

**NRM 142 Course Outline as of Fall 2010****CATALOG INFORMATION**

Dept and Nbr: NRM 142 Title: ORIENTEERING WILDRNS

Full Title: Orienteering for Wilderness Users

Last Reviewed: 12/12/2023

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.00	Lecture Scheduled	1.00	17.5	Lecture Scheduled	17.50
Minimum	1.00	Lab Scheduled	1.00	4	Lab Scheduled	17.50
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	35.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 35.00

Total Student Learning Hours: 70.00

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**

Compass orienteering, GPS (Global Positioning Systems) and topographic map reading for backpackers and wilderness recreation users.

**Prerequisites/Corequisites:****Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: Compass orienteering, GPS (Global Positioning Systems) and topographic map reading for backpackers and wilderness recreation users. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU GE:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>

<b>IGETC:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
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<b>CSU Transfer:</b>	<b>Effective:</b>	<b>Inactive:</b>
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<b>UC Transfer:</b>	<b>Effective:</b>	<b>Inactive:</b>
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**CID:**

**Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon successful completion of this course, students will be able to:

1. Determine the scale of maps.
2. Interpret contour lines and intervals on a map.
3. Interpret range and township grids on a map.
4. Interpret topographic map symbols and color system on a map.
5. Maneuver between routes from a known point.
6. Set a compass according to the mechanical/magnetic principles of the hand compass.
7. Perform basic triangulation using maps.
8. Apply map and compass principles to GPS technology.
9. Perform basic orienteering, maneuvering with map, compass, and GPS.

### **Topics and Scope:**

- I. Map scale
- II. Contour lines and intervals
- III. Longitude and latitude grids
- IV. Range and township grids
- V. Topographic maps
  - A. Symbols
  - B. Color system
- VI. Mechanical/magnetic principles of the hand compass
- VII. Route finding from a known point
  - A. Degrees
  - B. Minutes
  - C. Seconds
- VIII. Basic triangulation for finding your location based on bearings to observed points
- IX. Map and compass principles applied to GPS technology
- X. Basic orienteering
  - A. With map
  - B. With compass
  - C. With GPS

## Assignment:

Representative assignments:

1. Reading: brief handouts in lecture sessions.

The following assignments will be graded 50% skills and 50% problem solving:

2. Find five pre-set points using a map, compass, and GPS equipment.

3. Identify markers, locations, and elevations of those points on a map.

4. Using a map and compass in the field, orienteer to a series of locations using a new set of coordinates at each destination.

5. One skills/problem solving exam: finding locations.

## Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

Writing  
0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Field work (finding pre-set points using a map, compass, and GPS equipment)

Problem solving  
40 - 45%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Using a map and compass in the field, orienteer to a series of locations using a new set of coordinates at each destination.

Skill Demonstrations  
40 - 45%

**Exams:** All forms of formal testing, other than skill performance exams.

None

Exams  
0 - 0%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Participation and attendance.

Other Category  
10 - 20%

## Representative Textbooks and Materials:

Be Expert with Map and Compass: The Complete Orienteering Handbook. Kjellstrom, Bjorn. Wiley Publishing, 1994. (Classic)

Instructor prepared materials.

Introduction to GPS: The Global Position Position. El-Rabbany, Ahmed. Artech House, Inc., 2002