



Before



After

Rural Road Ecology & Maintenance - ERM 448

Fall 2019
Tu/Th 1:35 -- 2:50

Who should take this course?

Roads are ubiquitous throughout the landscape and this course is intended for students who anticipate working in natural resource fields including:

- **Environmental Management**
- **Forestry**
- **Fisheries**
- **Agriculture**
- **Mining**
- **Land Use Planning**
- **Environmental Engineering**

Course Description

This course will provide students with the fundamental understanding of the interaction of natural systems with unpaved and low-volume paved roads in order to economically maintain roadways with minimal impact on the surrounding environment. The major focus area will be the road/stream interface, including the fundamentals of hydrology, geology, soils, and erosion processes as they pertain to roads and streams. A special emphasis will be placed on proper stream crossing design to benefit aquatic organism passage.

*Upon completion the student will be **ESM certified under Pennsylvania's Dirt, Gravel and Low Volume Road Program.** www.dirtandgravel.psu.edu*

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