جامعة المستقبل

كلية الهندسة

قسم هندسة الأطراف والمساند الصناعية

وصف البرنامج الاكاديمي

المرحلة الأولى - الفصل الأول

	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 الهندسي			**Module Delivery**	
Module Type	BASIC			☒ **Theory** ☐ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	UOMU0103011				
ECTS Credits	6				
SWL (hr/sem)	150				
Module Level	1		**Semester of Delivery**	1	
Administering Department	UOMU0103		**College**	UOMU01	
Module Leader	Ghadeer Haider Abbas		**e-mail**	ghadeer.haider@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 and their importance in manufacturing products 4. To familiarize the students with the basics of Engineering drawing. 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. 8. 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. Students will be able to apply technical graphic principles to many engineering applications.		
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. Part A – introduction to graphics styles Lines, font, types of papers, tools. Part B – Drawing techniques		

	Identify Drawing Sheets, sketching by hand, Sketching by tools. Part C – Engineering Operation and 2D Drawing Applications. Part D – Projection's techniques and Orthographic Projection Applications. Part E – 3D drawing styles and practices. Views and Isometric Drawing

Learning and Teaching Strategies
استراتيجيات التعلم والتعليم

Strategies	1. Speed and accuracy of decision making. 2. Provision of detailed explanation in class on the topic. 3. Provision of adequate illustration on the board with the aid of a projector. 4. Making lecturing periods interactive and complimentary it with practical work. 5. Educational websites 6. Giving the students class work during the lecture period. 7. 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	87	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	5
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

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	مقدمة عن الرسم الهندسي والأدوات الواجب توفرها
Week 2	lines, lettering, geometric shapes and their features	أنواع الخطوط، الاشكال الهندسية ومميزاتها
Week 3	Sheet preparation, drawing starting	تهيئة لوحة الرسم، كيفية البدء بالرسم الهندسي
Week 4	Engineering operations 1	1- العمليات الهندسية
Week 5	Engineering operations2	2- العمليات الهندسية
Week 6	Engineering operations 3	3- العمليات الهندسية
Week 7	Engineering operations exercises	تمارين جامعة للعمليات الهندسية
Week 8	Projection Theory	نظرية الاسقاط
Week 9	Orthographic Projection 1	المساقط
Week 10	Orthographic Projection 2	2- المساقط
Week 11	Dimensioning	الابعاد
Week 12	Class Exercises	تمارين إضافية
Week 13	Sectional views 1	1- المساقط المقطوعة
Week 14	Sectional views 2	2- المساقط المقطوعة
Week 15	Isometric Drawing	الرسم المجسم

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	
Week 9	
Week 10	
Week 11	
Week 12	
Week 13	
Week 14	
Week 15	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	الرسم الهندسي للمؤلف (عبد الرسول الخفاف)	Yes
Recommended Texts		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:

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

	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	الرياضياتI			**Module Delivery**	
Module Type	BASIC			☒ **Theory** ☐ **Lecture** ☐ **Lab** ☒ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	UOMU0103012				
ECTS Credits	6				
SWL (hr/sem)	150				
Module Level	1		**Semester of Delivery**	1	
Administering Department	UOMU0103		**College**	UOMU01	
Module Leader	Firas Thair Al-maliky		**e-mail**	firas.thair.almaliky@uomus.edu.iq	
Module Leader's Acad. Title	Asst. Prof.		**Module Leader's Qualification**	PhD.	
Module Tutor					
Peer Reviewer Name			**e-mail**		
Review Committee Approval	1/6/2023		**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	The aims of a mathematics module are to provide students with an understanding of mathematical concepts, skills, and techniques that can be applied to a range of real-world problems. This includes topics such as An introductory class in the theory and techniques of differentiation of algebraic and trigonometric functions. Topics include limits, optimization, curve sketching, and areas. Additionally, the module aims to prepare students for future academic and professional pursuits that require mathematical proficiency.		
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	On successful completion of this module, students will be able to: 1. Find Domain and range of a function and graphs 2. Apply rules of calculus to solve engineering problems including differential equations. 3. Differential calculus, these concepts are used to analyze rates of change, optimization problems, and the behavior of functions in engineering applications. 4. The student should recognize the types of derivation. 5. Develop proficiency in performing operations on vectors including multiplication, addition, and scalar multiplication. 6. Formulation of a mathematical problem, mathematical formulation and use of mathematical methods in solving.		
Indicative Contents المحتويات الإرشادية	The Indicative Contents of a Mathematics module will depend on the level and scope of the course. However, some common topics that may be covered in a mathematics module include: 1- Arithmetic: Basic mathematical operations such as addition, subtraction, multiplication, and division. 2- Algebra: The study of mathematical symbols and the rules for manipulating these symbols to solve equations and represent real-world situations. 3- Geometry: The study of shapes, sizes, positions, and measurements of objects in space.		

