

West Virginia University
Department of Civil and Environmental Engineering
Highway Safety Engineering
Fall 2013

Instructor: Dr. David Martinelli; drmartinelli@mix.wvu.edu, david.martinelli@mail.wvu.edu

Room 525 Engineering Sciences Building; 293-9936, cell/text 216.4222

Administrative Assistant: Leslie Van Zant; leslie.vanzant@mail.wvu.edu; 293-9953

Office Hours: Arrange through Leslie

Meeting: Tuesdays, Thursdays 11:00-12:15 MRB107

Objectives:

Cultivate an appreciation for the highway safety problem, and a passion for doing something about it.
Gain proficiency in the following 5 “core competency” areas recommended by the Transportation Research Board:

1. The Nature of Road Safety
2. The History and Institutional Settings of Road Safety Management
3. The Origins, Characteristics, and Uses of Crash Data
4. Contributing Crash Factors, Countermeasure Selection, and Evaluation
5. Road Safety Program Management

Understand contemporary highway safety issues in an academic context by reading and critiquing scholarly literature on the subject as well as navigating the landscape of technical resources on the subject.

Resources:

“Traffic: Why We Drive The Way We Do (And What it Says About Us),” Tom Vanderbilt, Random House, N.Y., 2008

“Highway Safety Core Competencies,” National Cooperative Highway Research Program, Report 667, Transportation Research Board, National Academies of Science, Washington, DC.

Federal Highway Administration Highway Safety Training Website: <http://safety.fhwa.dot.gov>

Readings and References as Assigned

Topics:

Core Competencies
Intersections
Local and Rural Roads
Pedestrian and Bicycle
Crash Data Analysis
Human Factors
Crash Reconstruction
Roadway Departure
Speed Management

Grading:

Homework: 25%
Class Participation 15%
Exam 1: 15%
Exam 2: 15%
Presentation 1: 15%
Presentation 2: 15%