MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Calculus1**			**Module Delivery**	
Module Type	**Core**			☒**Theory** ☒**Lecture** ☐ **Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	**ScMath 3101**				
ECTS Credits	**8**				
SWL (hr/sem)	**200**				
Module Level		1	**Semester of Delivery**		1
Administering Department		Math	**College**	Sc	
Module Leader	Malath Raheem Jasim		**e-mail**	sc.malathrj@uoanbar.edu.iq	
Module Leader's Acad. Title		Lecturer	**Module Leader's Qualification**		Ph.D.
Module Tutor	Name (if available)		**e-mail**	E-mail	
Peer Reviewer Name		Name	**e-mail**	E-mail	
Scientific Committee Approval Date		20/06/2023	**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 Objectives أهداف المادة الدراسية	1. Gain skill in drawing functions, especially common ones 2. Gaining experience in gealing trigonometric function and the relationships between them. 3. Concept of limits and how find them and continuous functions. 4. How to identify and find the asymptotes. 5. Finding the derivative of function and using the chain rule and implicit derivation. 6. The concept of linear approximation. 7. Acquiring the skill in graph the function by using derivative application and asymptotes.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Recognize how find the domain and range of the function and how graph the function. 2. Use shifting and scaling to graph any common function. 3. Defining the trigonometric functions and them graphing and trigonometric identities. 4. Understand how functional relationships change position or speed of a moving object as a function of time, calculate average rates of change and finding the tangent of the curve. 5. Find ourselves interested in the function's behavior near a particular point x_0 but not at x_0, Theorem limit laws. 6. How find One-Sided Limits, Continuity and Limits involving infinity and Asymptotes of Graphs. 7. Define the slope and tangent to a curve at a point, and the derivative of a function at a point. Interpret the derivative as the instantaneous rate of change of a function, and apply this interpretation to the study of certain types of motion. 8. Introduces differentiation rules, derivatives of trigonometric functions. 9. Finding derivative by using Chain Rule and Implicit Differentiation. 10. Introduce how use Linearization and find differentials. 11. Use derivative to find extreme values of functions, introduce the mean value theorem Monotonic Functions and the First Derivative Test, Concavity and Curve Sketching.
Indicative Contents المحتويات الإرشادية	<u>Functions</u> Functions and Their Graphs, Combining Functions; Shifting and Scaling Graphs, Trigonometric Function. [30 hrs] <u>Limits and Continuity</u> Rates of Change and Tangents to Curves, Limits of a Function, Limit Laws, The Precise Definition of a Limit, One-Sided Limits, Continuity and Limits involving infinity; Asymptotes of Graphs. [31 hrs]

	Differentiation Tangents and the Derivative at a Point, The Derivative as a Function, Differentiation Rules, Derivatives of Trigonometric Functions, The Chain Rule and Implicit Differentiation, Linearization and Differentials. [30 hrs] **Applications of Derivatives** Extreme Values of Functions, The Mean Value Theorem, Monotonic Functions and the First Derivative Test, Concavity and Curve Sketching. [30 hrs]

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	It is important at the outset to introduce students to the importance and role of calculus, which is considered a basis and a paving ground for studying academic subjects in the next stages. The basic tasks that the student is required to learn through teaching this subject, with the importance of every mathematical concept from the first lecture until the end of the fifteenth week, because its concepts are interrelated, and every mathematical concept paves the way for the subsequent concept. For a proper understanding, the student is required to focus on the lecture, the importance of reviewing the records at home, and doing the required assignments regularly. .

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	75	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	121	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	8
Total SWL (h/sem)	**200**		

الحمل الدراسي الكلي للطالب خلال الفصل	

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.				
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	20% (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	Functions and Their Graphs
Week 2	Combining Functions; Shifting and Scaling Graphs
Week 3	Trigonometric Function
Week 4	Rates of Change and Tangents to Curves, Limits of a Function
Week 5	Limit Laws, The Precise Definition of a Limit
Week 6	One-Sided Limits, Continuity and Limits involving infinity; Asymptotes of Graphs
Week 7	Tangents and the Derivative at a Point
Week 8	The Derivative as a Function, Differentiation Rules
Week 9	Derivatives of Trigonometric Functions
Week 10	The Chain Rule and Implicit Differentiation
Week 11	Linearization and Differentials
Week 12	Extreme Values of Functions