	4- Calculus: The study of mathematical concepts such as limits, derivatives, and integrals. Overall, the Indicative Contents of a Mathematics module aims to provide students with a comprehensive understanding of mathematical concepts and their applications in various fields of study.
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 tutorials and by considering type of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	72	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	4
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

Module Evaluation
تقييم المادة الدراسية

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

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Functions: Domain and Range, Functions and their graphs, Trigonometric Functions.
Week 2	Limits and Continuity: Limit of a Function and Limit Laws, One-Sided Limits Continuity, Limits Involving Infinity, Asymptotes of Graphs.
Week 3	
Week 4	Derivatives: Tangent Lines and the Derivative at a Point, The Derivative as a Function, Differentiation Rules, Derivatives of Trigonometric Functions, The Chain Rule, Implicit Differentiation, Linearization and Differentials.
Week 5	
Week 6	
Week 7	Applications of Derivatives: Extreme Values of Functions, The Mean Value Theorem, Monotonic Functions and the First Derivative Test, Concavity and Curve Sketching, Applied Optimization, Antiderivatives
Week 8	
Week 9	
Week 10	Integrals: The Definite Integral, The Fundamental Theorem of Calculus, Indefinite Integrals and the Substitution Method, Definite Integral Substitutions and the Area Between Curves.
Week 11	
Week 12	
Week 13	Matrices and Determinants: Definitions, Properties and operations, Determinant, Inverse of a matrix, Solution of linear system equations, eign values and eign vectors
Week 14	Vector Theory: Three-Dimensional Coordinate Systems, Representation of vectors in space, unit vectors, Scalar Product, Vector Product, Lines and Planes in Space.
Week 15	**Preparatory week before the final Exam**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	George B. Thomas Jr., "CALCULUS", 14th Ed	Yes
Recommended Texts	1. Erwin Kreyszig, “Advanced Engineering Mathematics”, 10th Ed. 2. Schaum's Outline of College Mathematics, Fourth Edition. Mary Attenborough, "Mathematics for Electrical Engineering and Computing", 1st Ed.	No
Websites	Topics in Calculus -Wolfram Mathworld.	

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:				

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

	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	اللغة الانجليزيةI			**Module Delivery**	
Module Type	SUPPORTIVE			☒ **Theory** ☐ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code					
ECTS Credits	2				
SWL (hr/sem)	50				
Module Level	1		**Semester of Delivery**	1	
Administering Department			**College**		
Module Leader	Muntadher Saleh Mahdi		**e-mail**	muntadher.saleh.mahdi@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			**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. To review essential grammar of the language. 2. To develop writing skills in engineering topics with focus on enhancing students' abilities to deliver ideas clearly according to academic writing structure, including introduction paragraph, body paragraphs and a conclusion. 3. To improve students' reading and comprehension skills in engineering topics, especially in prosthetics and orthotics engineering, and help them extract relevant information and summarize key points accurately. 4. To enhance students' vocabulary in engineering topics, through reading and listening activities. 5. To improve students' ability to listen effectively to different listening materials in engineering topics, understand the basic ideas, and summarize key points. 6. To improve students' ability to speak and present ideas in front of the class. 7. To enhance students' ability to engage and participate in classes through group reading or discussion.		
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Students should be able to compose correct sentences according to the language grammar. 2. Students should be able to deliver well-written reports that meet the standards expected in the engineering field. 3. Students should be able to comprehend engineering documents, research papers, and manuals effectively. 4. Students should be able to understand and use technical vocabulary accurately and appropriately in their academic and professional settings. 5. Students should be able to listen to English listening materials in engineering field easily. 6. Students should be able speak in English and present ideas in public. 7. Students should be able to engage in groups and work in a team environment.		

