

Course Syllabus

1	Course title	Introduction to engineering	
2	Course number	0908200	
3	Credit hours	2	
	Contact hours (theory, practical)	2 theoretical hours	
4	Prerequisites/corequisites	None	
5	Program title	B.Sc. in Mechatronics Engineering	
6	Program code	0908200	
7	Awarding institution	The University of Jordan	
8	School	School of Engineering	
9	Department	Mechatronics Engineering Department	
10	Course level	Second year	
11	Year of study and semester (s)	2021/2022 Second semester	
12	Other department (s) involved in teaching the course	None	
13	Main teaching language	English	
14	Delivery method	<input type="checkbox"/> Face to face learning <input type="checkbox"/> Blended <input checked="" type="checkbox"/> Fully online	
15	Online platforms(s)	<input checked="" type="checkbox"/> Moodle <input checked="" type="checkbox"/> Microsoft Teams <input type="checkbox"/> Skype <input type="checkbox"/> Zoom <input type="checkbox"/> Others.....	
16	Issuing/Revision Date	20/2/2022	

17 Course Coordinator:

Name: Dr. Musa AlYaman	Contact hours: Monday 12:30-13:30, Thursday 12:30-13:30
Office number: 202 Mechatronics Engineering Department	Phone number: : 5355000 Ext. 23032
Email: m.alyaman@ju.edu.jo	



18 Other instructors:

None

19 Course Description:

This course covers several topics including the history of engineering, Mechatronics engineering: evolution and relationship with other disciplines mainly planning and management, types of engineering, engineering design, engineering ethics, the proper use of engineering tools including computers and computer simulations, as well as tools for inventive problem solving, creative and critical thinking including mind mapping, team work skills and an introduction to project management.

20 Course aims and outcomes:

A- Aims:

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.

B- Students Learning Outcomes (SLOs):

Upon successful completion of this course, students will be able to:

SLOs	SLO (1)	SLO (2)	SLO (3)	SLO (4)	SLO (5)	SLO (6)	SLO (7)
SLOs of the course							
1. Recognize the role of engineering design and engineering analysis in economy and society							X
2. Appreciate the importance of multidisciplinary teamwork in engineering practice					X		
3. Understand the ethical and social responsibility of engineers				X			
4. Recognize the importance of written and oral communication in the engineering profession			X				

21. Topic Outline and Schedule:

Week	Lecture	Topic	Student Learning Outcome	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Day/Date
1	1.1		3,4,5 and 7	Fully Online	Teams			Sunday 27/2/2022
	1.2	Course Overview	3,4,5 and 7	Fully Online	Teams	Synchronous		Tuesday 1/3/2022
	1.3							
2	2.1	Chapter 1	3,4,5 and 7	Fully Online	Teams	Moodle		Sunday 6/3/2022
	2.2	Chapter 1 Discussion	3,4,5 and 7	Fully Online	Teams	Synchronous		Tuesday 8/3/2022
	2.3							
3	3.1	Chapter 2	3,4,5 and 7	Fully Online	Teams	Moodle	Assignment 1 Available: 13:30	Sunday 13/3/2022
	3.2	Chapter 2 Discussion	3,4,5 and 7	Fully Online	Teams	Synchronous		Tuesday 15/3/2022
	3.3							
4	4.1	Chapter 3	3,4,5 and 7	Fully Online	Teams	Moodle	Assignment 1 Due:13:30	Sunday 20/3/2022
	4.2	Chapter 3 Discussion	3,4,5 and 7	Fully Online	Teams	Synchronous		Tuesday 22/3/2022
	4.3							
5	5.1	Chapter 4	3,4,5 and 7	Fully Online	Teams	Moodle		Sunday 27/3/2022
	5.2	Chapter 4 Discussion	3,4,5 and 7	Fully Online	Teams	Synchronous		Tuesday 29/3/2022
	5.3							
6	6.1	Chapter 5	3,4,5 and 7	Fully Online	Teams	Moodle		Sunday 3/4/2022
	6.2	Chapter 5 Discussion	3,4,5 and 7	Fully Online	Teams	Synchronous		Tuesday 5/4/2022

