To: The Engineering Faculty  
From: School of Electrical and Computer Engineering  
Re: ECE 49401

The School of Electrical and Computer Engineering has approved the following new course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

**ECE 49401 Professional Communication Capstone**  
Lecture: 1 credit  
Semesters offered: Fall, Spring  
Non-repeatable  

Pre-requisites: ECE 39401

**Course Description**  
This course provides ECE students an opportunity to refine their professional communication skills before launching into the workplace or graduate school. Topics include: ethics in ECE, workplace communication (written and verbal), and plans for professional growth.

**Reason**  
This course is the completion of the ECE seminar sequence where they will refine their professional and ethical development in and out of the classroom.

**History of Previous Offering**  
This course was previously offered as ECE 40000 but is now redesigned into a capstone course and will serve as the final in a three-course sequence: ECE 29401 – ECE 39401 – ECE 49401. This sequence of courses is designed to introduce, develop and master ethical and professional development of our ECE students.

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Michael R. Melloch, Associate Department Head of ECE
**ECE 400**

2 sections per semester  
Thursday 11, 12 (or 12, 1)  
100 students per section  
WALC 1132 (seats 108)

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Due</th>
<th>Other</th>
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<tbody>
<tr>
<td>8.24</td>
<td>Course intro</td>
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<tr>
<td>8.31</td>
<td>Teamwork/Diversity/Presentations</td>
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<td>Choose teams in class</td>
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<td>9.7</td>
<td>In-class work on presentations</td>
<td>Topics</td>
<td>Speaker 1 -- Ethics -- at night</td>
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<td>9.14</td>
<td>TBA</td>
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<td>9.21</td>
<td>Groups 1-3</td>
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<td>Speaker 2 -- at night</td>
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<td>9.28</td>
<td>Groups 4-6</td>
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<td>10.5</td>
<td>TBA</td>
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<td>10.12</td>
<td>Groups 7-9</td>
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<td>10.19</td>
<td>Proposal Discussion</td>
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<td>Speaker 3 -- at night</td>
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<tr>
<td>10.26</td>
<td>Groups 10-12</td>
<td>Must have IDI finished</td>
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<td>11.2</td>
<td>IDI Discussion</td>
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<td>Bring IDI results</td>
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<td>11.9</td>
<td>Groups 13-15</td>
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<td>Proposals Due</td>
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<td>11.16</td>
<td>Groups 16-18</td>
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<td>Engineering Practice Assignment Due</td>
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<td>11.23</td>
<td>No class - Thanksgiving</td>
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<td>11.30</td>
<td>Course debrief</td>
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<td>12.7</td>
<td>Ragu</td>
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<td>Last class</td>
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ECE 400 Assignments

Learning Objectives:
1. An ability to communicate ideas in a written form
2. An awareness of skills necessary to achieve success in the workplace
3. The ability to research and evaluate current events in an engineering context
4. An understanding of the role of ethical engineering in the work environment

- Ethics presentation - 150
- IDI - 100
- Proposal - 100
- Engineering Practice -- 50
- Attendance -- 100

- Assignment One: Group Presentation (LOs: 1, 2, 3, 4): With your teams, you will create a 15 minute presentation for the class on an ethical issue related to engineering. You will briefly explain the issue (2 minutes), present the different sides of the issue (8 minutes each side), and answer 5 minutes of questions from the audience. Your presentation must include a visual aid (power point, handout, model, demonstration). You will turn in an outline of the transcript for your presentation, a copy or picture of/link to your visual aid, hard copies of at least two sources that discuss your chosen topic, a team evaluation, and a self-evaluation.
  - 6 students; 18 groups
  - 15 minutes
  - 3 groups for 6 days

- Assignment Two: Personal Growth Plans (LOs: 1, 2, 3, 4): Based on the results of your IDI and your understanding of current engineering/multicultural issues, you will create a Personal Growth Plan, using the Personal Growth Plan template.

- Assignment Three: Proposal (LOs: 1, 2, 3): You will select an issue you see in ECE and propose a reasonable solution to the problem. These documents will be seen by Dr. Balakrishnan, and should represent your very best work.
Help from PRF

- Six nights of speakers (12 speakers)

  - Ethics
  - Law
  - One other

  - Young Alumni -3
  - Young Industry -3
  - Challenges and Decisions -3