Indicative Contents المحتويات الإرشادية	Part A – Review Grammar and Language Accuracy • Sentence structures and verb tenses in engineering contexts • Subject-verb agreement and word order • Common grammatical errors and their corrections. [8 hrs] Part B – Reading Comprehension • Reading and understanding simple technical texts and articles • Skimming and scanning techniques for technical information • Identifying main ideas and key details in engineering materials [8 hrs] Part C – Technical Vocabulary and Terminology: • Vocabulary building exercises and activities • Application of technical vocabulary in writing and speaking tasks [4 hrs] Part D – Writing Skills • Writing short paragraphs and descriptions of engineering processes • Constructing coherent sentences and organizing ideas • Introduction to technical report writing and documentation. [8 hrs] Part E – Listening and Comprehension Skills • Understanding spoken instructions and directions • Listening to daily conversation and short stories • Extracting key information from audio materials [8 hrs] Part F – Speaking Skills • Participating in group discussions • Practicing effective communication in team projects [7 hrs] Part G – Basic Communication Skills: • Greetings, introductions, and social interactions • Describing objects, processes, and diagrams [7 hrs]
Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	• Strategies that are used in delivering this module is to train the students on reading, listening and writing, and that is achieved through class exercises and assignments to improve those skills . • Communicative strategy: Encourage students to engage in authentic language use through pair and group work, discussions, role-plays, and real-life engineering scenarios. • Multimodal Instruction: Utilize a variety of teaching resources and materials, including audiovisual materials, interactive online platforms.

	Incorporate visual aids, diagrams, and multimedia tools to enhance comprehension and engage visual and auditory learners. • Authentic Materials: Incorporate authentic materials such as engineering articles, technical manuals, and industry reports to expose students to real-world language use in engineering contexts. This helps students develop language skills and domain-specific knowledge simultaneously. • Formative Assessment: Implement regular formative assessments, such as quizzes, short writing assignments, and oral presentations, to monitor students' progress and provide timely feedback. Use assessment tasks to gauge language development and target areas for improvement. • Self-Reflection and Self-Assessment: Encourage students to reflect on their language learning progress, set goals, and assess their own language proficiency. Promote self-directed learning by providing self-assessment tools and encouraging students to seek opportunities for autonomous language practice.

Student Workload (SWL)
الحمل الدراسي للطالب

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	17	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	50		

Module Evaluation
تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	5% (5)	5, 10	LO #1 and 2
	Assignments	7	5% (5)	2, 4, 6, 8, 10, 12, and 14	All
	Projects / Lab.	8	5% (10)	1, 3, 5, 7, 9, 11, 13 and 15	All
	Report	1	5% (5)	12	LO #6
Summative assessment	**Midterm Exam**	4 hr	20% (20)	7	All
	Final Exam	3hr	60% (60)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	1. It's a wonderful world! Grammar: Auxiliary verbs, naming tenses, questions and negative. Vocabulary: Social expressions, sport and Leisure. Reading: Wonders of the modern world. Writing: Topic sentences. Listening: My wonders exercise.
Week 2	2. Get happy! Grammar: Present tenses, simple and continuous, and present passive. Vocabulary: Numbers and dates, money and fractions. Reading: The clown doctor. Writing: Developing paragraphs with descriptive details. Listening: Sports exercise.
Week 3	3. Telling tales Grammar: Past tenses, past simple, continuous, and perfect, and past passive. Vocabulary: Art and Literature. Reading: The painter and the Writer. Writing: Using word maps to brainstorm. Listening: Books and films exercise.
Week 4	4. Doing the right thing Grammar: Modal verbs – obligation and permission. Reading: A world guide to good manners. Vocabulary: Nationality words, countries and adjectives. Writing: Review of descriptive vocabulary. Listening: Come round to my place exercise.
Week 5	5. On the move Grammar: Future forms – going to, will, and present continuous. Reading: My kind of holidays. Vocabulary: the weather, travelling around.
Week 6	6. I just love it!

