

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Workshop Technology		Module Delivery
Module Type	Support		<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	PE113		
ECTS Credits	3		
SWL (hr/sem)	75		
Module Level	1	Semester of Delivery	
Administering Department	Department of Petroleum Engineering	College	College of Engineering
Module Leader	Sarmed fua'ad Jaber	e-mail	al-anssari@alnaji-uni.edu.iq
Module Leader's Acad. Title	Assist. Prof.	Module Leader's Qualification	PHD
Module Tutor	Name (if available)	e-mail	
Peer Reviewer Name	Name	e-mail	
Scientific Committee Approval Date		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

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	<ol style="list-style-type: none"> 1. This is the basic subject for all engineering fields. 2. This course deals with the basic concept of the workshop including welding, filings, carpentry, and turning. 3. The student will have the required skills to use the carpentry tools in manufacturing different parts. 4. The student will have the required skills to use the welding, filing and turning process in manufacturing different parts.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	<ol style="list-style-type: none"> 1. Recognize how to select suitable processes in the production of different parts. 2. Recognize how to select suitable tools. 3. Recognize how to select suitable sound materials. 4. The student will have the skills to manufacture different parts. 5. The student will understand how to control the quality of the parts produced by welding and turning process
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive practical applications, and by considering types of simple experiments involving some sampling activities that are interesting to the students.
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Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	33	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	42	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	3
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	75		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	3	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	2	10% (10)	continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Definition of carpentry and types of wood - natural wood and industrial wood
Week 2	Wood defects
Week 3	The tools and tools used in the carpentry process and the cutting of wood.
Week 4	Electrical devices used in the carpentry process
Week 5	A general definition of filings, their importance, method of work, and how to use the tools.
Week 6	Classification of the files tools
Week 7	Manual planer and its types (flat - triangular - bent edge). Sawing process and types of saws.
Week 8	Lathing: - general lathes - multi-pen lathes - turret lathes - vertical lathes
Week 9	Parts of the lathe and lathing pens (brushes - fixed crow - moving crow - carriage and plotter - traction covenants and guide column)
Week 10	The angles of the pens (prism angle - fragment angle)
Week 11	Types of lathing operations - (longitudinal lathing - transverse lathing - cutting lathing - conical surfaces) and the metals used in the production of cutting tools (pens) - maintenance of carbide pens - methods of attaching artifacts to the machine - safety and security precautions)
Week 12	Definition of welding and its advantages and disadvantages, along with a brief history of welding.
Week 13	Joining metals: - the most important methods of joining metals by means of screws - rivets - plumbing and mortar – welding.
Week 14	Types of Welding: - Cross - Cold - Electrical Resistance - Electric Arc - Gas - Forging (Methods).
Week 15	Methods of preparing acetylene gas - (in the workshop - in the laboratory).

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Practical application: The student uses the available equipment to make different geometric shapes
Week 2	The student submits a report showing his complete understanding of the theoretical and applied aspects
Week ٣	The filing method is in the form of practical exercises with geometric shapes
Week ٤	The student submits a report showing his complete understanding of the theoretical and applied aspects
Week ٥	The student practices the types of lathe operations through the application of practical exercises
Week ٦	The student submits a report showing his complete understanding of the theoretical and applied aspects
Week 7	Practical application, method and technique of welding and student submits a report showing his complete understanding of the theoretical and applied aspects

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	اسس هندسة المعادن, تاليف كايسر, ترجمة د-شاكر. 1. السامرائي, د-قحطان الخزرجي	Yes
Recommended Texts		
Websites		

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	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks 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.