### CE 462/562  TRAFFIC ENGINEERING APPLICATIONS & SIGNAL TIMING (4)  Peter Koonce

Theory and practice of traffic signal timing. Focuses on terms associated with signal timing, relating practice in the field with analysis completed using the Highway Capacity Manual and other traffic engineering software. A significant portion of the class is focused on applications, specifically focused on multimodal applications. Also offered for graduate-level credit as CE 562 and may be taken only once for credit. This course counts as a Structural Elective for BSCE students.

**Prerequisite:** CE 351

### CE 410/510  TOP: RAILROAD STRUCTURE DESIGN (3)  Joseph Krajewski

Course details to come.

**Prerequisite:**

### CE 432/532  STRUCTURAL STEEL DESIGN (4)  Travis McFeron

Design of components of steel structures based on allowable strength design and load and resistance factor design methods. Also offered for graduate-level credit as CE 532 and may be taken only once for credit. This course counts as a Structural Elective for BSCE students.

**Prerequisite:** CE 321 & CE 325

### CE 485/585  ENVIRONMENTAL CLEANUP RESTORATION (4)  Bill Fish

Survey of procedures for evaluating risks posed by hazardous waste sites and the cleanup steps that lead to an acceptable restoration of such sites. Topics include U.S. environmental law and regulation, site investigations, risk assessment, and a focus on actual case studies, many in Portland and the Pacific Northwest. Also offered for graduate-level credit as CE 585 and may be taken only once for credit.

**Prerequisite:** junior standing, CE 371 or equivalent