	Grammar: Questions with like and verb patterns. Reading: Global Pizza- the history of the world's most famous food. Vocabulary: Describing food, cities and people. Writing: Paragraph explaining cause and effect/ result. Listening: New York and London exercise.
Week 7	7. The world of work Grammar: Present perfect, and present perfect passive. Reading: Dream jobs. Vocabulary: Phrasal verbs, on the phone. Writing: Expressing personal feelings about problems. Listening: The busy life of a retired man.
Week 8	8. Just imagine Grammar: Conditionals, first and second conditionals, and time clauses. Vocabulary: Base and strong adjectives. Reading: Who wants to be a millionaire. Writing: Using time expressions: after, before, and when. Listening: Who wants to be a millionaire exercise.
Week 9	9. Getting on together Grammar: Modal verbs – Probability and possibility. Vocabulary: character adjectives, agreeing and disagreeing. Reading: The man who planted trees. Writing: Writing about causes and effect relationships. Listening: Brothers and Sisters exercise.
Week 10	10. Obsessions Grammar: Present perfect continuous, questions and answers, and time clauses. Vocabulary: Compound nouns. Reading: Famous for not being famous. Writing: Summarizing all previous exercises in one writing exercise. Listening: Collectors exercise.
Week 11	11. Tell me about it Grammar: Indirect Questions, and questions tags. Reading: Engineering reading material 1. Vocabulary: Engineering terms 1.

	Speaking: group discussion. Listening: BBC six minutes English exercise.
Week 12	Speaking presentation. Listening: Ted video exercise.
Week 13	12. Life's great events! Grammar: Reported speech: reported statements, and reported requests and commands. Reading: Engineering reading material 2 Vocabulary: Engineering terms 2. Speaking: group discussion. Listening: Engineering listening material.
Week 14	Reading: Engineering reading material 3 Vocabulary: Engineering terms 3
Week 15	**Content review**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	
Week 9	
Week 10	
Week 11	
Week 12	
Week 13	
Week 14	
Week 15	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	1. New Headway Plus Intermediate Student Book, Liz and Hohn Soars, 2006, Oxford University Press. Writing in Paragraphs, Dorothy E Zemach and Calos Islam, 2010, Macmillan.	Yes
Recommended Texts		No
Websites	News – Biomedical Engineering at the University of Michigan (umich.edu) TED-Ed - YouTube BBC Learning English - 6 Minute English	

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:				

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

	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	اللغة العربيةI			**Module Delivery**	
Module Type	SUPPORTIVE			☒ **Theory** ☐ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code					
ECTS Credits	2				
SWL (hr/sem)	50				
Module Level	1		**Semester of Delivery**	1	
Administering Department			**College**		
Module Leader	Fatima Turki Sahib		**e-mail**	fatima.turki.sahib@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			**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_السعي الى جعل اللغة العربية ذات تطبيق مفاهيمها على الواقع والحياة اليومية 2_ اضافة مفردات للمنهج ضمن التطور الحاصل في المقرر بنسبة لا تتجاوز 10% لتغطية المادة الدراسية		
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	أ- الأهداف المعرفية أ1-أ- الأهداف المعرفية أ2- تعريف الطالب مفهوم اللغة العربية واهمية ممارستها في الاعلام والصحافة وكذلك بين الشعوب . أ3- تزيد اللغة العربية من قدرات الطالب وامكانياته العلمية. أ4- تعد الثقافة والاطلاع على موضوعات اللغة العربية تساعده على نطق الكلمات بصورة صحيحة وسليمة وخالية من الأخطاء ب - الأهداف المهاراتية الخاصة بالمقرر . ب1 - تكسب اللغة العربية الطالب مهارات تسعفة لكي يؤدي واجبه بالشكل الصحيح. ب2 – يكتسب الطالب مهارة نطق الكلمات بصورة صحيحة وسليمة وخالية من العيوب.		
Indicative Contents المحتويات الإرشادية	1_تحليل المادة وشرحها للطلبة مع الأمثلة. 2_المناقشة من خلال الاسئلة والاجوبة فالمشاركة داخل المحاضرة دليل الطالب على الالتزام وتحمله المسؤولية.		
Learning and Teaching Strategies استراتيجيات التعلم والتعليم			
Strategies	- هناك مجموعة من المحاضرات المطبوعة حيث يتم مناقشة المادة العلمية ووضع الملاحظات المهمة خلال المحاضرة. - رفع جزء من المادة العلمية على الموقع الالكتروني. - المحاضرات المتنوعة من الكتب النحوية الحديثة وامهات الكتب من المؤلفات النحوية القديمة. - المناقشات بشكل مجموعات صغيرة وكبيرة. - الاجابة عن الاسئلة خلال المحاضرة العلمية او في الساعات المكتبية للتدريسيين. - قراءة الكتب المرجعية والورقات العلمية المتنوعة بشكل فردي او جماعي. - اعتبار القران الكريم مادة تطبيقة لفهم القواعد النحوية والمعاني المستقاة منها		

