
	Ministry of Higher Education and Scientific Research - Iraq University of Tikrit College of Petroleum Process Engineering Department of Petroleum and Gas Refining Engineering	
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MODULE DESCRIPTOR FORM

نموذج وصف المادة الدراسية

Module Information الدراسية المادة معلومات			
Module Title	Engineering Drawing		Module Delivery
Module Type	Basic		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	PGR116		
ECTS Credits	3		
SWL (hr/sem)	75		
Module Level	UG1	Semester of Delivery	1
Administering Department	PGR	College	PPE
Module Leader	Yousif Saleh Issa	e-mail	yosif.eng.80@tu.edu.iq
Module Leader's Acad. Title	Asst. Lecturer.	Module Leader's Qualification	MSc.
Module Tutor		e-mail	
Peer Reviewer Name		e-mail	
Review Committee Approval	-	Version Number	1.0

Relation With Other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

الإرشادية والمحتويات التعلم ونتائج الدراسة المادة أهداف

<p>Module Aims أهداف المادة الدراسية</p>	<ol style="list-style-type: none">1. To introduce the students the using of drawing instruments.2. To know about different types of lines and use of different types of pencil in an engineering draw.3. To know about different types of projection.4. To know projection of points, straight lines solids etc.5. To introduce the students to use scales and orthographic projections.6. To know different types of surfaces.7. To know the projections of the lines inclined8. To represent the object in 3D view through isometric views.9. To know about isometric projection.10. The student will be able to represent and convert the isometric view to orthographic view.
<p>Module Learning Outcomes مخرجات التعلم للمادة الدراسية</p>	<ol style="list-style-type: none">1. Get information about the important tools for engineering drawing. This will give student basic knowledge of technical drawings professions and means of communications to others.2. Learning how to draw the shapes, angles and lines and others which is essential for engineer.3. Develop student's imagination and ability to represent the shape size and specifications of physical objects.4. Understand the main idea of using dimension for engineering drawing.5. Familiarize with different drawing equipment, technical standards and procedures for construction of geometric figures. This will give students ability to draw three dimension objects on the paper and to draw the pectoral drawings.6. Explain the principle of projection and sectioning.7. Understand the intersection, development of surface of body and fasteners.8. Learning the main idea from assembly and detail drawing.
<p>Indicative Contents</p>	<p>In past years, all that was available were drawing boards, papers,</p>

المحتويات الإرشادية	<p>rulers, calipers, and others. While these instruments are still available today for manual drawings, such drawings are not suitable for contemporary manufacturing.</p> <ul style="list-style-type: none"> • This is because most CNC systems today can read the information right from the files. Thus, they can easily produce a cutting program as required. Handmade drawings would just make this more cumbersome for engineers. • The advent of computer-aided design (CAD) software has made things a lot easier. This software comes with several advantages over manual drawings. You can use CAD to make drawings from scratch. However, the easier option will be first to make a 3D model. Then, you can create your drawings from there.
Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	<p>Engineering drawing includes a description of the manufacturing process. Thus, it conveys engineering ideas for a design process. It may also provide records of already existing components. Engineering drawing is not just an illustration. Rather, its intention is to describe the shapes and sizes of components.</p> <p>Such descriptions may also include specifications of acceptable variations, limits, materials, and others. The drawings can be of various forms, ranging from oblique to isometric. The drawings also include a series of projections that show various angles of the components. All of these are aimed at getting the products to meet requirements.</p>

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الفصل خلال للطالب المنتظم الدراسي الحمل	45	Structured SWL (h/w) أسبوعيا للطالب المنتظم الدراسي الحمل	3
Unstructured SWL (h/sem) خلال للطالب المنتظم غير الدراسي الحمل الفصل	30	Unstructured SWL (h/w) أسبوعيا للطالب المنتظم غير الدراسي الحمل	2
Total SWL (h/sem) الفصل خلال للطالب الكلي الدراسي الحمل	75		

Module Evaluation					
الدراسية المادة تقييم					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	20% (20)	5, 14	LO# 1-4, 8-10
	Assignments	14	20% (20)	Continuous	
	Projects / Lab.				
	Report				
Summative assessment	Midterm Exam	2	10	9	
	Final Exam	3	50	16	All
Total assessment					

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction
Week 2	Engineering graphic instruments and their using
Week 3	engineering drawing lines
Week 4	engineering drawing lines
Week 5	Graphic geometry
Week 6	Graphic geometry
Week 7	Graphic projection theory
Week 8	Graphic projection theory
Week 9	Dimensions
Week 10	Missed views
Week 11	Missed views
Week 12	Isometric drawing and sketching
Week 13	Isometric drawing and sketching
Week 14	Sectional view
Week 15	Preparatory Week

Week 16	Final Exam
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Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Engineering drawing / الخفاف/الرسم الهندسي	Yes
Recommended Texts		
Websites		

APPENDIX:

GRADING SCHEME مخطط الدرجات				
Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 - 49)	FX – Fail	مقبول بقرار	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note:				
NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				