MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Mathematics I**			**Module Delivery**	
Module Type	**Basic learning activities**			☐ **Theory** ☒ **Lecture** ☐ **Lab** ☒ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**ENG001**				
ECTS Credits	**6**				
SWL (hr/sem)	**150**				
Module Level		UGI	**Semester of Delivery**		1
Administering Department			**College**		
Module Leader	Prof. Dr. Ahmed Rajih Hassan Wetaify		**e-mail**	ah.ra34@mu.edu.iq	
Module Leader's Acad. Title		Lecturer	**Module Leader's Qualification**		Ph.D.
Module Tutor	Asst. Lecturer Abass Nawar Zinad		**e-mail**	abbas.znad@mu.edu.iq	
Peer Reviewer 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 Aims أهداف المادة الدراسية	The course will cover the materials : Functions and Graphs, Identifying Functions; Even & Odd Functions, Functions and Graphs, Combining Functions; Shifting and Scaling Graphs, Trigonometric Functions, limits and continuity, One-Sided Limits and Limits at Infinity. Differentiation Rules, integration, applications of integrals, Applications of Derivatives.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	• Students will recognize problem-solving techniques • Appropriate to a given situation, including the development of mathematical models the identification of assumptions, • The understanding of the limitations of models, and the use of both graphical and numerical methods.
Indicative Contents المحتويات الإرشادية	FUNCTIONS AND GRAPHS LIMITS AND CONTINUITY DIFFERENTIATION APPLICATIONS OF DERIVATIVES INTEGRATION APPLICATIONS OF INTEGRAL

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Group assignments in the classroom, the students will practice solving some questions; Homework, the students will practice solving questions on his/her own.

	Pop quizzes will cover the material previously discussed in class. The monthly arranged exam will cover specific topics from the lectures. The final exam will cover all materials which were discussed in class.

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	6
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**	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	L1- Functions and Graphs T1- PRELIMINARIES R1- Domain & Range
Week 2	L2- PRELIMINARIES- Absolut value, Lines, Circles, and Parabolas1 T2- PRELIMINARIES
Week 3	L3- Functions and Graphs T3-Lines, Circles, and Parabolas
Week 4	امتحان شهري ١
Week 5	L 4- Identifying Functions; Even & Odd Functions T4- Identifying Functions; Even & Odd Functions
Week 6	L5- Combining Functions; Shifting and Scaling Graphs T5- Combining Functions; Shifting and Scaling Graphs
Week 7	L6- Trigonometric Functions T6- Trigonometric Functions
Week 8	L7-LIMITS AND CONTINUITY T7-LIMITS AND CONTINUITY
Week 9	L7-LIMITS AND CONTINUITY T7-LIMITS AND CONTINUITY
Week 10	L8-LIMITS AND CONTINUITY T8-LIMITS AND CONTINUITY
Week 11	Exam.
Week 12	L8-LIMITS AND CONTINUITY T8-LIMITS AND CONTINUITY
Week 13	L8-LIMITS AND CONTINUITY T8-LIMITS AND CONTINUITY
Week 14	L9-One-Sided Limits and Limits at Infinity T9-One-Sided Limits and Limits at Infinity
Week 15	L9-One-Sided Limits and Limits at Infinity

	T9-One-Sided Limits and Limits at Infinity
Week 16	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	• Joel R. Hass, Maurice D. Weir, Thomas - University Calculus Early Transcendentals- (2015). • Joel R. Hass, Christopher E Heil, Przemyslaw Bogacki, Maurice D Weir, George B. Thomas, University Calculus Early Transcendentals (4th Edition) (2019). • James Stewart, Calculus, Early Transcendentals, 7th Edition Brooks Cole (2012)	Yes
Recommended Texts	• Gilbert Strang, Edwin Herman, Calculus Volume 1 by OpenStax (2016)	Yes
Websites	www.openstax.org/details/calculus-volume-1	

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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Physics**			**Module Delivery**	
Module Type	**Basic**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**CHE112**				
ECTS Credits	**6**				
SWL (hr/sem)	**150**				
Module Level		UGI	**Semester of Delivery**		1
Administering Department		Chemical	**College**		Engineering
Module Leader	Asst. Lecturer Hanan Ahmed Ibrahim		**e-mail**		hanan.ahmed.ibrahim@mu.edu.iq
Module Leader's Acad. Title		Assist.Lect	**Module Leader's Qualification**		MS.C.
Module Tutor	-		**e-mail**		-
Peer Reviewer Name		-	**e-mail**		-
Scientific Committee Approval Date		15/06/2023	**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	After successful completion of the module, students should be able to: 1. Introduction to physics and physical quantities, including: introduction to atomic physics; oscillatory motion. 2. To understand volt Newton's Laws of Motion, first law, second law- acceleration, force and mass ,third law. 3. . To understand Fluid Mechanics Temperature and Thermodynamics 4. This is the basic subject for describe Moving fluids and continuity principle; Static fluids and Pascal's law ,flow and Poiseuille's equation. 5. To understand First and second law of thermodynamics.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	By the end of this course student should demonstrate the following outcome relevant to Engineering physics 1- Demonstrate conceptual understanding of fundamental physics principles. 2- Apply concepts in interference and diffraction to solve relevant of engineering applications. 3- Define and apply the concepts of limits and continuity to the mentioned functions and study them. 4- To understand Fluid Mechanics Temperature and Thermodynamics of fundamental physics principles.

	5- An ability to identify ,formulate and solve physics equations.
Indicative Contents المحتويات الإرشادية	indicative content includes the following. Introduction to concept of engineering physics and its relevance to civil engineering, Fundamental science , objective of physics [5 hrs]. (Newton's Laws of Motion, first law –Inertia ,second law-acceleration, force and mass ,third law –action –reaction [15 hrs]. Rotational and lateral movement; Harmonic, damped and forced oscillations; [15 hrs]. First and second law of thermodynamics; Principles of electric and magnetic fields; [20 hrs]. Introduction to Atomic bonding; Attractive and repulsive forces; Chemical bonds; Crystal structures; Amorphous solids and polymers; Microscopic defects in solids, [10 hrs]. Basics of elasticity theory; Brittle fracture and microcracks; Plastic deformation; [15 hrs]. Moving fluids and continuity principle; Static fluids and Pascal's law; Buoyancy and Archimedes' Principle;Viscous flow and Poiseuille's equation. [20hrs].

