	Ministry of Higher Education and Scientific Research - Iraq Al-Mustaqbal University College of Engineering Department of Prosthetics and Orthotics Engineering	

MODULE DESCRIPTOR FORM
نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	الرسم المعان بالحاسوب			**Module Delivery**	
Module Type	ELECTIVE			☒ **Theory** ☐ **Lecture** ☐ **Lab** ☐ **Tutorial** ☒ **Practical** ☐ **Seminar**	
Module Code	UOMU0103023				
ECTS Credits	5				
SWL (hr/sem)	125				
Module Level	1		**Semester of Delivery**	2	
Administering Department	UOMU0103		**College**	UOMU01	
Module Leader	Enas Dhahir Habeeb		**e-mail**	Enas.Dhahir.Habeeb@uomus.edu.iq	
Module Leader's Acad. Title	Asst. Lect.		**Module Leader's Qualification**	MSc.	
Module Tutor					
Peer Reviewer Name			**e-mail**		
Review Committee Approval	01/06/2023		**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 Aims أهداف المادة الدراسية	1. Expanding the mental ability to imagine geometric shapes. 2. Controlling the practical aspects of the course through laboratory sessions. 3. Introducing students to engineering designs by computer and their importance in manufacturing products 4. To familiarize the students with the basics of Computer Aided Drafting (CAD). To enable the students, understand the elements of 3D visualization. 5. Introduce students to the techniques of technical graphics so that the design ideas can be communicated and produced. 6. Introduce students to visual and written standard requirements related to the industry. 7. To understand and interpret any form of engineering drawings. To draw an object from different perspective views.		
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	On completion of this course students will be able to: 1. The ability to read and analyze design maps 2. The ability to represent engineering designs and transfer them to reality 3. Students are able to understand the description any graphics design> 4. Learn and familiarize with common drawing notations. 5. Familiarize with development and Intersections of basic geometric models. 6. Students will be able to produce working drawings according to the industry requirement. 7. Students will be able to draw the needed views of assembly drawings showing all the details. 8. Students will be able to apply technical graphic principles to many engineering applications. clearly and concisely communicating all of the information necessary to transform an idea or a concept in to reality		

Indicative Contents المحتويات الإرشادية	Indicative content includes the following. Part A – introduction to Computer Aided Drafting (CAD). user interface, tool bars Part B – Draw Commands Line, circle, ….. ect. Part C – Modify commands Copy, mirror, trim, ….. ect. Part D – dimensions, layers, Part E – finalize and print

Learning and Teaching Strategies
استراتيجيات التعلم والتعليم

Strategies	-1 Speed and accuracy of decision making. -2 Familiarity with the user interface of design software -3 Provision of detailed explanation in class on the topic. -4 Provision of adequate illustration on the board with the aid of a projector. -5 Making lecturing periods interactive and complimentary it with practical work. -6 Educational websites -7 Giving the students class work during the lecture period. -8 Giving take-home assignments at the end of each lecture.

Student Workload (SWL)
الحمل الدراسي للطالب

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	63	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	62	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	4
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	125		

Module Evaluation
تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	4	10% (10)	3, 5,7,11	LO #3, 5, 7 and 11
	Assignments	14	10% (10)	Continuous	All
	Projects / Lab.	15	10% (10)	Continuous	All
	Report				
Summative assessment	Midterm Exam	3 hr	20% (20)	7-8	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	Introduction to AutoCAD, Interface, Command bar/Requirements
Week 2	Tools bars
Week 3	Draw Command: - Line, Arc and Circle options.
Week 4	Draw Command: - 2
Week 5	Modify Command: - Erase, move and copy.
Week 6	Modify Command: - Offset, fillet, Chamfer, Trim and Extend.
Week 7	Object snap
Week 8	Ortho &Polar, Object snap tracking and Dynamic Input (DYN)
Week 9	Modify Command: - Array, Break, Explode and Join
Week 10	Modify Command: - Stretch, Scale, Grips
Week 11	Dimension, Selection tools and Properties
Week 12	Annotation – Dimension properties
Week 13	Annotation - Layers
Week 14	Orthographic Projection by using AutoCAD-1
Week 15	Orthographic Projection by using AutoCAD-2

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	الرسم الهندسي للمؤلف (عبد الرسول الخفاف)	No
Recommended Texts	AutoCAD 2016 Course, sayed jad	No
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:				

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.

ملاحظة: هذا النموذج تم وضعه وتقديمه من قبل مديرية ضمان الجودة في وزارة التعليم العالي والبحث العلمي