ORL 045 Basic Trail Building Techniques:

Catalog Description:
Learn to build low maintenance trails in a safe and efficient manner. This class is suitable for students who are interested in trail building jobs or for those wishing to build trails on private land.

Course Topic Outline:
• Trail Building Safety Techniques
• Trail Maintenance
• Brushing and Scouting
• Tread and Drainage Construction
• Basic Saw Crew Training
• Hand Tool Field Maintenance

Major Course Goals:
Students will be inspired to build low maintenance trails using safe and effective techniques.

Student Learning Outcomes:
1. Identify and implement trail strategies contributing to trail and natural resource sustainability
2. Select, utilize, and maintain a variety of tools used for basic trail construction
3. Demonstrate an ability to assess trail conditions, trail needs, and safety considerations

ORL 046 Advanced Trail Building Techniques:

Catalog Description:
Students will learn advanced techniques related to the use of technical equipment to build low maintenance trails in a safe and efficient manner. This class is most suitable for students interested in building mountain trails on public lands.

Course Topic Outline:
• Safe Use of Technical Equipment
• Grip Hoist
• Crosscut Saw
• Chain Saw
• Pionjar
• Boulder Busting
• Rock Structures
• Building Stairs
• Grade Reduction
• Tread Elevation

Major Course Goals:
Students will be inspired to use increasingly technical skills and techniques to construct and improve low maintenance trails.

Student Learning Outcomes:
1. Demonstrate safe, proper and efficient use of a variety of mechanized and motorized tools used for trail construction
2. Safely conduct a variety of activities related to the use of rock (e.g. walls, drainage structures, elevated tread, etc…)
3. Utilize techniques consistent with protecting against future trail maintenance needs and user conflicts
ORL 047 Trail Building Crew Leadership:

Catalog Description:
This class is designed for students who have demonstrated strong trail building skills. Leading trail crews requires a variety of leadership and management skills. Students will learn skills related to design, tool care, risk management, and a variety leadership and management skills such as communication, motivation, and group norm setting.

Course Topic Outline:
- Risk Management
- Job Hazard Analysis
- Teaching Tool Care
- Work Crew Leadership and Management
- Basic Project Design
- Determination of Work Crew Needs
- Safety Awareness

Major Course Goals:
Students will utilize trail building skills and experiences and will expand their skills into teaching them to others and leading crews through the process of trail design and implementation.

Student Learning Outcomes:
1. Create, communicate, and implement an effective risk management plan related to trail construction
2. Identify tools, equipment, and human resources needed to complete specific tasks
3. Demonstrate principles related to motivation and efficient use of crew time