Week 13	The Mean Value Theorem
Week 14	Monotonic Functions and the First Derivative Test
Week 15	Concavity and Curve Sketching
Week 16	**Preparatory week before the final Exam**

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	Calculus,George B. Thomas,11,PEARSON,2009	Yes
Recommended Texts	Calculus And Analytic Geometry, 9Th Edition, GEORGE B. THOMAS, JR. & ROSS L, 2010	No
Websites	https://www.alfreed-ph.com/p/blog-page_39.html	

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	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded

(0 – 49)	**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	**Linear algebra 1**			**Module Delivery**	
Module Type	**Core**			☒**Theory** ☒**Lecture** ☐ **Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	**ScMath 3102**				
ECTS Credits	8				
SWL (hr/sem)	200				
Module Level		1	**Semester of Delivery**		1
Administering Department		Math	**College**	Sc	
Module Leader	Ali Rashid Ibrahim		**e-mail**	Sc.alirashed@uoanbar.edu.iq	
Module Leader's Acad. Title		Professor	**Module Leader's Qualification**		Ph.D.
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 Objectives أهداف المادة الدراسية	1. Introducing the student to the basics and concepts of Linear Algebra 1 according to the topics being studied. 2. Study the different methods of solving the studied topics. 3. Giving a visualization of some important applications of the studied methods and how to relate them to practical reality. 4. Raising the student's level of awareness to understand the work of modern applications that depend mainly on the development of the used solution methods. 5. Consolidate the studied concepts to be an introduction for the student to learn about the concept of mathematics and its applications, which are the basis for the progress of various other sciences.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Study matrices, their properties, operations on them, and methods for finding the inverse of a matrix. 2. Learn how to solve linear systems. 3. Learn how to find the determinant of a matrix. 4. Learn how to use the determinant of the matrix to solve linear systems. 5. Addressing applications that use the concept of matrices, especially with regard to the graph theory as a basic concept of applied mathematics in different fields.
Indicative Contents المحتويات الإرشادية	Matrices, definitions and examples: Matrix definition, identifying some types of matrices and examples. [4 hrs.] Matrix operation and their properties: Study of operations on matrices, addition and subtraction of matrices, multiplication of matrices, properties related to operations on matrices, illustrative examples of operations, identification of related theories. [8 hrs] system of linear equations and Matrix: Definition of linear equation, system of linear equations, geometric representation of linear equation and system of linear equations, study of elementary methods for solving simple linear systems (graph method, substitution method, elimination method), illustrative examples of methods of solution, identification of how to use the matrix to solve linear systems through Matrix representation of linear system (matrix of coefficients). [12 hrs] Inverse of the matrix (square matrix) “Invertible matrices”: Definition of matrix inverse, invertible matrices, non-invertible matrices (single matrix), illustrative examples, knowledge of elementary methods to find the inverse of a matrix. [8 hrs] Augmented coefficient matrix and inverse of matrix: Define the concept of the augmented coefficient matrix, use the concept of the augmented matrix to find the inverse of the invertible matrix, study the solution method to find the inverse of the matrix using the concept of the augmented matrix, illustrative examples. [8 hrs]

	Inverse properties: Identify the most important properties of the inverse of the matrix, study the related theories and axioms, illustrative examples. [6 hrs] Transpose of matrix (square matrix): Defining the concept of the transpose of matrix, studying the properties of the transpose of matrix with related theories and axioms, illustrative examples. [4 hrs] Trace of matrix (square matrix): Defining the concept of the trace of matrix, studying the properties of the trace of matrix with related theories and axioms, illustrative examples. [4 hrs] System of linear equations and solution. (Gaussian elimination and Gauss-Jordan elimination methods): Study the most important methods for solving linear systems (Gaussian elimination and Gauss-Jordan elimination methods) which use the concept of the augmented coefficient matrix to represent the linear system, the basic properties of these methods, illustrative examples. [12 hrs] Linear system and inverse. Studying the method of solving linear systems using the concept of the inverse of the matrix, recognizing the importance of this method in the applied field, illustrative examples. [6 hrs] Row echelon and reduced row echelon form: Studying the concept of the Row echelon form and the steps to convert the coefficient matrix of the linear system into Row echelon form, identifying the properties, illustrative examples, linking the concept of the row echelon form with a Gaussian elimination method, illustrative examples. Studying the concept of the reduced row echelon form and the steps to convert the coefficient matrix of the linear system into reduced row echelon form, identifying the properties, illustrative examples, linking the concept of the reduced Row echelon form with a Gauss-Jordan elimination method, illustrative examples. [12 hrs] Homogeneous linear system: Knowledge of the concept of a system of homogeneous linear equations, properties of the system, methods of solving the system, illustrative examples. [4 hrs] Elementary matrix: Defining the concept of an elementary matrix, terms and properties of an elementary matrix, illustrative examples. [4 hrs] Determinants. Definition of the determinant of a matrix (square matrix), its applications, illustrative examples to find the determinant of a matrix of order 2. [2 hrs] Minor and Cofactor. Definition of the Minor and Cofactor of the elements of the matrix, illustrative examples to find the Minor and Cofactor of each element of the

	matrix, recognizing the importance of each of the minor and Cofactor to find the determinant of the matrix of order greater than 2, illustrative examples. Determinant of the matrix of order greater than 2. Applying the concept of the minor and Cofactor to find the determinant of a matrix of order greater than 2, related axioms, illustrative examples. [4 hrs] Smart choice of row or column. Learn how to find the determinant of a matrix briefly by selecting the row or column used to find the determinant, illustrative examples. [4 hrs] Matrix of cofactors and the adjoint matrix. Definition of the cofactor matrix of the square matrix, definition of the adjoint matrix, illustrative examples, linking the concept of the adjoint matrix by finding the inverse of the matrix (Inverse matrix using the adjoint), illustrative examples. [4 hrs] Cramer's rule to solve the system of linear equations" using determinants": Explanation of Cramer's method for solving a system of linear equations using the concept of determinants, identifying some properties of the method, illustrative examples. [6 hrs] Properties of determinants: Explain the properties of determinants and related theorems and axioms, employing these properties to find the determinant of the matrix in brief, illustrative examples. [8 hrs]

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Reports on daily activities and duties. 2. Weekly discussions of the topics raised and addressing the student's knowledge conclusions on these topics.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	75	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	121	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	8
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 and 10	
	Assignments	2	10% (10)	2 and 12	
	Projects / Lab.				
	Report	1	10% (10)	13	
Summative assessment	Midterm Exam	2hr	20% (10)	7	
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Matrices, definitions and examples.
Week 2	Matrix operation and their properties. system of linear equations and Matrix.
Week 3	Inverse of the matrix (square matrix) “Invertible matrices”
Week 4	Inverse of the matrix (square matrix). Augmented coefficient matrix and inverse of matrix.
Week 5	Inverse properties. Theorems and examples.
Week 6	Transpose of matrix. Trace of matrix (square matrix). System of equations and methods of solution. Application(examples).
Week 7	System of linear equations. Linear system and inverse. Gaussian elimination and Gauss-Jordan elimination
Week 8	Gaussian elimination and Gauss-Jordan elimination. “Row echelon and reduced row echelon form”
Week 9	Homogeneous linear system.

	Elementary matrix.
Week 10	Determinants. Minor and Cofactor.
Week 11	Determinants. Smart choice of row or column. Matrix of cofactors. The adjoint matrix.
Week 12	Inverse matrix using the adjoint.
Week 13	Cramer's rule to solve the system of linear equations" using determinants" Examples.
Week 14	Properties of determinants (theorems and examples).
Week 15	Properties of determinants (theorems and examples).
Week 16	**Preparatory week before the final Exam**

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	1. Introductory linear algebra with applications, Bernard Kolman, first edition, 1976. 2. Elementary Linear Algebra Subsequent Edition, Arthur Wayne Roberts,1985.	Yes
Recommended Texts	1. Elementary Linear Algebra, Ninth Edition, Howard Anton, Chris Rorres, 2005.	No