Student Workload (SWL) الحمل الدراسي للطالب			
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	17	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	50		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	5	20(20%)	5,10	LO #1, 2, 10 and 11
	Assignments	1	10(10%)	2,12	LO # 3, 4, 6 and 7
	Projects / Lab.				
	Report	1	10(10%)	13	LO # 5, 8 and 10
Summative assessment	**Midterm Exam**	10	10(10%)	7	LO # 1-7
	Final Exam	50	50(50%)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	مقدمة عن الأخطاء الشائعة
Week 2	اقسام الكلام
Week 3	تطبيقات الأخطاء اللغوية الشائعة
Week 4	الضاد والظاء
Week 5	الترقيم
Week 6	الاسم والفعل والفرق بينهما
Week 7	انواع الهمزة
Week 8	العدد
Week 9	النداء
Week 10	التاء المربوطة والتاء المفتوحة

Week 11	قواعد كتابة الالف الممدودة والمقصورة
Week 12	
Week 13	انواع الفعل الفعل واقسامه
Week 14	الحروف الشمسية والحروف القمرية
Week 15	التاء الطويلة والتاء البسيطة

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	
Week 9	
Week 10	
Week 11	
Week 12	
Week 13	
Week 14	
Week 15	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	الهنداوي,خليل,واخرون,بدون سنة طبع ,نماذج تطبيقية في الاعراب والبلاغة والعروض والشرح الادبي ,مكتبة دار الشروق, بيروت ط3	
Recommended Texts	كتاب الاملاء الواضح تأليف علي الجارم واحمد امين النحو الوافي عباس حسن /2009/القاهرة/دار التراث	
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:				

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

	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	دوائر منطقية			**Module Delivery**	
Module Type	ELECTIVE			☒ **Theory** ☐ **Lecture** ☒ **Lab** ☒ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	UOMU0103014				
ECTS Credits	5				
SWL (hr/sem)	125				
Module Level	1		**Semester of Delivery**	1	
Administering Department	UOMU0103		**College**	UOMU01	
Module Leader	Samir Ibrahim Abbas		**e-mail**	samir.badrawi@uomus.edu.iq	
Module Leader's Acad. Title	Lect.		**Module Leader's Qualification**	PhD.	
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	Electrical circuits	**Semester**	
Co-requisites module	Electronic circuits	**Semester**	
Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية			
Module Aims أهداف المادة الدراسية	1. To develop problem solving skills and understanding of circuit theory through the application of techniques. 2. To understand voltage, current and power from a given circuit. 3. This course deals with the basic concept of electrical circuits. 4. This is the basic subject for all electrical and electronic circuits. 5. To understand Kirchhoff's current and voltage Laws problems. 6. To perform mesh and Nodal analysis.		
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Recognize how Logic gate works in electronic circuits. 2. List the various terms associated with Logic gate. 3. Summarize what is meant by a basic Logic gate. 4. Discuss the reaction and involvement of atoms in Logic gate. 5. Describe Logic gate inputs and outputs. 6. Define basic Logic gate . 7. Identify the basic logic elements and their applications. 8. Discuss the operations of Numbering system & Boolean algebra. 9. Discuss the various Reduction techniques methods.		
Indicative Contents المحتويات الإرشادية			
Learning and Teaching Strategies استراتيجيات التعلم والتعليم			
Strategies	Type something like: 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 tutorials and by considering type of simple experiments involving some sampling activities that are interesting to the students.		

