**Course:** Introduction to Engineering 0908200 (2 Credit hours – Compulsory Course)

**Instructor:** Dr. Musa Al-Yaman  
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**Course Website:**  
http://eacademic.ju.edu.jo/m.alyaman/Material/Forms/AllItems.aspx

**Catalog Data:**  
An introduction to the study and practice of engineering. Topic include: History of engineering, major engineering disciplines, engineering design and problem solving, ethics and teamwork, communication skills, computer tools, profile of the engineering profession.

**Prerequisites by Course:** None

**Prerequisites By Topic: None**

**Textbook:**  

**Schedule & Duration:**  
16 Weeks, 32 lectures (50 minutes each) plus exams.

**Minimum Student Material:**  
Text book, class handouts, and an access to Personal Computer with office software

**Instructional Methods:**  
1. Lecture/Problem solving sessions.  
2. Case studies using Microsoft office.  
3. short pop-up Quizzes  
Classroom with whiteboard and projection display facilities, library, and computational facilities.

**Minimum College Facilities:**

**Course Objectives:**  
1. Recognize the role of engineering design and engineering analysis in economy and society.  
2. Appreciate the importance of multidisciplinary teamwork in engineering practice.  
3. Understand the ethical and social responsibility of engineers.  
4. Recognize the importance of written and oral communication in the engineering profession.  

**Contribution to Professional Component:**  
The course motivates the student to acquire the knowledge, skills and attitudes necessary to succeed in an engineering profession, and helps building teamwork, communication skills and ethical responsibility.
Course Learning Outcomes and Relation to ABET Student Outcomes:
Upon successful completion of this course, a student should:
1. Recognize the role of engineering design and engineering analysis in economy and society
2. Appreciate the importance of multidisciplinary teamwork in engineering practice.
3. Understand the ethical and social responsibility of engineers.
4. Recognize the importance of written and oral communication in the engineering profession.
5. Know how to use Microsoft Word and Microsoft Project software.
6. An ability to identify and solve engineering problems.

Course Topics:
<table>
<thead>
<tr>
<th>Course Topic</th>
<th>Chapter(s) in Text</th>
<th>Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>The History of Engineering</td>
<td>Chapter 1</td>
<td>2</td>
</tr>
<tr>
<td>Engineering Majors</td>
<td>Chapter 2</td>
<td>4</td>
</tr>
<tr>
<td>Profile of the Engineering Profession</td>
<td>Chapter 4</td>
<td>4</td>
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<tr>
<td>Succeeding in the Study of Engineering</td>
<td>Chapter 5</td>
<td>4</td>
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<tr>
<td>Problem Solving</td>
<td>Chapter 6</td>
<td>4</td>
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<tr>
<td>Computer Tools for Engineers</td>
<td>Chapter 7</td>
<td>2</td>
</tr>
<tr>
<td>Teamwork Skills</td>
<td>Chapter 8</td>
<td>4</td>
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<tr>
<td>Engineering Design</td>
<td>Chapter 9</td>
<td>2</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>Chapter 10</td>
<td>2</td>
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<tr>
<td>Ethical Responsibility</td>
<td>Chapter 11</td>
<td>2</td>
</tr>
</tbody>
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Ground Rules:  
□ Attendance:
Students are expected to attend EVERY CLASS SESSION and they are responsible for all material, announcements, schedule changes, etc., discussed in class. The university policy regarding the attendance will be strictly adhered to.

• Make up Examinations
There will be no makeup exams for any exam that will be taken during the course.

Exceptions to this rule is restricted only to the following cases:-
1. Death of only first order relatives (father, mother, sister, or brother).
2. Hospital entry (in-patient) during the time of the examination.

Any other cases will be given the zero mark in the corresponding exam.

• Special Notes
1. Seating plan will be as given in the attendance sheet.
2. Students creativity is welcomed and will receive additional marks.

Assessments:  Exams, Quizzes, Projects, and Assignments.
Grading policy:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Project</td>
<td>15%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
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Last Updated:  October, 2017