Ministry of Higher Education and Scientific Research
Supervision and Scientific Evaluation Authority
Department of Quality Assurance and Academic Accreditation

Academic Program Description Form for Colleges and Institutes
Academic Year

University: Shatt Al-Arab
College/Institute: Engineering
Scientific Department: Civil
Date of Form Completion: 01/09/2024

Signature
Name of Head of Department:

Asst. Lecturer Nabeel Najm Abdullah

Signature

Name of Scientific Assistant: Dr. Jawad Kadhim

Reviewed by:
Quality Assurance and University Performance Division
Name of Division Director: Dr. Jasem Mohsen Yasser

Signature:

الدكتور
جاسم محسن ياسر
Dr.Jasim Al-Battat

جامعة شط العرب
كلية الهندسة
العمادة
SHATT AL-ARAB UNIVERSITY

أ.م.د. احسان قاسم محمد
عميد كلية الهندسة

Dean's Approval

MODULE DESCRIPTION FORM

Module Information معلومات المادة الدراسية					
Module Title	**Engineering Drawings**			**Module Delivery**	
Module Type	**Core**			**Theory** **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**E118**				
ECTS Credits	8				
SWL (hr/sem)	120				
Module Level		1	**Semester of Delivery**		2
Administering Department		Type Dept. Code	**College**	Type College Code	
Module Leader	Jawad Khazim		**e-mail**		
Module Leader's Acad. Title		Lecturer	**Module Leader's Qualification**		PH.D.
Module Tutor			**e-mail**	E-mail	
Peer Reviewer Name		Name	**e-mail**	E-mail	
Scientific Committee Approval Date		01/09/2024	**Version Number**		1.0

Relation with other Modules العلاقة مع المواد الدراسية الاخرى

Prerequisite module	None	**Semester**	
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الارشادية

Module Aims أهداف المادة الدراسية	1. To enable the students to identify the tools/instrument needed. 2. To familiarize the student, with the proper techniques, manipulation, uses, and care of the drawing instruments. 3. To introduce the students to a specific language of engineers which is a graphical language. 4. To help and guide the students to learn how technical drawings can be drawn in different methods. 5. To acquire some different skills such as the ability to read and prepare engineering drawings, the ability to make free-hand sketching of objects, the power to imagine, analyze, and communicate, and the capacity to understand other subjects. 6. To acquire adequate skills in measuring/scaling dimension accurately, and the method of placing dimensions. 7. To acquire basic analysis skills in orthographic/section/isometric drawing 8. To know the proper drawing conventions/symbols to describe the engineering drawings.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	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. Knowing the types of lines and their applications in technical drawings. 3. Learning the steps to construct different geometric figures like lines, arcs, polygon, ellipse etc. which is essential for engineer. 4. Comprehend general projection theory, with emphasis on orthographic projection to represent three-dimensional objects in two-dimensional views. 5. Develop student's imagination and ability to represent the shape size and specifications of physical objects. 6. Learning how to draw sectional views. 7. Knowing how to place dimensions on engineering drawings. 8. Equipped with the skill that enables the students to convert orthographic projection into isometric projection.

Indicative Contents المحتويات الارشادية	Introduction to Engineering Drawing, Drawing Tools, Pencils, Drawing Sheets, Title Block of a Sheet, Types of Lines and their Uses. (10 hrs) Exercises in the Use of Instruments: Straight lines (Solid, Dashed and Center Lines), Circles and Tangents. (10 hrs) Graphic Geometry: Bisections, Parallels, Divisions, Angles, Geometric Shapes Tangents (Straight and Curved Lines), Ellipse. (30 hrs) Orthographic Projection: Theory, Orthographic Views, Representation of
	Lines, Hidden Features, Center Lines. Precedence of Lines, Exercises in Projection. (30 hrs) Sectional Views: Definition, Classification, Full and Half Sections, Exercises in Sectional Views. (20 hrs) Dimensioning Practices: Introduction, Terminology and Conventions, Exercises in Dimensioning. (10 hrs) Introduction to Types of Pictorial Drawing: Pictorial Methods Classified, Isometric. (10 hrs) Isometric Drawing: Perspective Drawing, Sketching, Layout of Circles, Exercises in Isometric Drawings. (30 hrs)

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, lectures and by considering a variety of assignments that are interesting to the students.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ 15 اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	142	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	10
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	108	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	7.7
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	250		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5,10	1,2,3,4,5,6
	Assignments	12	15% (15)	2,3,4,5,6,7, 9,10,11,12,13 ,14	1,2,3,4,5,6,7,8
	Projects / Lab.	15	15% (15)	1,2,3,4,5,6,7, 8,9,10,11,12, 13,14,15	1,2,3,4,5,6,7,8
	Report				
Summative assessment	Midterm Exam	2 hr	10% (10)	8	1,2,3,4,5
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to engineering drawing and graphic instruments and their uses
Week 2	Exercises in the use of instruments
Week 3	Graphic geometry I
Week 4	Graphic geometry II
Week 5	Graphic geometry III
Week 6	Orthographic Projection I
Week 7	Orthographic Projection II
Week 8	Orthographic Projection III
Week 9	Sectional Views I
Week 10	Sectional Views II
Week 11	Dimensioning Practices (introduction, terminology and conventions)
Week 12	Introduction to types of Pictorial Drawing
Week 13	Isometric Drawing I
Week 14	Isometric Drawing II
Week 15	Isometric Drawing III
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	الرسم الهندس المؤلف: عبدالرسول الخفاف بغداد – 1990	Yes
Recommended Texts	The Fundamentals of Engineering Drawing & Graphic Technology, Fifth Edition Thomas E. French & Charles J. Vierck	No
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.