CE 495 – 141 Civil Engineering Design II

Summer 2017: May 22, 2017 - Jul 12, 2017

Instructor: Joseph Baladi, P.E, P.P, CME, CPWM
Email: joseph.baladi@njit.edu
Class 6:00 pm - 9:00 pm TR Kupfrian Hall 206

Course Description:

Provides students with the type of design experience they would receive if engaged in civil and environmental engineering design practice. Students can select from multiple projects with choice of concentration on: structures, transportation and planning, and environmental engineering.

Students will gather project data of real life ongoing project in New Jersey, visit the site, attend one public session for stake holders or general information session, review relevant project reports related to their field of choice, get familiar with all steps needed in the process to prepare alternatives, design and present preferred final design.

Grades:

<table>
<thead>
<tr>
<th>Final Score</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Above 90</td>
<td>A</td>
</tr>
<tr>
<td>85-89</td>
<td>B+</td>
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<tr>
<td>80-84</td>
<td>B</td>
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<tr>
<td>76-79</td>
<td>C+</td>
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<tr>
<td>70-74</td>
<td>C</td>
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<tr>
<td>65-69</td>
<td>D</td>
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<tr>
<td>Below 64</td>
<td>F</td>
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10 percent of grade on class participation
10 percent on attending project meeting or related activities
80 percent on submittals and presentation.
**Course Outlines:**

Class 1: Introduction and overview to Projects

Class 2: Project and group selection, handout related to projects

Class 3: Project support materials review

Class 4: Project process, stakeholders, public meeting, funding sources

Class 5: Design Criteria

Class 6: Site Visit

Class 6: Project management and coordination with entities involved in project (private, local, state and federal)

Class 7: Work with individual group

Class 8: CAD and progress and interim submittal

Class 9: Additional Specific Design Criteria related to groups. Lecture

Class 9: Group sessions and guidance regarding preferred alternative design

Class 10: Meeting with actual stakeholders and project managers (date may vary)

Class 11: Review and comment on progress set

Class 12: Submittal and Presentations

Class 13: Submittal and Presentations

Class 14: Closing remarks and comments. Appendix / supporting materials submittals deadline.

**Projects:**

Bridge Design: including roadway design and layout and other related elements

Public Transportation Hub / Mixed Use:

Preliminary Engineering Design and Environments Impact for a proposed rail line