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	• The strategy used in this course is outcome base learning. The course will give the basics of the field and how to obtain additional information as engineers require it in their careers and will give them good opportunity to understand the methods of solving physic equations. • Different forms of teaching will be used to come across with objectives of the course. PowerPoint presentations for the head titles, definitions, graphs, and many useful illustrations with a summary at the end of each chapter will be presented and discussed.

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	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	102	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
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	20% (20)	5, 11	LO #1, 2, 10 and 11
	Assignments	2	20% (20)	2, 6	LO # 3, 4, 6 and 7
	Projects / Lab.	-	-	Continuous	
	Report	-	-	-	LO # 5, 8 and 10
Summative assessment	**Midterm Exam**	2 hr	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	Introduction Engineering physics

Week 2,3	The Force and Newton's Laws of Motion
Week 4	movement Physics and Measurement Vectors
Week 5,6	First and second law of thermodynamics
Week 7	Principles of electric and magnetic fields
Week 8	Static Equilibrium and Elasticity
Week 9,10	Fluid Mechanics Temperature and Thermodynamics
Week 11	Rotational and lateral movement; Harmonic, damped and forced oscillation
Week 12	Introduction to Atomic bonding; Attractive and repulsive forces; Chemical bonds; Crystal structures; Amorphous solids and polymers; Microscopic defects in solids
Week 13	Basics of elasticity theory; Brittle fracture and microcracks; Plastic deformation
Week14,15	Moving fluids and continuity principle; Static fluids and Pascal's law; Buoyancy and Archimedes' Principle;Viscous flow and Poiseuille's equation.
Week 16	**Preparatory week before the final Exam**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Engineering physics, Dr. Hasan Maridi , British university in Yemen	No (only electronic version)
Recommended Texts	Physics for Scientisits and Engineers (with Physics NOW and info Trac), Raymond A.Seway –Emeritus ,James Madison university,Tomson Brooks /Cole @2004, 6th Edition , 1296 pages	No (only electronic version)
Websites	https://sites.google.com/site/hasanmaridi	

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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Chemical Eng. Principle I**			**Module Delivery**	
Module Type	**Core**			☐ **Theory** ☒ **Lecture** ☐ **Lab** ☒ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**CHE113**				
ECTS Credits	**8**				
SWL (hr/sem)	**200**				
Module Level		UGI	**Semester of Delivery**		1
Administering Department			**College**		
Module Leader	Thabit Fadhel Hasoni		**e-mail**	thabit.fadil@mu.edu.iq	
Module Leader's Acad. Title		Asst.Lect.	**Module Leader's Qualification**		MS.c.
Module Tutor			**e-mail**		
Peer Reviewer 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 Aims أهداف المادة الدراسية	The module aims to teach students the basics of balancing matter and energy, basic mathematical operations in chemical engineering, and train them to develop their ability to solve problems in practice.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- In the successful complete of this module the students would be able to : 2- Know the conception of units , operating with units , dimensions , mole , density, concentration and pressure and to do their calculation. 3- Do materials and energy balance for processes. 4- Understand the conception of ideal gas and real gas and to do related calculations.
Indicative Contents المحتويات الإرشادية	Dimensions, units, And their conversion Moles, density,And concentration Choosing a basis Temperature Pressure Introduction to Material balances A general strategy For solving material Balance problems Solving material Balance problems For single units Without reaction The chemical Reaction equation And stoichiometry Material balances For processes Involving reaction Material balance Problems involving Multiple units Recycle, bypass,Purge, and the Industrial application Of material balances

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1- Class learning 2- Tutorial of problems solving. 3- Self-study. 4- Tests. 5- Workshops.

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	137	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	200		

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**	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	Engineering Calculations, Units
Week 2	Dimensions
Week 3	Basis
Week 4	Temperature and Pressure
Week 5	Conversion, Yield, Selectivity
Week 6	Purge
Week 7	Percent of Completion in Chemical Reactions
Week 8	Material Balance without Chemical Reaction
Week 9	Material Balance without Chemical Reaction
Week 10	Examination
Week 11	Material Balance with Chemical Reaction
Week 12	Material Balance with Chemical Reaction
Week 13	Material Balance with Chemical Reaction
Week 14	Recycle.
Week 15	Examination
Week 16	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Basic principles and calculations in chemical engineering	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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Engineering drawing**			**Module Delivery**	
Module Type	**Suport or related learning activity**			☐ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☒ **Practical** ☐ **Seminar**	
Module Code	**ENG003**				
ECTS Credits	**5**				
SWL (hr/sem)	**125**				
Module Level		UGI	**Semester of Delivery**		1
Administering Department			**College**		
Module Leader	Dr. Baleegh Saud Alobaid		**e-mail**	Baleegh.saud@mu.edu.iq	

Module Leader's Acad. Title	Lecturer	**Module Leader's Qualification**	Ph.D.
Module Tutor	Lecturer Ali Salih Jafer Asst. Lecturer Salwan Fadhil Abas Asst. Lecturer Abdulala saud azez Asst. Lecturer Abass Nawar	**e-mail**	ali.salih@mu.edu.iq salwan.fadil@mu.edu.iq Abdulalasaud@mu.edu.iq abbas.znad@mu.edu.iq
Peer Reviewer 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 Aims أهداف المادة الدراسية	This module aims to Engineering drawings can be produced to a good professional standard if the following points are observed the types of lines used must be of uniform thickness and density, eliminate fancy printing, shading and associated artistry, include on the drawing only the information which is required to ensure accurate clear communication, use only standard symbols and where no other method of specification exist and appropriate abbreviations.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1-use the technical drawing tools properly and to plot pictures according to the dimensions and properties of technical drawing papers. 2-recognizes the technical drawing pens and pencils. Performs drawing exercises with ruler, compass, t-square and miter. 3-learns the standart paper dimensions and paper types. 4-knows to enfold a large paper to A4 dimensions. 5-performs the picture localization planning to standart papers.

