Course Number: CIVL 4590  
Course Title: Transportation Design Project  
Credit Hours: 3 lecture hours  
Prerequisites: CIVL 4530 (Geometric Design) and ENGR 1110 (Intro. To Engineering)  
Corequisites: None

Textbook:


Reference Materials:


Course Description in Bulletin:

Individual senior design project requiring the development of plans for a roadway over a large land segment: horizontal and vertical curves in accord with State and AASHTO standards; topographic terrain features; historical preservation area; minimum elevation; intersection design; earthwork balance.

Course Objectives:

- Apply roadway geometric design concepts in a design project environment.
- Develop a working knowledge of digital terrain modeling and roadway design software (*InRoads*).
- Provide practical experience in roadway design.
- Complete a roadway design project.

Course Evaluation and Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework and In-Class Assignments</td>
<td>20%</td>
</tr>
<tr>
<td>Design Project – Hardcopy Submittal</td>
<td>60%</td>
</tr>
<tr>
<td>Design Project – Oral Presentation</td>
<td>20%</td>
</tr>
</tbody>
</table>

Accommodations for Students with Disabilities:

Relevant university policy regarding accessibility to the course material and facilities applies to this course. Students requiring accommodations pursuant to the policy should notify and meet with the instructor during the first week of classes to ensure that any necessary accommodations can be made.
Information for Summer 2017 Term:

Class Time/Place: 1:15 p.m. – 2:45 p.m., Monday, Wednesday, and Friday
216 Harbert Engineering Center

Instructor: Rod E. Turochy
Phone: 844-6271
E-mail: rodturochy@auburn.edu

Office Hours: 9:00 – 11:00 a.m., Monday and Wednesday, and by appointment
223 Harbert Engineering Center

Class Website: http://www.eng.auburn.edu/users/rturochy/civl4590

Design Project: Design project (hardcopy submittal) is due Monday, July 31, at 4:00 p.m.

Oral Presentations: Project presentations will be held during the designated final exam period for the class meeting time, on Friday, August 4, at 4:00 – 6:30 p.m.

Procedural Rules:

1. **General:** Students are responsible for assigned reading and participating in class discussion. During class, cellular telephones must be turned off or otherwise made silent. Students are encouraged to work together in learning the design software.

2. **Reading:** It is the student’s responsibility to keep pace with class instruction and the attached course outline. Students are responsible for reading the assigned material. Comprehension and the ability to ask questions are increased if the student reads the material prior to class.

3. **In-Class Assignments:** Occasional closed-book, closed-notes assignments will be administered in class during the semester. Missed assignments can be made up in the event of excused absences as agreed upon by the instructor prior to, or within one week after the assignment.

4. **Homework Assignments:** Problems will be assigned in class and posted on the class website. Homework problems will be due at the beginning of class on dates specified. Late homework will be accepted until the beginning of the next class period at a 50% reduction in grade. Homework solutions will be posted, and selected problems will be discussed in class. Students are encouraged to work together on homework assignments; however, the submitted material must be the individual student’s work.

5. **Design Project:** The design project is the major work product in the course, which provides an opportunity for students to demonstrate their knowledge of geometric design concepts and the design software program. The hardcopy submittal deadline is firm; a late submittal within 24 hours will be accepted with a 20% reduction in grade. Submittals beyond 24 hours after the deadline will not be accepted. The project also includes an oral presentation about the project.