

**CE 761**  
**Bridge Engineering**  
**Spring 2013**  
**Class Information**

Hours / Location: MWF 1:00 –1:50, ESB 207

Professors: Dr. Karl E. Barth

Office: ESB 617

Office Hours: to be scheduled

Textbook: No textbook will be required for this course. We will specifically refer to: American Association of State Highway and Transportation Officials, “LRFD Bridge Design Specifications”, Fifth Edition, 2010 (US Units)

Organization:

- 3 lectures per week
- homework as assigned
- 2 examinations (one midterm and one final)

Grade Weighting:

• Homework	=	33 %
• Exam I (midterm)	=	33 %
• <u>Exam II (final)</u>	=	<u>33 %</u>
Total	=	100 %

Homework Policy:

- **Your name, course number, problem number, and due date must appear on all homework**
- **Successive pages of multiple page sets must be initialed and should have the pagination (i.e., 1/3, 2/3, 3/3, etc.) in the upper right-hand corner of the page**
- **All assignments are to be done NEATLY using**
  - **Pencil**
  - **Engineering paper**
    - each problem should be started on a new sheet of engineering paper
    - only one side of the paper is to be used (the lighter side)
  - **Straight edges must be used for all figures**
- **Multiple-page sets are to be stapled together in the upper left hand corner**
- **Late homework will not be accepted**

**CE 761 – Bridge Engineering (Spring 2013)**  
**Tentative Schedule**

<b><u>Week</u></b>	<b><u>Class Dates</u></b>	<b><u>Class Topics</u></b>
1	01/14, 01/16, 01/18	Introduction
2	<b><i>01/21</i></b> , 01/23, 01/25	AASHTO LRFD Specifications <b><i>No Class 01/21 (Martin Luther King Jr. Day)</i></b>
3	01/28, 01/30, 02/01	Structural Analysis for Dead/Live Loads
4	02/04, 02/06, 02/08	Steel Beam & Girder Topics
5	02/11, 02/13, 02/15	Steel Beam & Girder Topics
6	02/18, 02/20, 02/22	Fatigue & Fracture Limit States
7	02/25, 02/27, 03/01	Beam/Girder Splices
8	03/04, 03/06, 03/08	Bridge Evaluation & Rating
9	03/11, 03/13, 03/15	Horizontal Curvature
10	03/18, 03/20, 03/22	Bearing Selection & Design
<b><i>11</i></b>	<b><i>03/25 03/27, 03/29</i></b>	<b><i>No Classes (Spring Recess)</i></b>
12	04/01, 04/03, 04/05	Software Applications
13	04/08, 04/10, 04/12	Bridge Deck Design
14	04/15, 04/17, 04/19	Substructure Elements
15	04/22, 04/24, 04/26	Miscellaneous Topics (as time permits)
16	04/29, 05/01, 05/03	Miscellaneous Topics (as time permits)
<b><i>17</i></b>	<b><i>Final Exam – TBD</i></b>	