

### **Hashemite University College of Engineering**

## **BE 201-** Engineering Drawing (2 Credit Hours/Fac. Compulsory)

Instructor		Grading in	ıfo	Class Info		
Eng. Ayat Alhinawi		Mid	30%	Days		
Email:		Labwork	30%	Time		
Office:	Eng. 3015	Final	40%	Location		
Office hours:	Sun/Tue/Thurs: 10:00-11:00					
Course						
Course Number:	110400201					
Prerequisite:						
Textbook:	Lab manual					
Course Description:	The course is designed to introduce principles of engineering drawing and descriptive geometry and enhance students' visualization capabilities to handle 3 D problems. It is hoped that this course will enable students to read and understand design details of engineering projects.					
Specific Outcomes of Instruction (Course Learning Outcomes):	<ol> <li>Introducing the fundamentals of engineering drawing language that enables engineering ideas to be expressed clearly through visual illustration.(a,k)</li> <li>Enhancing students' 3 D capabilities to visualize, analyze, and understand engineering related problems. (e,k)</li> <li>Provides completeness of details necessary for designing and constructing of machines or structural elements(k)</li> </ol>					
Important material	<ul><li>Lecture notes</li><li>References</li><li>Internet resources</li></ul>					

#### **References:**

- James H. Earle, "Engineering Design Graphics", Addison Wesley.

Major Topics Covered and Schedule in Weeks:

Topic	# Weeks	# Contact hours*
Introduction to Engineering Drawing: Drawing instruments, Line techniques, Presentation of drawings, Lettering.	2	6
Geometric Construction: Lines, Angles, Ellipses, offsets and tangency.	3	9
Orthographic Drawing: Multi-view orthographic projections, Free hand sketching.	3	6
Dimensioning: rules.	1	6
Sections: Basics of sectioning, Types of sections.	2	9
Pictorials: Isometric drawing and projection, Oblique drawing and projection.	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. Cheating and plagiarism are completely prohibited.

<sup>1</sup>st Semester (2016-2017)

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

#	Outcome Description	Contribution
	General Engineering Student Outcomes	
(a)	An ability to apply knowledge of mathematics, science, and engineering	l
(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	
(e)	An ability to identify, formulate, and solve engineering problems	l
(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	Н

H=High, M= Medium, L=Low