	6-Relates a relationship between planes and transisions between planes 7-Adapts scale, types of scales and measurement techniques to drawings.
Indicative Contents المحتويات الإرشادية	drawing operations curves and scales objective is also to visualize projections clips the techniques of constructing the various types of polygons

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	This is an introductory module for 1st year engineering students to the area of graphics of engineering design and construction may very well be the most important course of all studies for an engineering or technical career. The course will introduce general aspects of graphic communication like geometric construction, orthographic projections etc. There will be two Quizzes during the semester. The strategy used in this course is outcome base learning. It is to test achievement of learning outcomes and changing upon. including weekends and starting immediately following class. Students with excused absences will be given a reasonable amount of time to catch up on their work with no penalty. Add Hole Tapping Needs to Your Drawing. Include Dimensions of Only Critical and Measurable Features.

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	77	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	

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	
	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	تعريفية على ادوات الرسم الهندسي وكيفية استخدامهاو انواع الورق
Week 2	تعريف انواع الخطوط و طريقة كتابة الحروف والارقام
Week 3	العمليات الهندسية
Week 4	نضريات الاسقاط - رسم المساقط المتعددة ١
Week 5	امتحان شهري-١
Week 6	نضريات الاسقاط- رسم المساقط المتعددة +٢وضع الابعاد
Week 7	نضريات الاسقاط- رسم المساقط المتعددة ٣
Week 8	نضريات الاسقاط- رسم المساقط المتعددة ٤
Week 9	رسم المساقط المتعددة-مراجعة
Week 10	امتحان شهري- ٢
Week 11	استنتاج ورسم رسم المسقط الثالث ١
Week 12	استنتاج ورسم رسم المسقط الثالث٢

Week 13	استنتاج ورسم رسم المسقط الثالث ٣
Week 14	استنتاج ورسم رسم المسقط الثالث٤
Week 15	مراجعة المادة
Week 16	

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	1. A Textbook of Engineering Drawing: for Undergraduate Engineering Students Paperback , 2020	Yes
Recommended Texts	The Theory of Engineering Drawing: Retro Restored Edition Paperback, 2021	Yes
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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Computer I**			**Module Delivery**	
Module Type	**Supportive**			☒ **Theory** ☐ **Lecture** ☒ **Lab** ☒ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	UNI004				
ECTS Credits	**3**				
SWL (hr/sem)	**75**				
Module Level		UGI	**Semester of Delivery**		1
Administering Department			**College**		
Module Leader	Karrar AbdAlmeer		**e-mail**	alakoulykarrar@mu.edu.iq	
Module Leader's Acad. Title		Lecturer	**Module Leader's Qualification**		M.Sc.
Module Tutor			**e-mail**		
Peer Reviewer 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 Aims أهداف المادة الدراسية	a) A key component of our mission is to make our students 'professional,' which to us sets the bar of not only teaching students how to develop software but also preparing them for a b) new career in software development. We train our students on much more than necessary programming skills and emphasize the soft career skills and networking needed to get into the right jobs. c) Identify the main types of computers, including supercomputer, mainframe, microcomputer, notebook, tablet, handheld. d) Describe the four functions of the computing cycle (i.e., input, processing, output, storage e) Identify the types and purposes of specialized input devices, including game controller, stylus, barcode reader, f) Compare various data storage devices, including flash drive, external hard drive, memory card, discs.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Per the Department's program assessment outcomes, by the end of this course you should demonstrate the following relevant to statistics methods: 1) an ability to apply knowledge of types of computer softeware 2) Computer networks.3)Information and coding theory
Indicative Contents المحتويات الإرشادية	Hardware Word Excel

	Power point network security

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Group Assignment, Quizzes and Final Exam: Quizzes will be based on the material covered in class. This material comes from a variety of sources and may go beyond the information covered in the text. Quizzes and the final exam will typically consist of both quantitative and qualitative questions. In all quizzes or final exam you will need to show all work on quantitative problems. Pay attention to significant figures. Group assignments will be open book, note and neighbor. The quizzes will be closed book, notes and neighbor. Assignments that cannot be read or are not presented in a professional engineering style will not receive credit. Final exam will be comprehensive. 2.Grading: •Plagiarism: Plagiarism is a serious offense and will not be tolerated. Plagiarism will result in a zero for the assignment. •Due dates will be given in class. Late papers may be accepted but will be docked 10% per day, including weekends and starting immediately following class. Students with excused absences will be given a reasonable amount of time to catch up on their work with no penalty. No assignments will be accepted after the solution been returned or posted, whichever occurs first. •Group work: Unless stated otherwise, you are allowed to work in groups and can submit one assignment for the group. For some assignments, you will be required to work in groups. A common grade will be given on group assignments.

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	12	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
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% (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**	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
Week 2	Computer Fundamentals
Week 3	Classification of Computers
Week 4	Computer Components
Week 5	Factors that must be Considered when buying a Computer

Week 6	Computer Safety
Week 7	Software Licenses
Week 8	Malware
Week 9	Computer Viruses
Week 10	Computer Damage to Health
Week 11	Operating Systems
Week 12	Introduction to Operating Systems Windows 7
Week 13	Some Common Situations & Setting in Windows 7
Week 14	Computer Fundamentals
Week 15	Classification of Computers
Week 16	
Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Introduction to Windows
Week 2	Work with icons
Week 3	use windows
Week 4	files and folders
Week 5	Accessories
Week 6	The main interface of Microsoft Word / general settings
Week 7	Texts/graphics/tables
Week 8	Dealing with slides and creating presentations (power point)
Week 9	Backgrounds and Themes / Transition Effects / Animations tab
Week 10	Slide Show/Print and Presentation Tab
Week 11	Dealing with Microsoft Office Excel
Week 12	Mathematical and arithmetic functions
Week 13	Statistical functions

Week 14	Boolean/conditional function (IF)
Week 15	COUNTIF,VLOOKUP Function
Week 16	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	"What is Computer Science? - Computer Science. The University of York". www.cs.york.ac.uk. Retrieved June 11, 2020.	Yes
Recommended Texts	"Computer science pioneer Samuel D. Conte dies at 85". Purdue Computer Science. July 1, 2002. Retrieved December 12, 2014.	Yes
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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Arabic Language			**Module Delivery**	
Module Type	**Support**			☒ **Theory** ☐ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	UNI003				
ECTS Credits	**2**				
SWL (hr/sem)	**50**				
Module Level	UGI		**Semester of Delivery**	1	
Administering Department	Chemical		**College**	Engineering	
Module Leader	Helen Fadhel Abbas		**e-mail**	helen.fadhel@mu.edu.iq	
Module Leader's Acad. Title	Lecturer		**Module Leader's Qualification**	Ph.D.	
Module Tutor	-		**e-mail**	-	
Peer Reviewer Name	-		**e-mail**	-	
Scientific Committee Approval Date			**Version Number**	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	-	**Semester**	-
Co-requisites module	-	**Semester**	-

