



Hashemite University
College of Engineering
BE 101-(Engineering Workshop 1 Credit Hours/Fac.Compulsory)

Instructor

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Office hours:	Microsoft Teams

Grading info

Mid	50%
Labwork	
Final	50%

Class Info

Days	
Time	
Location	

Course

Course Number:	110400101
Prerequisite:
Textbook:	Lab manual
Course Description:	This course is designed to provide engineering students with fundamentals of engineering materials and their properties, manufacturing processes and industrial safety. It also exposes the student to practical training in different workshops in order to gain basic skills
Specific Outcomes of Instruction (Course Learning Outcomes):	<ul style="list-style-type: none"> - Understand the basic safety instructions which should be followed in the engineering workshops(a,k,) - Realize the basic measuring devices and tools and learn how to use them(b,c). - Understand the engineering materials basic structure and the formation of grains and grain boundaries(d,e,k,b).
Important material	<ul style="list-style-type: none"> - Lecture notes - References - Internet resources

References:

James H. Earle, “ Engineering Design Graphics, with AutoCAD 2000”, Addison Wesley

Major Topics Covered and Schedule in Weeks:

Topic	# Weeks	# Contact hours*
Industrial Safety	2	6
Measuring and Marking-out	3	9
Engineering Materials and their Properties	3	6
Casting Processes	1	6
Metal Forming Processes	2	9
Metal Machining Processes	4	9
Total	15	45

Course Policy

If you miss class, there won't be a makeup test, quiz, etc. and you WILL get a zero unless you have a valid excuse.

Student Outcomes (SO) Addressed by the Course:

#	<i>Outcome Description</i>	<i>Contribution</i>
<i>General Engineering Student Outcomes</i>		
(a)	An ability to apply knowledge of mathematics, science, and engineering	<i>L</i>
(b)	An ability to design and conduct experiments, as well as to analyze and interpret data	<i>M</i>
(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	<i>H</i>
(d)	An ability to function on multidisciplinary teams	<i>L</i>
(e)	An ability to identify, formulate, and solve engineering problems	<i>L</i>
(f)	An understanding of professional and ethical responsibility	
(g)	An ability to communicate effectively	
(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	<i>H</i>

H=High, M= Medium, L=Low