	6.3							
7	7.1	Chapters (1-5)	3,4,5 and 7	Face to Face	Teams	Synchronous	Mid Exam 5:30-6:00 pm	Sunday 10/4/2022
	7.2	Mid Discussion	3,4,5 and 7	Fully Online	Teams	Synchronous		Tuesday 12/4/2022
	7.3							
8	8.1	Chapter 6	3,4,5 and 7	Fully Online	Teams	Moodle		Sunday 17/4/2022
	8.2	Chapter 6 Discussion	3,4,5 and 7	Fully Online	Teams	Synchronous		Tuesday 19/4/2022
	8.3							
9	9.1	Chapter 7	3,4,5 and 7	Fully Online	Teams	Moodle		Sunday 24/4/2022
	9.2	Chapter 7 Discussion	3,4,5 and 7	Fully Online	Teams	Synchronous		Tuesday 26/4/2022
	9.3							
10	10.1	MS-Project+ MS-Word+ MS-Excel	3,4,5 and 7	Fully Online	Teams	Moodle		Sunday 8/5/2022
	10.2	Discussing MS (Project+ Word+ Excel)	3,4,5 and 7	Fully Online	Teams	Synchronous	Project Available: 13:30	Tuesday 10/5/2022
	10.3							
11	11.1	Chapter 8	3,4,5 and 7	Fully Online	Teams	Moodle	Assignment 2 Available: 13:30	Sunday 15/5/2022
	11.2	Chapter 8 Discussion	3,4,5 and 7	Fully Online	Teams	Synchronous		Tuesday 17/5/2022
	11.3							
12	12.1	Chapter 9 (Part1)	3,4,5 and 7	Fully Online	Teams	Moodle	Assignment 2 Due:13:30	Sunday 22/5/2022

	12.2	Chapter 9 (Part1) Discussion	3,4,5 and 7	Fully Online	Teams	Synchronous		Tuesday 24/5/2022
	12.3							
13	13.1	Chapter 9 (Part2)	3,4,5 and 7	Fully Online	Teams	Moodle		Sunday 29/5/2022
	13.2	Chapter 9 (Part2) Discussion	3,4,5 and 7	Fully Online	Teams	Synchronous	Project Due:13:30	Tuesday 31/5/2022
	13.3							
14	14.1	Project Discussion	3,4,5 and 7	Fully Online	Teams	Moodle		Sunday 5/6/2022
	14.2	Course Feedback	3,4,5 and 7	Fully Online	Teams	Synchronous		Tuesday 7/6/2022
	14.3							

22 Evaluation Methods:

Opportunities to demonstrate achievement of the SLOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	SLOs	Period (Week)	Platform
Participation and Assignments	10	Chapters 2 & Chapters 8	3,4,5 and 7	3 rd week & 11 th week	Moodle
Project	20	Chapter 7 & MS Project & MS Word	3,4,5 and 7	10 th week	Moodle
Midterm Exam	30	Chapters 1-5	3,4,5 and 7	7 th week Sunday 10/4/2022	Moodle
Final Exam	40	All topics	3,4,5 and 7		Moodle



23 Course Requirements

Each student should have a computer (with MS Project, MS Excel, and MS Word installed) and internet connection.

24 Course Policies:

A- Attendance policies:

Students are expected to attend EVERY CLASS SESSION and they are responsible for all materials, announcements, schedule changes, etc., discussed in class

B- Absences from exams and submitting assignments on time:

There will be no make-up exams for any exam or missed assignment, which will be taken during the course. Exceptions to this rule is restricted only to the following cases:

- Death of only first order relatives (father, mother, sister, or brother).
- Hospital entry (inpatient) during the time of the examination.

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

C- Health and safety procedures:

Students are responsible for:

- Keeping themselves informed of conditions affecting their health and safety;
- Participating in safety training programs;
- Following to health and safety practices in their workplace, classroom;
- Advising of or reporting unsafe practices or serious hazards in the classroom or laboratory.

D- Honesty policy regarding cheating, plagiarism, misbehavior:

Follow the UoJ guidelines that providing definitions, procedures, and recommendations for promotion and violation of academic honesty and integrity.

E- Grading policy:

Follow the UoJ guidelines that providing definitions of undergraduate grading policy

F- Available university services that support achievement in the course:

Text book, class handouts, and an access to Personal Computer with office software



25 References:

A- Required book(s), assigned reading and audio-visuals:

Engineering Fundamentals: An Introduction to Engineering. 4th ed. By S. Moaveni, (2011). Cengage Learning

B- Recommended books, materials, and media:

Exploring Engineering: An Introduction to Engineering and Design. 2nd edition by P. Kosky, R. Balmer, W. Keat and G. Wise. (2010). Elsevier Inc.

26 Additional information:

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Name of Course Coordinator: Dr. Musa AlYaman-----Signature: ----- Date: 20/2/2022
Head of Curriculum Committee/Department: ----- Signature: ----- ---
Head of Department: ----- Signature: ----- -
Head of Curriculum Committee/Faculty: ----- Signature: ----- -
Dean: ----- Signature: -----