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	أهداف الدرس تتلخص في الآتي: ١. تمكين الطالب من كتابة التقارير باللغة العربية بشكل صحيح وتجنب الاخطاء اللغوية والاملائية والاسلوبية. ٢. تطوير قدرة النطق الفصيح لدى الطالب للتمكن من التواصل بحرفية خلال العمل. ٣. توسعة فهم الادب العربي لانماء اساليب الكتابة في العربية. ٤. توسعة القدرة على التعبير وطرح الافكار بلغة عربية رصينة.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	يفترض بالانتهاء من تدريس هذه المادة أن يكون الطالب قد تحصل على القدرات التالية: ١. القدرة على التواصل بمهارة شفهيًا مع فرد أو مجموعة من الأشخاص بوسائل البيان اللغوية وفي الكتابة بالعربية على مستويات إدارية مختلفة. ٢. القدرة على إدراك الضرورة المستمرة لنمو المعرفة باللغة العربية والكتابة المهنية وكيفية العثور على المعلومات حولها وتطبيقها بشكل صحيح. ٣. القدرة على التحدث والكتابة بشكل مناسب دون أخطاء في القواعد العربية الاساسية. ٤. القدرة على الكتابة بشكل مناسب دون أخطاء في الاملاء.
Indicative Contents المحتويات الإرشادية	مراجعة الكلمة واقسامها، المعرب والمبني، وأفعال الماضي والمضارع والامر واحوالها (٥ ساعات)، مراجعة العلامات الفرعية التي تلحق بالافعال والاسماء (٥ ساعات)، همزات القطع والوصل، الهمزة المتوسطة، وعلامات الترقيم (٥ ساعات)، الجمل الاسمية والفعلية (٥ ساعات)، التاء المربوطة والتاء المفتوحة (٥ ساعات)، الحروف الناسخة والافعال اللازمة والمتعدية (٥ ساعات)، أدوات الجر (٥ ساعات)، نماذج من النصوص العربية (١٠ ساعات)، أخطاء شائعة في الكتابة بالعربية (١٥ ساعة)،أمثلة تطبيقية لكتابة التقارير بالعربية (٤٠ ساعة).

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	تقوم استراتيجية التعلم على التغيير المستمر بحسب مخرجات التعلم ومدى تحققها. سيركز استاذ المادة على الاخطاء اللغوية الشائعة ومحاولة تفاديها بالنسبة للطلبة عند استعمالهم اللغة في مجالات العمل.

	سيركز أيضا خلال الدرس على ثلاثة عناصر رئيسية وهي القواعد، والاملاء والأدب لتحسين قدرة الطالب للتواصل شفهيا وكتابيا باللغة العربية.

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	
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	10%	6, 11	LO # 1-4
	Assignments	2	10%	4, 10	LO # 1-4
	Projects / Lab.	1	10%	-	-
	Report/lab.	1	10%	-	-
Summative assessment	**Midterm Exam**	2 hr	10% (10)	7	LO # 1-4
	Final Exam	5 hr	50% (50)	16	LO # 1-4
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered

Week 1	مراجعة الكلمة واقسامها، المعرب والمبني، وأفعال الماضي والمضارع والامر واحوالها
Week 2	مراجعة العلامات الفرعية التي تلحق بالافعال والاسماء
Week 3	همزات القطع والوصل، الهمزة المتوسطة، وعلامات الترقيم
Week 4	الجمل الاسمية والفعلية
Week 5	التاء المربوطة والتاء المفتوحة
Week 6	الحروف الناسخة والافعال اللازمة والمتعدية
Week 7	أدوات الجر، والمجرور بحرف الجر والمجرور بالاضافة
Week 8	نماذج من النصوص العربية
Week 9	نماذج من النصوص العربية (تواصل للدرس السابق)
Week 10	أخطاء شائعة في الكتابة
Week 11	أخطاء شائعة في الكتابة (تواصل للدرس السابق)
Week 12	أخطاء شائعة في الكتابة (تواصل للدرس السابق)
Week 13	أمثلة تطبيقية لكتابة التقارير بالعربية
Week 14	أمثلة تطبيقية لكتابة التقارير بالعربية (تواصل للدرس السابق)
Week 15	أمثلة تطبيقية لكتابة التقارير بالعربية (تواصل للدرس السابق)
Week 16	

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	**الميسر في اللغة العربية: المستوى الاول: النحو والصرف والاملاء، سمير بن يحيى المعبر، دار حافظ، المملكة العربية السعودية، جدة، ١٤٢٣ هجـ، ٢٠٠٣ م.**	كلا (النسخة الاليكترونية فقط)
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: MarksDecimal 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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Mathematics II**			**Module Delivery**	
Module Type	**Basic learning activities**			☐ **Theory** ☒ **Lecture** ☐ **Lab** ☒ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**ENG005**				
ECTS Credits	**6**				
SWL (hr/sem)	**150**				
Module Level		UGI	**Semester of Delivery**		2
Administering Department			**College**		
Module Leader	Dr. Ahmed Rajih Hassan Wetaify		**e-mail**	ah.ra34@mu.edu.iq	

Module Leader's Acad. Title	Prof.	**Module Leader's Qualification**	Ph.D.
Module Tutor	Asst. Lecturer Abass Nawar Zinad	**e-mail**	abbas.znad@mu.edu.iq
Peer Reviewer Name		**e-mail**	
Scientific Committee Approval Date		**Version Number**	1.0

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	ENG001	**Semester**	1
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 course will cover the materials : Functions and Graphs, Identifying Functions; Even & Odd Functions, Functions and Graphs, Combining Functions; Shifting and Scaling Graphs, Trigonometric Functions, limits and continuity, One-Sided Limits and Limits at Infinity. Differentiation Rules, integration, applications of integrals, Applications of Derivatives.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	• Describe mathematical ideas from multiple perspectives. • Explain fundamental mathematical concepts or analyses of real-world problems to non-mathematicians.
Indicative Contents المحتويات الإرشادية	FUNCTIONS AND GRAPHS LIMITS AND CONTINUITY

	DIFFERENTIATION APPLICATIONS OF DERIVATIVES INTEGRATION APPLICATIONS OF INTEGRAL

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Group assignments in the classroom, the students will practice solving some questions; Homework, the students will practice solving questions on his/her own. Pop quizzes will cover the material previously discussed in class. The monthly arranged exam will cover specific topics from the lectures. The final exam will cover all materials which were discussed in class.

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	6
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**	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	Differentiation Rules
Week 2	Derivatives of Trigonometric Functions
Week 3	Derivatives of Logarithmic Functions
Week 4	امتحان شهري
Week 5	Applications of Derivatives
Week 6	Minimum point
Week 7	Maximum point
Week 8	Integration
Week 9	Definite integral
Week 10	Indefinite integral
Week 11	Methods of Integration
Week 12	Integration by formula, integration by parts
Week 13	Integration by substitution,
Week 14	Trigonometric substitution
Week 15	Applications of Definite Integrals
Week 16	Matrix

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	• Joel R. Hass, Maurice D. Weir, Thomas - University Calculus Early Transcendentals- (2015). • Joel R. Hass, Christopher E Heil, Przemyslaw Bogacki, Maurice D Weir, George B. Thomas, University Calculus Early Transcendentals (4th Edition) (2019). • James Stewart, Calculus, Early Transcendentals, 7th Edition Brooks Cole (2012)	Yes
Recommended Texts	• Gilbert Strang, Edwin Herman, Calculus Volume 1 by OpenStax (2016)	Yes
Websites	www.openstax.org/details/calculus-volume-1	

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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Chemistry**			**Module Delivery**	
Module Type	**Basic**			☒ **Theory** ☐ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**CHE122**				
ECTS Credits	**8**				
SWL (hr/sem)	**200**				
Module Level	UGI		**Semester of Delivery**	2	
Administering Department	Chemical engineering		**College**	Engineering	
Module Leader	Hanan Ahmed Ibrahim		**e-mail**	hanan.ahmed.ibrahim@mu.edu.iq	
Module Leader's Acad. Title	Asst. Lecturer		**Module Leader's Qualification**	Master	
Module Tutor	Name (if available)		**e-mail**	E-mail	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	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	(a) Understand the concept of analytical chemistry. (b) Understanding and calculating some properties of substances such as equivalent weight and molecular weight. (C) Knowing the methods and laws of calculating concentrations of substances and the relationship between them. (d) Understand the physical properties of materials and methods for their calculation. (e) Identify and calculate the acidity function (f) Understand acids and bases and their equilibrium states. (g) Knowing about titration, its methods, and its importance. (h) Understand weak acids, strong bases, and the resulting salts (i)Knowledge the concept of organic chemistry (j)Methods for naming organic compounds (j)Knowledge of the physical and chemical properties of organic compounds (k)Learn how to prepare organic compounds (l)Know the chemical reactions of organic compounds

Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1) the ability to apply knowledge of mathematics and chemical processes, 2) the ability to calculate certain physical properties, 3) the ability to recognize the properties of materials and their relationship production and action, 4) the ability to recognize the acid function, its importance and how to calculate it, 5) an understanding of professional and ethical responsibility, 6) the ability to communicate effectively, 7) the education necessary to understand the impact of an engineering solution in a global, economic, environmental and societal context, and 8) the ability to Use the techniques, skills, and modern engineering tools necessary for engineering practice. (9) Understand the general organic chemistry (10) Understand the alkanes (11) Explain the alkenes (12) Understand the alkynes (13) Explain the halides alkyl (14) Explain the cycloalkanes (15) Understand the aromatic hydrocarbons (16) Understand alcohols (17) Understand aldehydes and ketones (18) Understand the carboxylic acids
Indicative Contents المحتويات الإرشادية	Introduction to Analytical Chemistry ,Equivalent weight, Mole ,Atomic weight ,Molecular weight ,Molarity and Normality and relation between them ,Density and specific gravity ,Weight Percentage ,Acid – base equilibria and pH of solutions Expression of equilibrium constant in acidic and basic medium ,Calculation of pH of aqueous solution ,salt of weak acid and strong base ,Analysis of samples by titration with standard solution ,Titration curves ,Gravimetric analysis. Learn about organic chemistry in general, define it and classify it according to its types and compounds. Aliphatic compounds (alkanes, alkenes, alkynes), their chemical composition, naming methods, physical properties, methods of preparation, and chemical reactions. cyclic compounds, their chemical composition, naming methods, physical properties, methods of preparation and chemical reactions. Aromatic compounds, their chemical composition, naming methods, physical properties, methods of preparation, and chemical interactions..

	Alcohols, carboxylic acids, alkyl halides, aldehydes and ketones, their chemical composition, naming methods, physical properties, preparation methods and chemical reactions.

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	123	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	77	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	200		

Module Evaluation تقييم المادة الدراسية				
	Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**

Formative assessment	**Quizzes**	2	10% (10)	5, 10	LO # 1-7
	Assignments	2	10% (10)	2, 12	LO # 1-7
	Projects / Lab.	1	10% (10)	Continuous	
	Report	1	10% (10)	13	LO # 1-7
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 of organic chemistry
Week 2	Classification of organic chemistry compounds
Week 3	Alkanes , Alkenes , Alkynes and Alcohols
Week 4	Aldehydes , Ketones
Week 5	Carboxylic acids
Week 6	Alkyls Halides
Week 7	Cyclo alkanes
Week 8	Aromatic compounds
Week 9	Introduction to Analytical Chemistry
Week 10	Equivalent weight,Mole ,Atomic weight ,Molecular weight
Week 11	Molarity and Normality , Chemical Stoichiometry
Week 12	Density and specific gravity ,Weight Percentage
Week 13	Acid – base equilibria and pH of solutions, Expression of equilibrium constant in acidic and basic medium
Week 14	Calculation of pH of aqueous solution , salt of weak acid and strong base
Week 15	Calculation of the pH of buffer solution , Titration curves : Direct titration and back titration
Week 16	Electromotive Force and Nernest Equation

