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_	Issue Number and Date	2/3/24/2022/2963
Course Syllabus		05/12/2022
	Number and Date of Revision or Modification	
	Deans Council Approval Decision Number	2/3/24/2023
	The Date of the Deans Council Approval Decision	23/01/2023
	Number of Pages	06

Course Syllabus

1	Course title	Mechatronics Engineering Skills and Ethics				
2	Course number	0908101				
3	Credit hours	2 2				
5	Contact hours (theory, practical)	2 theoretical hours				
4	Prerequisites/corequisites	None				
5	Program title	B.Sc. in Mechatronics Enginee	ring			
6	Program code	0908101				
7	Awarding institution	The University of Jordan				
8	School	School of Engineering				
9	Department	Mechatronics Engineering Department				
10	Course level	First Year				
11	Year of study and semester (s)	2023/2024 Second semester				
12	Other department (s) involved in teaching the course	None				
13	Main teaching language	English				
14	Delivery method	\Box Face to face learning \Box B1	ended			
15	Online platforms(s)	■Moodle □Microsoft Team	ns □Skype □Zoom			
16	Issuing/Revision Date	5/10/2023				

17 Course Coordinator:



Name:Dr. Musa AlYamanContact hours: Sunday 9:30-10:30, Monday 9:30-10:00Office number:**202** Mechatronics Engineering DepartmentPhone number: : 5355000 Ext. 23032Email:m.alyaman@ju.edu.jo

18 Other instructors:

None

19 Course Description:

This course covers several topics history of engineering, Mechatronics engineering evolution and relationship with other disciplines. Planning and management, types of engineering, engineering design, engineering ethics such as codes of ethics and honour, responsibilities to employers and society. 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, teamwork skills, an introduction to project management. Technical writing such as structure of technical reports, writing process, writing style, grammar, punctuation, and usage. Requirements of effective presentations.

20. Program Intended Learning Outcomes: (To be used in designing the matrix linking the intended learning outcomes of the course with the intended learning outcomes of the program)

			Mech	natronics	SO's		
PEO's	1	2	3	4	5	6	7
1							
2							
3							
4							

Relationship of SO's to PEO's.

21. Course Intended Learning Outcomes: (Upon completion of the course, the student will be able to achieve the following intended learning outcomes)

Descriptors	ILO/ID	Program SOs	SO
			(3)
		ILOs of the course	
Vacualadaa	A1	Understand the underlying basic concepts Ethics in Engineering	
Knowledge	A2	Understand the pivotal role of Engineers in the Society.	



	B1	Design and implement an effective Engineering Solutions	
01 .11	B2	Evaluate and apply basic MS Word, Excel and Project.	
Skills	B3		
	B4		
Competence	C1	Demonstrate competency in basic leadership and team working skills.	
*	C2	Apply time management skills.	

22 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					Х		
3.	Understand the ethical and social responsibility of engineers				Х			
4.	Recognize the importance of written and oral communication in the engineering profession			Х				

23. Topic Outline and Schedule:



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Week	Lectu re	Торіс	ILO/s Linked to the Topic	Learning Types (Face to Face/ Blended/		Synchrono us / Asynchron ous	Evaluation Methods	Learning Resources
	1.1	Course Overview	A1	Face to Face	Moodle Teams	Synchronou s	Exams	E-learning portal + Book
1	1.2	Course Introduction	A1	Face to Face	Moodle Teams	Synchronou s	Exams	E-learning portal +
	1.3							
	2.1	Chapter 1 (Definition and History)	B1	Face to Face	Moodle Teams	Synchronou s	Exams	E-learning portal +
2	2.2	Chapter 1 (Definition and History)	B1	Face to Face	Moodle Teams	Synchronou s	Exams	Book
	2.3							
	3.1	Chapter 2 (Mechatronics Engineering)	B1	Face to Face	Moodle Teams	Synchronou s	Exams	E-learning portal +
3	3.2	Chapter 2 (Mechatronics Engineering)	B1	Face to Face	Moodle Teams	Synchronou s	Exams	Book
	3.3							
	4.1	Chapter 3 (Statistics and Ethics)	C1	Face to Face	Moodle Teams	Synchronou s	Homew ork, Exams	Book
4	4.2	Chapter 3 (Statistics and Ethics)	C1	Face to Face	Moodle Teams	Synchronou s	Homew ork, Exams	E-learning portal +
	4.3							
5	5.1	Chapter 3	B1	Face to Face	Moodle Teams		Exams	E-learning portal +



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1		(Sector 1						1
		(Statistics and Ethics)				Synchronou s		
	5.2	Chapter 4 (Classroom Skills)	B1	Face to Face	Moodle Teams	Synchronou s	Exams	Book
	5.3							
	6.1	Chapter 4 (Classroom Skills)	B1	Face to Face	Moodle Teams	Synchronou s	Exams	Book
6	6.2	Chapter 5 (Problem Solving)	B1	Face to Face	Moodle Teams	Synchronou s	Exams	E-learning portal +
	6.3							
	7.1	Chapter 5 (Problem Solving)	B2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	E-learning portal +
7	7.2	Chapter 6 (Design Skills)	B2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	Book
	7.3							
	8.1	Mid Term Chapters (1-5)	B2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	Book
8	8.2	Mid Term Discussion	B2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	E-learning portal +
	8.3							
0	9.1	Chapter 6 (Design Skills)	B1	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	E-learning portal +
9	9.2	Chapter 7 (Project Management)	B2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	Book



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	9.3							
	10.1	MS Project	B1	Face to Face	Moodle Teams	Synchronou S	Assignm ents, Exams	E-learning portal +
10	10.2	MS Word	B1	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	Book
	10.3							
	11.1	MS Excel	B2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	Book
11	11.2	Chapter 8 (Teamwork)	B1	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	E-learning portal +
	11.3							
	12.1	Chapter 8 (Teamwork)	B2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	E-learning portal +
12	12.2	Chapter 9 (Communicatio n Skills)	A2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	Book
	12.3							
	13.1	Chapter 9 (Communicatio n Skills)	A2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	Book
13	13.2	Chapter 9 (Communicatio n Skills)	A2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	E-learning portal +
	13.3		A2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	Book
14	14.1	Course Feedback	A2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	E-learning portal +
17	14.2	Marks Feedback	C2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	Book



	14.3							
15	15.1	Course Discussion and Feedback	C2	Face to Face	Moodle Teams	Synchronou s	Assignm ents, Exams	Book
	15.2							
	15.3							

24. Evaluation Methods:

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

Evaluation Activity	Mar k	Topic(s)	ILO/s Linked to the Evaluatio n activity	Period (Week)	Platfor m
Assignments	16	Eight Assignments	3		Moodle
Project	10	Chapter 7 & MS Project & MS Word	3	10 th week	Moodle
Midterm Exam	24	Chapters 1- 5	3	8 th week	Moodle
Final Exam 50 All topics		All topics	3		Moodle

25. Course Requirements:

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

26. 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

27. 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.



28. Additional information:

<u> </u>		
Name of the Instructor or the Course Coordinator:	Signature:	Date:
Dr. Musa Al Yaman	Musa	31/1/2024
Name of the Head of Quality Assurance Committee/ Department	Signature:	Date:
Name of the Head of Department	Signature:	Date:
Name of the Head of Quality Assurance Committee/ School or Center	Signature:	Date:
Name of the Dean or the Director	Signature:	Date: