

<b>COURSE NUMBER:</b> Vg496		<b>COURSE TITLE:</b> Professional Ethics	
<b>CREDIT:</b> 2		<b>PREREQUISITES:</b> Vg100, Junior or Senior standing	
<b>TEXTBOOKS/REQUIRED MATERIAL:</b> All reading materials are posted on the internet. Most readings are writings by the main course instructor. Alternatively, the text <u>Ethics in Engineering</u> , 4 <sup>th</sup> edition, by Mike Martin and Roland Schinzinger may be used.		<b>PREPARED BY:</b> Heinz Luegenbiehl <b>DATE OF PREPARATION:</b> June 29, 2012 <b>DATE OF UC APPROVAL:</b> Oct. 30, 2013	
<b>INSTRUCTOR(S):</b> Heinz Luegenbiehl		<b>SCIENCE/DESIGN:</b> n/a	
<b>CATALOG DESCRIPTION:</b> Introduction to the nature of professional responsibilities and engineering ethics. Students become acquainted with the basic ethical demands made by their future profession. They learn how to critically examine their role in society and how to independently make decisions on an ethical basis. They improve their ability to work in teams and to make presentations to fellow professionals and to the public. Specific topics include engineering codes of ethics, safety, possibilities of dissent, and cross-cultural issues.		<b>COURSE TOPICS</b>  <ol style="list-style-type: none"> <li>1. The Nature of Ethics</li> <li>2. Case Study Procedures</li> <li>3. The Nature of Professions</li> <li>4. Professional Autonomy and Authority</li> <li>5. Engineering Codes of Ethics</li> <li>6. Safety</li> <li>7. Loyalty and Dissent</li> <li>8. Conflicts-of-interest and Confidentiality</li> <li>9. International and Cross-Cultural Issues</li> <li>10. Attitudes toward Technology</li> </ol>	
<b>COURSE STRUCTURE/SCHEDULE:</b> Lecture: once per week, 90 minutes each			
<b>COURSE OBJECTIVES</b> [Course Outcomes in brackets]	<ol style="list-style-type: none"> <li>1. To provide opportunities for students to learn the ethical requirements of being part of the engineering profession. [1, 2, 3, 4]</li> <li>2. To provide experiences in dealing with ethical issues students are likely to face in their professional lives. [5,6,7]</li> <li>3. To provide experience of working in teams to accomplish a common goal. [8,9,10]</li> </ol>		
<b>COURSE OUTCOMES</b> [Program Outcomes in brackets]	<p>After completing Vg496, students should be able to:</p> <ol style="list-style-type: none"> <li>1. Demonstrate knowledge of the nature of professional communities and of professional identification. [f,h,j]</li> <li>2. Demonstrate knowledge of a relevant engineering code of ethics. [f]</li> <li>3. Demonstrate knowledge of the major ethical issues of concern to engineers.[f,h,j]</li> <li>4. Demonstrate knowledge of the important role of engineering in society and of the social impacts of engineering activities. [f,h,j]</li> <li>5. Utilize the case method for evaluating ethical issues. [h]</li> <li>6. Be able to apply an engineering code of ethics to resolve ethical issues. [f,h]</li> <li>7. Be able to independently identify and resolve professional ethical issues. [f,h,j]</li> <li>8. Work in teams to develop a written document. [d,f]</li> <li>9. Organize a team-based oral presentation. [d,f]</li> <li>10. Lead a class discussion regarding an ethical issue. [d,f]</li> </ol>		
<b>ASSESSMENT TOOLS</b> [Course Outcomes in brackets]	<p>Homework [2,3,5,6,7]  Final Exam [1,2,3,4,5,6,7]  Written reports [3,4,8]  Oral reports [2,3,5,6,9,10]  Peer evaluations [9,10]</p>		