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Laboratory Tools
Week 2	Density and specific gravity
Week 3	Melting Point , Boiling Point
Week 4	Extraction , Sublimation
Week 5	Distillation , Recrystallization
Week 6	Preparation of Ethyl acetate , Preparation of Soap
Week 7	Preparation of Aspire , Cyclohexane
Week 8	Detection of active group
Week 9	Preparation of the solid solutions
Week 10	Preparation of solutions of a liquid substance of a certain concentration
Week 11	Determine the molarity of a secondary standard solution
Week 12	Calibration of a sulfuric acid solution of unknown concentration using a standard solution of potassium hydroxide
Week 13	Determine the molarity of a mixture of hydroxide and sodium carbonate
Week 14	The acidity of vinegar , Titration of polyprotic acids (polybasic)
Week 15	Determine the concentration by Homer method , Volhard method and Fajan method

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	*Jonathan Clayden - Blackwell's	Yes

	*Basic Principles of Analytical Chemistry, dr. Najat Juma Saleh, University of Technology, Baghdad.	
Recommended Texts	*John McMurry's Organic Chemistry *Skoog A. Douglas ,"Fundamental of Analytical Chemistry ",8 th edition ,Canada (2004) *Daniel C .Harris ,"Quantitative chemical Analysis", 6 th edition , U.S. (2003).	Yes

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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Chemical Eng. Principle II**			**Module Delivery**	
Module Type	**Core learning activity**			☐ **Theory** ☒ **Lecture** ☐ **Lab** ☒ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	CHE123				
ECTS Credits	**8**				
SWL (hr/sem)	**200**				
Module Level		UGI	**Semester of Delivery**		2
Administering Department			**College**		
Module Leader	Thabit Fadhel Hasoni		**e-mail**	thabit.fadil@mu.edu.iq	
Module Leader's Acad. Title		Asst.Lect.	**Module Leader's Qualification**		Master
Module Tutor			**e-mail**		
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date			**Version Number**	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	CHE113	**Semester**	1
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 module aims to teach students the basics of balancing matter and energy, basic mathematical operations in chemical engineering, and train them to develop their ability to solve problems in practice.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1-In the successful complete of this module the students would be able to : 2-Know the conception of units , operating with units , dimensions , mole , density, concentration and pressure and to do their calculation. 3-Do materials and energy balance for processes. 4-Understand the conception of ideal gas and real gas and to do related calculations.
Indicative Contents المحتويات الإرشادية	Ideal gas Real gas s:Compressibility Real gases: Equations of state Single-component Two-phase systems (vapor pressure) Energy: terminology, Concepts, and units Introduction to Energy balances For processes Without reaction Calculation of Enthalpy changes Applications of Energy balance In the absence of chemical reactions

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Class learning Tutorial of problems solving. Self-study. Tests.

	Workshops.

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	137	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	200		

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**	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	Gases
Week 2	Vapors

Week 3	Liquids and Solids.
Week 4	Ideal Gas.
Week 5	Ideal Gas.
Week 6	Mixture of Ideal Gases.
Week 7	Mixture of Ideal Gases.
Week 8	Vapor Pressure
Week 9	Mixture of Gas.
Week 10	Examination
Week 11	Saturated Vapor.
Week 12	Partial Saturation And Humidity.
Week 13	Energy Balance.
Week 14	Calculation of Thermal Content.
Week 15	Examination
Week 16	

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Basic principles and calculations in chemical engineering	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

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MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية		
Module Title	**English Language I**	**Module Delivery**
Module Type	**Support**	☐ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical**
Module Code	**UNI001**	
ECTS Credits	**2**	
SWL (hr/sem)	**50**	

			☐ **Seminar**		
Module Level		UGI	**Semester of Delivery**		2
Administering Department		Chemical	**College**	Eng.	
Module Leader	Dr. Baleegh Saud Alobaid		**e-mail**	Baleegh.saud@mu.edu.iq	
Module Leader's Acad. Title		Lecturer	**Module Leader's Qualification**		PhD
Module Tutor	-		**e-mail**	-	
Peer Reviewer Name		Scientific Committee	**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 Aims أهداف المادة الدراسية	Here are some common module aims that should be considered: 1. Language Proficiency Development: The aim is to enhance students' overall language proficiency in English. The module aims to help students build a solid foundation in grammar, vocabulary, and pronunciation. 2. Communication Skills: The aim is to develop students' ability to communicate effectively in various everyday situations and academic contexts. 3. Vocabulary Expansion: The aim is to expand students' vocabulary range. The module focuses on introducing and reinforcing new words, idioms, and expressions commonly used in spoken and written English.

	4. Grammar Mastery: The aim is to reinforce and expand students' understanding of English grammar structures. The module aims to provide systematic grammar instruction, practice, and application in authentic contexts. 5. Independent Learning Skills: The aim is to develop students' ability to take responsibility for their own learning and become independent language learners. The module may include strategies and activities to foster self-directed learning, such as setting learning goals, self-assessment, and using online resources.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Demonstrate improved listening skills by understanding main ideas, specific details, and implicit information. 2. Display enhanced reading skills by comprehending and analyzing a range of texts, such as articles, reports, short stories, and excerpts from academic texts. Identify main ideas, supporting details, and implied meanings while building vocabulary and reading fluency. 3. Expand vocabulary knowledge by acquiring new words, expressions, and idiomatic phrases related to various topics. Apply vocabulary in context and demonstrate an understanding of word meanings, synonyms, antonyms, and collocations.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. 1. Vocabulary Building: - Everyday vocabulary and expressions - Vocabulary related to various topics such as family, hobbies, work, travel, etc. - Vocabulary expansion through word families, synonyms, antonyms, and collocations 2. Grammar: - Review and reinforcement of basic grammar structures (present tenses, past tenses, future tenses, etc.) - Grammar practice through contextualized examples and exercises 3. Reading Skills: - Reading and understanding short texts, articles, and stories - Developing reading comprehension skills through exercises and questions - Building reading speed and comprehension through practice 4. Writing Skills: - Developing writing skills through guided writing activities - Writing short paragraphs and essays on various topics - Practicing sentence structure, paragraph organization, and coherence 5. Listening and Speaking Integration: - Engaging in listening activities followed by discussion and oral responses - Participating in group discussions and presentations

	- Practicing listening and speaking skills in real-life situations

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Communicative Approach: Emphasize active communication in the target language by encouraging students to use English in real-life situations and provide ample opportunities for them to practice speaking and listening skills. 2. Task-Based Learning: Design tasks and activities that require students to use English to complete meaningful and purposeful tasks. 3. Differentiated Instruction: Cater to the diverse learning needs and preferences of students by employing varied instructional strategies. Provide a range of activities, materials, and assessments to accommodate different learning styles, abilities, and interests. 4. Use of Technology: Integrate technology tools and resources to enhance language learning. 5. Formative Assessment: Implement regular formative assessments such as quizzes, presentations, group projects, and class discussions to monitor student progress and provide timely feedback. Encourage self-assessment and reflection to promote learner autonomy.

