

Course Outline for: EXSC 1153 Backpacking and Wilderness Preservation**A. Course Description**

1. Number of credits: 3
2. Lecture hours per week: 3
3. Prerequisites: None
4. Corequisites: None
5. MnTC Goals: None

Backpacking is an outdoor sport that requires a diverse skill set to ensure safety and enhance enjoyment. Appropriate equipment and behaviors for various outdoor settings are introduced in the classroom before the camping experience. A strong emphasis on Leave No Trace principles, ecology, and environmental concerns is applied to class discussions and backpacking practices. A 3-day, 2-night class camping trip is required for this course.

B. Date last reviewed/updated: March 2025**C. Outline of Major Content Areas**

1. Equipment and Clothing Selection and Care
2. Fitting, Packing, and Carrying a Backpack
3. Trip Planning: Area, Duration, Food Selection, Special Needs
4. Fires, Stoves, and Food Preparation
5. Minimum Impact Hiking and Camping
6. Physical and Mental Preparation for Backpacking Trips
7. Hiking Techniques, Stream Crossings, Snow Fields, Boulder Fields
8. Emergencies, Lyme Disease, Hypothermia, Giardiasis, and other Health Problems
9. Environmental and Natural Resource Issues, Problems, Solutions
10. Wildlife: Sharing the Wilderness
11. Wilderness Preservation and Ecological Concerns

D. Course Learning Outcomes

Upon successful completion of the course, the student will be able to:

1. Identify various types of backpacking equipment, clothing, and footwear according to their appropriate function.
2. Properly pack a backpack for a backpacking trip.
3. Properly adjust and carry a backpack on the trail.
4. Apply appropriate physical and mental training protocols learned during class to prepare for an overnight backpacking class trip.
5. Create a trip plan considering area, duration, food needs and other factors.
6. Demonstrate safe operating techniques for a backpacking stove.
7. Describe safe methods for building and extinguishing backpacking fires.
8. Select a suitable campsite with regard for the environment and minimal impact.
9. Demonstrate safe hiking techniques in a variety of terrain settings.

10. Apply knowledge learned to prevent Lyme disease, hypothermia, and other medical problems.
11. Explain how to avoid contracting Giardiasis and other water-borne diseases by means of a water filtering system.
12. Examine a variety of environmental issues involving the interrelationships of wilderness to humans.
13. Investigate multiple aspects of one environmental problem of personal interest.

E. Methods for Assessing Student Learning

Methods for assessment may include, but are not limited to, the following:

1. Daily skill performance
2. Written exam to evaluate factual knowledge and concepts
3. Literary research on topics/equipment of their choice with written and/or oral report of their findings
4. Written trip plan
5. Quizzes

F. Special Information

None