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	47	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	3
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**	2	10% (10)	5, 10	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO # 5, 8 and 10
Summative assessment	**Midterm Exam**	2 hr	10% (10)	7	LO # 1-7
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction into digital techniques
Week 2	Logic gates, principles and types
Week 3	Numbering system
Week 4	Number base conversion
Week 5	Arithmetic operation
Week 6	Boolean algebra
Week 7	DeMorgan theorem
Week 8	Simplification for digital circuits
Week 9	SOP & POS
Week 10	Reduction techniques

Week 11	Half & full adders & subtractor
Week 12	Decoders & encoders & comparators
Week 13	Multiplexers & demultiplaxers
Week 14	Parity check & code conversions
Week 15	Flip-Flop

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	LOGIC GATES AND BOOLEAN ALGEBRA
Week 2	THE APPLICATIONS OF EXCLUSIVE -OR GATE
Week 3	ARITHMETIC ELEMENTS
Week 4	DECODERS AND ENCODERS
Week 5	MULTIPLEXERS AND DEMULTIPLEXERS
Week 6	BISTABLE MULTIVIBRATORS (FLIP-FLOPS)
Week 7	
Week 8	
Week 9	
Week 10	
Week 11	
Week 12	
Week 13	
Week 14	
Week 15	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Digital fundamental by Floyed	Yes
Recommended Texts	Digital design by Morris Mano	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:				

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

	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	علم الحاسوب I			**Module Delivery**	
Module Type	SUPPORTIVE			☒ **Theory** ☐ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code					
ECTS Credits	3				
SWL (hr/sem)	75				
Module Level	1		**Semester of Delivery**	1	
Administering Department			**College**		
Module Leader	Hamzah Waleed Hamzah		**e-mail**	hamzah.waleed.hamzah@uomus.edu.iq	
Module Leader's Acad. Title	Asst. Lect.		**Module Leader's Qualification**	MCs.	
Module Tutor					
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 أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية			
Module Aims أهداف المادة الدراسية	1. To gain the necessary understanding of the basics of computing and information technology required in personal and professional life. 2. To develop the necessary skills to solve problems using computers 3. To understand the computer hardware and software 4. To gain an understanding of the basic computer components 5. To understand the basics of networks and the internet.		
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. To recognize the basic computer components and how they work together. 2. To recognize various input and output devices in a computer. 3. To understand different storage types in the computer. 4. To recognize various application software 5. To understand the role of the operating system in the computer. 6. To be able to use the internet for web browsing, email, etc. 7. To be able to use the Windows operating system for everyday needs. 8. To be able to use word processing and spreadsheet software. To understand cloud based software such as Google Sheets, Docs, and Gmail		
Indicative Contents المحتويات الإرشادية	**Introduction to Computers [1hrs]:** In this lecture we talk about the definition of the computer, data, and information, the components of a computer and the advantages and disadvantages of using computers. **The Components of the System Unit [2hrs]:** In this lecture we introduce the system unit. We introduce the microchip. We describe the control unit and arithmetic and logic unit parts of the processor and explain the four machine cycles. Define bit and byte. and describe the various types of memory, RAM, and cache. **Storage [2hrs]:** In this lecture we introduce storage medium and devices such as hard disks, flash memories, Solid State Disks. We also introduce cloud storage.		

	Input and Output [2hrs]: In this lecture we describe various input and output devices in a computer system. **The Motherboard The ports and cables [1hr]:** In this lecture we introduce the motherboard function, the ports of the computer and various cables used to connect to the computer. **Operating System and Utility Programs [2hrs]:** In this lecture we describe various operating system functions. We also introduce utility programs. **Application Software [2hrs]:** In this lecture, we identify the categories of application software, and describe the characteristics of the user interface. We also identify the key features of some business programs. Finally, we discuss web applications. **Networks [1hrs]:** In this lecture we discuss the components of a communication system, we differentiate among types of networks: LANs, MANs, WANs, network architectures and network topologies. **The Internet and the World Wide Web [2hrs]:** In this lecture, we introduce the various concepts related to the Internet and the world wide web. We will describe various broadband Internet connections. We will also explain the purpose of the web browser and how to use a search provider. Finally, we describe the website types and introduce e-mail.
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 tutorials and by considering type of simple experiments involving some sampling activities that are interesting to the students. The labs are essential to teach the students how to use the Windows operating system, applications such as word and excel, and web based applications such as Google Sheets and Docs.