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	
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	30% (10)	5, 10	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
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	Tenses • Questions • Using a bilingual dictionary • Social expressions 1
Week 2	Present tenses • have/have got • Collocation - daily life • Making conversation
Week 3	Past tenses • Word formation • Time expressions
Week 4	much/many · some/any • a few, a little, a lot of • Articles • Shopping • Prices
Week 5	Verb patterns 1 , Future forms , Hot verbs , How do you feel?
Week 6	What ... like? • Comparatives and superlatives • Synonyms and antonyms • Directions
Week 7	Mid-term Exam
Week 8	Present Perfect • for, since • Adverbs, word pairs • Short answers
Week 9	have (got) to · should/must. Words that go together • At the doctor's
Week 10	Time clauses • if •Hot verbs • In a hotel
Week 11	Verb patterns 2 , manage to, used to -ed/-ing adjectives • Exclamations
Week 12	Passives , Verbs and nouns that go together , Notices
Week 13	Second conditional • might • Phrasal verbs • Social expressions 2
Week 14	Present Perfect Continuous • Word formation • Adverbs • Telephoning
Week 15	Past Perfect • Reported statements • Saying goodbye
Week 16	**Preparatory week before the final Exam**

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	New Headway Pre-Intermediate Student's Book, John and Liz Soars, Plus edition	Yes
Recommended Texts	A Self-study Grammar Book for Engineers, Sonia Oliver and Monica Soler	No
Websites	https://elt.oup.com/student/headway/preint4/?cc=us&selLanguage=en	

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

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MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Workshops**			**Module Delivery**	
Module Type	**Support**			☐ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** X☐ **Practical** ☐ **Seminar**	
Module Code	**ENG002**				
ECTS Credits	**4**				
SWL (hr/sem)	**100**				
Module Level		UGI	**Semester of Delivery**		2
Administering Department		Chemical	**College**		Eng.
Module Leader	**Ali Samir**		**e-mail**		**ali.samir@mu.edu.iq**
Module Leader's Acad. Title		Lecturer	**Module Leader's Qualification**		Ph.D.
Module Tutor	-		**e-mail**		-
Peer Reviewer Name		Scientific Committee	**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 Aims أهداف المادة الدراسية	1. Develop an understanding of the importance of industrial safety in workshop environments. 2. Teach the proper structure, organization, and formatting of technical reports. 3. Provide hands-on experience in using lathes and milling for various turning and shaping operations. 4. Understanding welding processes fundamentals and techniques. 5. Familiarize students with different welding methods, such as arc welding, MIG welding, and TIG welding. 6. exploring mechanical, electrical, and plumbing systems commonly found in buildings. 7. Introduce students to the basics of carpentry and woodworking techniques. 8. Teach safe handling and operation of carpentry tools, such as saws, planes, and chisels.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Familiarize students with safety protocols, procedures, and equipment. 2. Develop the student's skills to write engineering technical reports. 3. Develop skills in tool selection, workpiece setup, and achieving dimensional accuracy. 4. Develop skills in welding joint preparation, welding bead formation, and weld quality assessment. 5. Develop skills in reading and interpreting MEP drawings, schematics, and specifications. 6. Develop skills in measuring, marking, cutting, joining, and finishing woodwork projects.
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	**1. Hands-on Practice: Provide suitable opportunities for students to engage in hands-on practical exercises relevant to the workshop topic. This could include operating workshop equipment, practicing techniques.** **2. Demonstrate workshop processes, techniques, and safety procedures to the students.** **3. Offer guided instruction where students receive individual or small group guidance and feedback from instructors or experienced practitioners.** **4. Encourage collaboration among students by assigning group projects or activities that require teamwork.** **5. Implement ongoing assessment methods, such as quizzes, practical assessments, or project evaluations, to monitor students' progress and provide opportunities for reinforcement and remediation.**

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	52	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	3.6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	100		

Module Evaluation تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	30% (10)	5, 10	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
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	
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	
Week 16	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts		
Recommended Texts		
Websites		

Grading Scheme مخطط الدرجات				
Group	**Grade**	التقدير	**Marks (%)**	**Definition**
Success Group (50 - 100)	**A** - Excellent	امتياز	90 - 100	Outstanding Performance
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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

