



**Hashemite University**  
**Department of Allied Engineering Sciences**  
**Ethics and Communication Skills**  
**(3 Credit Hours/Dept. Compulsory )**

**Instructors**

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**Grading info**

Midterm Exam	30%
Course Presentation	30%
Final	40%

**Class Info**

Days	
Time	
Location	Announced on the Moodle

**Course**

Course Number:	110400203
Prerequisite:	111405110
Textbook:	<ul style="list-style-type: none"> <li>• David Beer and David McMurrey, “<b>A guide to writing as an engineer</b>”, 4th Edition, John Wiley &amp; sons, 2014.</li> <li>• Charles B. Fleddermann, “<b>Engineering Ethics</b>”, 4th Edition, Pearson Prentice Hall, 2012.</li> </ul>
Course Description:	This course aims to introduce engineering ethics in theory and practice using a multi-disciplinary approach. The students are exposed to ethical issues that engineers sometimes face in professional practice, to help students think more clearly and deeply about such issues, and to explore resources, strategies, and options for coping with such conflicts. The course will make use of case studies of ethical issues drawn from different fields of engineering. Oral and written communication skills will be also discussed by introducing levels and style of technical writing. Common errors in usage, documentation and citation of engineering documents will be addressed.
Specific Outcomes of Instruction (Course Learning Outcomes)	<ol style="list-style-type: none"> <li>1. <b>Understand</b> the nature of professional responsibility and be able to identify the ethical elements in decisions. (f)</li> <li>2. <b>Communicate</b> effectively in oral and written format. (g)</li> <li>3. <b>Develop</b> an ability to function on multidisciplinary teams. (d)</li> </ol>
Important material	<ul style="list-style-type: none"> <li>- Lecture notes</li> <li>- References</li> <li>- Internet resources</li> </ul>

**References:**

<ul style="list-style-type: none"> <li>- Gerald Alred, Charles Brusaw, and Walter Oliu, “<b>The Handbook of Technical Writing</b>”, St. Martin’s Press, 7th edition</li> <li>- Mike Martin and Roland “<b>Ethics in Engineering</b>” Fourth Edition, Mc Graw Hall.</li> </ul>
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## Major Topics Covered and Schedule in Weeks:

Topic	# Weeks	# Contact hours*
Introduction	1	3
Engineers and Writing	0.5	1.5
Eliminating Intermittent(sporadic) Noise in Writing	0.5	1.5
Some Guidelines for Good Engineering Writing	0.5	1.5
Writing Letters, Memoranda, and E-mail	0.5	1.5
Writing Common Engineering Documents	0.5	1.5
Writing an Engineering research and design Report	0.5	1.5
Tables and Graphics	0.5	1.5
Engineering Your Presentation	1	3
Writing to Get an Engineering Job	1	3
Documentation and Ethics in Engineering Writing	0.5	1.5
Presentation 1: Introduction	0.5	1.5
Presentation 2: Professionalism and Codes of Ethics	0.5	1.5
Presentation 3: Understanding Ethical Problem	0.5	1.5
Presentation 4: Ethical Problem-Solving Techniques	0.5	1.5
Presentation 5: Risk, Safety, and Accidents	0.5	1.5
Presentation 6: The Rights and Responsibilities of Engineers	0.5	1.5
Presentation 7: Ethical Issues in Engineering Practice	0.5	1.5
Presentation 8: Doing the Right Thing	0.5	1.5
<b>Total</b>	<b>11</b>	<b>33</b>

## Student Outcomes (SO) Addressed by the Course:

#	Outcome Description	Contribution
<b>General Engineering Student Outcomes</b>		
(a)	An ability to apply knowledge of mathematics, science, and engineering	
(b)	An ability to design and conduct experiments, as well as to analyze and interpret data	
(c)	An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability	
(d)	An ability to function on multidisciplinary teams	<b>L</b>
(e)	An ability to identify, formulate, and solve engineering problems	
(f)	An understanding of professional and ethical responsibility	<b>H</b>
(g)	An ability to communicate effectively	<b>H</b>
(h)	The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	
(i)	A recognition of the need for, and an ability to engage in life-long learning	
(j)	A knowledge of contemporary issues	
(k)	An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice	

**H**=High, **M**= Medium, **L**=Low

## Course Policy

- The course will follow selected subjects as listed on the course schedule. Additional lecture notes and examples will be given and discussed in class as much as time permits.
- Course Website (Moodle): <http://www.mlms.hu.edu.jo/>. Students are asked to check the website regularly for announcements.
- Students are responsible for following up the lecture materials
- Students are responsible for reading additional information and examples in order to understand the materials discussed in the lectures.
- The engineering ethics part of this course will be presented by students to evaluate their presentation abilities.
- Ethics presentations will be evaluated according to a “presentation evaluation form” that will be posted on “Moodle”.
- The number of students that will be assigned to present each chapter of the ethics textbook will also be posted on “Moodle”.
- Names of students for each presentation group will be posted on “Moodle” and at the door of the instructor’s office.
- If you miss class, there won’t be a makeup test, etc. and you WILL get a zero unless you have a valid excuse.
- Cheating and plagiarism are completely prohibited.
- If you miss more than 15% of classes you will automatically fail the class.