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	48	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	27	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	1
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**	2	10% (5)	3, 10	All
	Assignments	2	10% (5)	Continuous	All
	Projects / Lab.	10	20% (10)	Continuous	All
	Report	0	0% (0)	-	-
Summative assessment	**Midterm Exam**	2hrs	60% (30)	5,12	All
	Final Exam	3hrs	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to Computers
Week 2	The Components of the System Unit – The microchips
Week 3	The Components of the System Unit – The processor
Week 4	The Components of the System Unit – The memory and the buses
Week 5	Storage devices – Hard disk
Week 6	Storage devices – Flash memory and cloud storage
Week 7	Input and Output – Keyboard, mouse, and touch input
Week 8	Input and Output – Display (LCD, OLED), printers
Week 9	The Motherboard
Week 10	The ports and cables

Week 11	The Operating System
Week 12	The Utility Programs
Week 13	The Application Software
Week 14	Networks (LAN, MAN, WAN)
Week 15	The Internet and the World Wide Web

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Computer Hardware
Week 2	Using web browsers and email (Gmail)
Week 3	Windows operating system
Week 4	
Week 5	
Week 6	Google Sheets and Docs tutorial
Week 7	
Week 8	Microsoft Word and Excel tutorial
Week 9	
Week 10	
Week 11	Microsoft PowerPoint tutorial
Week 12	
Week 13	How to write an academic report using Microsoft Word
Week 14	
Week 15	Summary and Exercises

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	➢ How Computers Work (Ron White) Discovering Computers Fundamentals, Your Interactive Guide to the Digital World (Gary B. Shelly, Misty E. Vermaat)	No
Recommended Texts	➢ Information Technology, An Introduction for Today's Digital World. Complete A+ Guide to IT Hardware and Software	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:				

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

	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	فيزياء			**Module Delivery**	
Module Type	BASIC			☒ **Theory** ☐ **Lecture** ☐ **Lab** ☒ **Tutorial** ☒ **Practical** ☐ **Seminar**	
Module Code	UOMU0103013				
ECTS Credits	6				
SWL (hr/sem)	150				
Module Level	1		**Semester of Delivery**	1	
Administering Department	UOMU0103		**College**	UOMU01	
Module Leader	Mariam Ghassan Ghaffar		**e-mail**	mariam.ghassan.ghaffar@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	/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. Understanding the fundamental principles of mechanical physics. Developing a strong foundation in physics that students can build upon in future studies.		
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Analyze the properties of forces, moments, couples, and resultants in 2D. 2. Analyze the properties of forces, moments, couples, and resultants in 3D 3. Solve equilibrium problems in 2D. 4. Solve equilibrium problems in 3D. Understand basic concepts of the dynamics.		
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. - The fundamental concepts necessary for the study of Physics. - The properties of forces, moments, couples, and resultants in 2D &3D - The equilibrium principles of structures. - The dynamic characteristics.		
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 tutorials and by considering type of simple experiments involving some sampling activities that are interesting to the students.		

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	108	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	42	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	2
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

Module Evaluation
تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5, 10	LO #1-3
	Assignments	2	10% (10)	2, 12	LO # 1-3
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO # 2-4
Summative assessment	Midterm Exam	2 hr	10% (10)	7	LO # 1
	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 Physics and Basic Concepts
Week 2	Scalars and Vectors
Week 3	Scalars and Vectors
Week 4	Newton's Laws and Units
Week 5	Rectangular Components of force in 2D
Week 6	Moment and Couple in 2D
Week 7	Mid-term Exam + Resultants in 2D
Week 8	Rectangular Components of force in 3D
Week 9	Moment, Couple and Resultants in 3D
Week 10	Equilibrium in two dimensions
Week 11	Equilibrium in two dimensions
Week 12	Equilibrium in three dimensions
Week 13	Equilibrium in three dimensions
Week 14	Introduction to dynamics.
Week 15	Introduction to dynamics

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Workshop A
Week 2	Workshop A
Week 3	Workshop B
Week 4	Workshop B
Week 5	Workshop C
Week 6	Workshop D
Week 7	Workshop E
Week 8	
Week 9	
Week 10	
Week 11	
Week 12	
Week 13	
Week 14	
Week 15	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Engineering Mechanics STATICS J.L.Meriam And L.G.Kraige	Yes
Recommended Texts	ENGINEERING MECHANICS: STATICS BY RUSSELL HIBBELER.	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:

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