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Module Information معلومات المادة الدراسية					
Module Title	**Human Rights and Democracy**			**Module Delivery**	
Module Type	**Support**			☒ **Theory** ☐ **Lecture** ☐ **Lab** ☒ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**UNI006**				
ECTS Credits	**2**				
SWL (hr/sem)	**50**				
Module Level		UGI	**Semester of Delivery**		2
Administering Department		Chemical	**College**	Eng.	
Module Leader	Sabah Zuhair Jaber		**e-mail**		
Module Leader's Acad. Title		Asst. Lecturer	**Module Leader's Qualification**		MS.c.
Module Tutor			**e-mail**		
Peer Reviewer Name			**e-mail**	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 Aims أهداف المادة الدراسية	١) تعريف شامل ومركز بحقوق الإنسان ابتداء من جذور نشأتها والتطورات التي شهدتها هذه الحقوق الإنسانية عبر العصور والمجتمعات البشرية وإسهام الشرائع السماوية والأديان والحضارات في رفدها بالقيم والمثل مرورا بمختلف العصور. ٢) بيان الاعتراف الدولي بهذه الحق وق من قبل المنظمات الدولية، وفي مقدمتها الأمم المتحدة، ثم الاعتراف الإقليمي في مختلف بقاع العالم. ٣) دور المنظمات غير الحكومية المعنية بحقوق الإنسان وقانون الدولة الإنساني وأهداف تلك المنظمات ووسائل عملها ودورها في تطور احترام وحماية حقوق الإنسان. ٤) الضمانات العملية لحقوق الإنسان على الصعيد الوطني في الدساتير والتشريعات الوطنية متمثلة بالضمانات الدستورية والقضائية، ثم الضمانات السياسية إلى جانب الدور الذي تقوم به المنظمات الوطنية المعنية بحقوق الإنسان في الدفاع عن هذه الحقوق وحمايتها. ٥) دور الأمم المتحد وأجهزتها ووكالاتها المختصة في احترام وحماية حقوق الإنسان وكذلك دور المنظمات الإقليمية في ها الميدان. ٦) دور المنظمات الحكومية سواء على المستوى العالمي أو على المستوى الإقليمي في حماية واحترام حقوق الإنسان ٧) تفعيل العقل والتفكير والإبداع والحرص على المشاركة الديمقراطية بكل تفاصيلها ومبادئ العدالة الاجتماعية.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	١) إمداد الطلاب بأكثر قدر ممكن من المعلومات والمعارف التي تمكنهم من الوقوف على حقوق الإنسان من حيث مفهومها وأهدافها ومبادئها وأهمية تطبيقها في حياتهم، ليعرفوا ما لهم من حقوق وما عليهم من واجبات تجاه دينهم وبلادهم وأمتهم والناس أجمعين. ٢) إكساب الطلاب القدرة على التعلم الذاتي والتعليم المستمر باعتبارهما من أهم أساليب النمو المعرفي والتكيف مع المستجدات العلمية والعملية في مجال حقوق الإنسان. ٣) القيم والممارسات الأخلاقية المهنية التي ترتبط بقوانين وتشريعات حقوق الإنسان. ٤) إيقاف الطلاب على طرق الإفادة من التقنيات المعاصرة التي جاءت بها العولمة، والمتمثلة في الفضائيات والحاسب الآلي والأنترنت، وأنها تتيح لهم فرص الاطلاع على المعلومات والمعارف المختلفة المتعلقة بحقوق الإنسان، سواء ذات العلاقة بالمجال المحلي أو الإقليمي أو العالمي، بما في ذلك ما يصدر من قوانين دولية عن منظمات حقوق الإنسان. ٥) إمكانية جعل الطالب واعياً لحقوق الإنسان ليساعد الناس على فهم حقوقهم وواجباتهم. ٦) تدريب الطلبة على تطبيق حقوق الإنسان والحرية والديمقراطية في الحياة اليومية. ٧) تمكين الطالب من دراسة أهم الحقوق التي ضمنتها له الشريعة الإسلامية والدساتير العراقية لا سيما الدستور النافذ لسنة ٢٠٠٥ فضلا عن معرفة الطالب للمواثيق الدولية التي صدرت بخصوص حقوق الإنسان.
Indicative Contents المحتويات الإرشادية	١) تعميم ثقافة حقوق الإنسان لعموم المجتمع وبالأخص العملية التعليمية ٢) ضمان تنشئة أجيال متعاقبة تقوم على معرفة القوانين والتشريعات الخاصة بحقوق الإنسان. ٣) تفعيل العقل والتفكير والإبداع والحرص على المشاركة الديمقراطية بكل تفاصيلها ومبادئ العدالة الاجتماعية

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	١) أسلوب المحاضرة إذا يتخلل المحاضرات الحوار الهادف والمناقشة البناءة بين الطلاب والأستاذ. ٢) التعلم التعاوني ..وذلك تقسيم الطلاب إلى مجموعات صغيرة وتمكينهم من مناقشة أفكار الدرس المختلفة بعد تضمينها المعلومات التي تتعلق بقضية أو مشكلة تتعلق بحقوق الإنسان ويطلب من الطلاب تحليلها وإبداء الرأي حولها ومناقشتها أمام كافة زملاء الصف ٣) دراسة الحالة: وذلك من خلال عرض الحالة موضوع الدراسة إي المشكلة المتعلقة بحقوق الإنسان في صورة قصة غير منتهية ويطلب من الطلاب من خلال أسئلة تُعيرها مسبقاً أن يحللوا القصة، ويناقشوها، ويبدوا آراءهم حول مضامينها، ومن ثم يصنعون النهاية المناسبة.

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	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	17	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
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	10% (10)	5, 10	All
	Assignments	2	10% (10)	2, 12	All
	Projects / Lab.				
	Report	2	20% (20)	6, 12	All
	Midterm Exam	2 hr	10% (10)	7	All

Summative assessment	**Final Exam**	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	مقدمة في تعريف حقوق الإنسان، ماهية حقوق الإنسان.
Week 2	حقوق الإنسان في المواثيق الدولية، حقوق الإنسان في المواثيق الإقليمية، حقوق الإنسان في التشريعات الوطنية
Week 3	حقوق الإنسان في الحضارات القديمة، حقوق الإنسان في الأديان السماوية، حقوق الإنسان في العصور الوسطى والحديثة
Week 4	الاعتراف المعاصر بحقوق الإنسان،
Week 5	تصنيفات حقوق الإنسان
Week 6	وسائل حماية حقوق الإنسان، ضمانات حقوق الإنسان
Week 7	الفساد الإداري وتأثيره على حقوق الإنسان
Week 8	القانون الدولي الإنساني وقانون حقوق الإنسان، تطبيق الأمم المتحدة للقانون الدولي الإنساني وقانون حقوق الإنسان.
Week 9	الحرية(مفهومها_ أهميتها، تعريفها)،
Week 10	نشأة وتطور الحريات العامة، أنواع الحريات العامة، معوقات الحرية
Week 11	دور القانون في مجال الحريات العامة، الحريات العامة وحقوق الإنسان من الترادف إلى التمايز.
Week 12	مقدمة في تعريف الديمقراطية، التطور التاريخي لمفهوم الديمقراطية (الحضارات القديمة)، التطور التاريخي لمفهوم الديمقراطية (الأديان السماوية
Week 13	الديمقراطية في العصور الوسطى والحديثة والمعاصرة
Week 14	أشكال الديمقراطية، الشروط العامة لنجاح النظام الديمقراطي،
Week 15	مفهوم الانتخابات وتكيفها القانوني البرلمان، تطبيق النظام الديمقراطي في العراق
Week 16	تهيئة للامتحان النهائي

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	

Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts		
Recommended Texts	حقوق الإنسان.. الدكتور حميد حنون خالد	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.