

CE 372 Fundamentals of Transportation Engineering

Instructor

Dr. Mike Lowry, P.E.
Engineering Physics Building, EP 115C
208-885-0139
mlowry@uidaho.edu

Class Location and Meeting Times

Class location: JEB 328
Class time: M, W, F, 9:30 – 10:20
Office hours: M, Th, F 11:00 –12:00.
Or you can email me and I will set aside time.

Course Description and Learning Objectives

Introduction to fundamental principles of planning, design, and operations of highways.
This course will prepare students for the transportation engineering section of the Fundamentals of Engineering (FE) exam.

Students who successfully complete this course will be able to:

- Use equations to describe vehicle movement, including stopping sight distance.
- Design vertical curves and horizontal curves for highways.
- Explain traffic flow theory and the relationship between traffic flow, speed, and density.
- Calculate highway capacity and level of service.
- Develop traffic signal timing.
- Perform the 4-step model to forecast traffic.
- Conduct traffic safety analysis.

The syllabus and schedule might change during the semester. The current version and additional materials are online:
<http://www.webpages.uidaho.edu/~mlowry/Teaching/fundamentals.pdf>

Required Textbook

- *Principles of Highway and Traffic Engineering and Traffic Analysis*, Seventh Edition, by Fred L. Mannering and Scott S. Washburn, John Wiley & Sons, 2019. (Available at wiley.com, Uofl Bookstore, amazon.com, etc.)

- Additional reading materials (provided by instructor)

Grading Criteria

Grades are posted on <https://canvas.uidaho.edu/> and will be assigned according to the following criteria:

Participation in class or in my office	2%
Assignments	35%
Exams	63%

****Using assignments, projects, or exams from previous semesters to study for exams, to help complete your assignments, or for any other purpose whatsoever is strictly prohibited. Violators will be failed. ****

****I will not accept late assignments or exam rescheduling without documentation from the Dean of Students or a medical professional. Requests for exam rescheduling must be made prior to the day of the exam.****

****I will not accept extra or alternative work to replace assignments or improve your grade.****