

CATALOG INFORMATION

Dept and Nbr: NRM 131

Title: TRAILS MAINT/RECONSTRUCT

Full Title: Park and Forest Trails Maintenance and Reconstruction

Last Reviewed: 1/23/2023

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.50	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	2.50	Lab Scheduled	1.50	2	Lab Scheduled	26.25
		Contact DHR	0		Contact DHR	0
		Contact Total	3.50		Contact Total	61.25
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00

Total Student Learning Hours: 131.25

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:

An introduction to the equipment, methods, techniques, and tools used in laying out, repairing, and rebuilding park and forest trails.

Prerequisites/Corequisites:

Recommended Preparation:

Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:

Description: An introduction to the equipment, methods, techniques, and tools used in laying out, repairing, and rebuilding park and forest trails. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

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>
<b>CSU Transfer:</b>		<b>Effective:</b>	<b>Inactive:</b>
<b>UC Transfer:</b>		<b>Effective:</b>	<b>Inactive:</b>

**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. Explain the historical, environmental, and political issues involved in park and forest trails and trail works.
2. Identify and demonstrate the safe use of all of the basic hand and power tools used in trail maintenance and reconstruction.
3. Identify twenty plant species (including twelve tree species) growing along the trail and state the environmental requirements and uses for each plant.
4. Identify animal species in habitats along the trail and discuss food sources and predators for each.
5. Identify the various types of trail users and describe their impacts.
6. Distinguish between scale and slope and recognize their representation on topographic maps.
7. List adjacent land uses in Sonoma County bordering the Sonoma County trails and articulate some of the issues concerning those land uses.
8. Construct a section of trail.
9. Identify agencies that employ trail workers and discuss the qualifications and working conditions in those agencies.

### **Topics and Scope:**

- I. History of Trails and Trail Construction
  - A. Trails before roads
  - B. Animal and game trails and trail patterns
  - C. Trails in other societies: The Inca trail example
  - D. Look at the trail
- II. Trails Construction Principles
  - A. How trails are laid out
    1. Identification
    2. Safe use
  - B. Different tools for different users on the same trail
- III. The Environment
  - A. Plants

1. Keys to identification
  2. Native and non-native species: How you can tell what to keep or kill
  3. Adaptations for use along trails for specific users
- B. Animals
1. What they eat
  2. What eats them
- C. Land
1. Adjacent land uses
  2. Issues in Sonoma County
- IV. Trail Users and Impacts
- A. Walk
  - B. Bike ride
  - C. Horses
  - D. Motors and engines and where they can go
- V. First the Paperwork
- A. Scale
  - B. Slope
  - C. Drainage
  - D. Maps, trail logs, and profiles
- VI. Project Implementation
- A. Review and post test
  - B. Tool maintenance
    1. Cleaning
    2. Sharpening
  - C. Construction of a section of trail
  - D. Scotch broom eradication (three methods)
  - E. Keeping a trail maintenance log (evaluation of project)
- VII. Bring Skills Together with Job Opportunities
- A. Talks by Sonoma County Regional Parks representative
  - B. Trails advocate
  - C. Federal trails standards and employment opportunities
    1. NPS (National Parks Service)
    2. USFS (United States Forest Service)
    3. BLM (Bureau of Land Management)
    4. Other as determined by instructor

### **Assignment:**

Assignments may include:

1. Reading assignments (averaging 5-10 pages per week).
2. Field assignments using trail work tools.
3. Field notebooks and logs, including maps and diagrams.
4. Project report (including photos of work accomplished).
5. Pre-test (ungraded); post-test (graded).

### **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.

Field notebook; project report.	Writing 20 - 40%
<b>Problem Solving:</b> Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.	
None	Problem solving 0 - 0%
<b>Skill Demonstrations:</b> All skill-based and physical demonstrations used for assessment purposes including skill performance exams.	
Field assignments.	Skill Demonstrations 30 - 50%
<b>Exams:</b> All forms of formal testing, other than skill performance exams.	
Multiple choice, True/false, Matching items, Completion, Short answer.	Exams 10 - 30%
<b>Other:</b> Includes any assessment tools that do not logically fit into the above categories.	
None	Other Category 0 - 0%

**Representative Textbooks and Materials:**

The Complete Guide to Trail Building and Maintenance. Demrow, Carl and Salisbury, David. Appalachian Mountain Club Books, 1998 (Classic)

Pacific Coast Tree Finder: A Manual for Identifying Pacific Coast Trees. Watts, Tom. Nature Study Guild, 2004.