.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises
6. Successfully employ plotting methods or grid systems.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises
7. Describe the parts of the compass.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises



LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
8. Demonstrate mastery and use of the compass.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments; Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises
9. Define and actually employ in an exercise the six crucial steps in search and rescue management.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises
10. Differentiate between and apply the two basic categories of search tactics (Passive vs. Active).	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises



LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
11. Describe and apply the primary types of active search tactics.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises
12. Describe and apply the techniques and methods used by searchers.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises
13. List and demonstrate both searching and tactical skills needed by field searchers.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises
14. Explain, and demonstrate in an exercise how knowledge of lost person behavior can be an advantage to the searcher.	Assigned Readings Role-Playing & Field Exercise Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study Graded Role-Playing & Field Exercises



At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Associate Vice President of Academic Affairs. The benchmark for each learning outcome is that *70% of students will meet or exceed outcome criteria*.

#### SEQUENCE OF TOPICS:

1. Introduction to Search and Rescue Management, Incident Command, and the Responsibilities in Search and Rescue
2. The Basics of Survival: Clothing, Personal Equipment, Emergency Survival Skills, First Aid and Ready Packs
3. Environmental Hazards
4. Search Philosophy and Tactics: Land Navigation and Lost Person Navigation
5. Search and Rescue Resources
6. Personal Floatation Device (PFD): Rescue/Survival Use and Swimming Strokes
7. Basic Water Rescue Equipment: Heaving Line, Ring Buoy, Throw Bag, Line Systems, and "Tag" and "Snag" Line
8. Factors in Well-Prepared Water Rescue: Personal Clothing, Equipment & Mother Nature
9. Team Organization and Rescue Operations
10. Potential Accident Site Hazards, Site Access, Types of Rescue and River Hazard Survey Form
11. Communications
12. Legal Aspects of Searches
13. Helicopter Operations
14. Practical Exercise

#### LEARNING MATERIALS:

National Association of Search & Rescue (NASAR). (2005). *Fundamentals of Search and Rescue*. Jones & Bartlett.

Other learning materials may be required and made available directly to the student and/or via the College's Libraries and/or course management system.

#### COURSE APPROVAL:

Prepared by: Benn Prybutok	Date: 5/24/2003
Revised by: Benn Prybutok	Date: 2/3/2009
VPAA/Provost Compliance Verification: Dr. John C. Flynn, Jr.	Date: 9/11/2009

Revised by: Benn Prybutok	Date: 2/2013
VPAA/Provost or designee Compliance Verification: Victoria L. Bastecki-Perez, Ed.D.	Date: 2/25/2013

Revised by: Jayden Sampson	Date: 12/17/2017
VPAA/Provost or designee Compliance Verification:	Date: 12/18/2017



A handwritten signature in cursive script, appearing to read "Jul-fros".

*This course is consistent with Montgomery County Community College's mission. It was developed, approved and will be delivered in full compliance with the policies and procedures established by the College.*