	2. Student Solutions Manuals for use with College Algebra with Trigonometry: graphs and models, by Raymond A. Barnett, Michael R. Ziegler and Karl E. Byleen, 2005.	
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	**Foundations of Mathematical I**			**Module Delivery**	
Module Type	**Core**			☒ **Theory** ☐ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**ScMath 3103**				
ECTS Credits	7				
SWL (hr/sem)	175				
Module Level		1	**Semester of Delivery**		1
Administering Department		Math	**College**	Sc	
Module Leader	Dr. Rifaat Saad Abduljabbar		**e-mail**	Drrifaat1974@uoanbar.edu.iq	
Module Leader's Acad. Title		Lecturer	**Module Leader's Qualification**		Ph.D.
Module Tutor			**e-mail**		
Peer Reviewer Name		Name	**e-mail**	E-mail	
Scientific Committee Approval Date		12/06/2023	**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 Objectives أهداف المادة الدراسية	We will cover some ideas from set theory and we will introduce the concept of mathematical proof. In section 2 we will study an important algebraic structure called a group. We aim to give a thorough grounding in the basics of group theory and to build confidence working with abstract definitions and concepts. In section 3 we will focus on number theory. In particular, we will introduce Z/(n), the integers modulo n, and we will learn methods to solve equations in this new setting. Finally, in section 4 we will study another important algebraic structure called a field which is a generalization of the real numbers
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. To begin the study of Mathematics is one of the most important and well-developed strands of pure mathematics with many elegant and beautiful theorems, and also with applications to many areas of mathematics . 2. To introduce students to the ideas of formal definitions and rigorous proofs (one of the fundamental features of modern mathematics, and something that is not familiar from), and to develop their powers of logical thinking.
Indicative Contents المحتويات الإرشادية	Logics [20hrs] Types of Proofs [15 hrs] Sets [15 hrs] Operations on sets [20hrs] Relations [15 hrs] Functions [15 hrs]

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	6	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	111	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	7.4

Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**175**

Module Evaluation
تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	10% (10)	5 and 10	
	Assignments	2	10% (10)	2 and 12	
	Projects / Lab.	-	-	-	
	Report	1	10% (10)	13	
Summative assessment	**Midterm Exam**	2hr	20% (20)	7	
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	Logics
Week 2	Types of Proofs
Week 3	Sets
Week 4	Operations on sets
Week 5	Theorems related to operations on sets
Week 6	Union and intersection of sets
Week 7	Van,s diagrams
Week 8	Power set
Week 9	The Algebra of Sets
Week 10	Relations
Week 11	Equivalence Relations
Week 12	Functions
Week 13	Composition and Inversion for Functions
Week 14	Operations for Collections of Sets
Week 15	Ordering Relations

Week 16	**Preparatory week before the final Exam**

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	Set theory and related topics. Shcome series	Yes
Recommended Texts		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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Computer Science**			**Module Delivery**	
Module Type	**B**			☒ **Theory** ☐ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**UoA 111**				
ECTS Credits	**3**				
SWL (hr/sem)	**75**				
Module Level	1		**Semester of Delivery**	1	
Administering Department	Math		**College**	Sc	
Module Leader	Safwat Abd Alkadar Hamad		**e-mail**	mcssafr@uoanbar.edu	
Module Leader's Acad. Title	Asst. Lecturer		**Module Leader's Qualification**	MSc.	
Module Tutor	Name (if available)		**e-mail**	E-mail	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	14/06/2023		**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 Objectives أهداف المادة الدراسية	1. معرفة انظمة التشغيل المتنوعة والمستخدمة في اجهزة الحاسوب. 2. التعرف على البرمجيات الاساسية المستخدمة في علوم الرياضيات 3. معرفة اهم البرامج المكتبة المتضمنة في حزمة مايكروسوفت. 4. معرفة استخدام برامج الطباعة والعروض التقديمية. 1. Knowledge of the various operating systems used in computers. 2. Identify the basic software used in mathematics 3. Know the most important library programs included in the Microsoft package. 4. Knowledge of using printing and presentation programs.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. القدرة على استخدام جهاز الحاسوب مع نظام التشغيل الخاص به. 2. القدرة على استخدام البرامج المكتبية مثل برنامج word و power point 3. القدرة على كتابة التقارير العلمية ومشاريع التخرج 4. القدرة على انشاء الجداول واضافة اشكال مختلفة المستخدمة في طباعة التقارير والمشاريع 5. القدرة على انشاء العروض التقديمية وكيفية عرضها في المناقشات والمحاضرات. 1. The ability to use a computer with its operating system. 2. The ability to use office programs such as Word and Power Point 3. The ability to write scientific reports and graduation projects 4. The ability to create tables and add different forms used in printing reports and projects 5. The ability to create presentations and how to present them in discussions and lectures.
Indicative Contents المحتويات الإرشادية	يدرس الطالب اهم المواضيع التالية: 1. انظمة التشغيل المستخدمة في اجهزة الحواسيب الحديثة. (6 ساعة) 2. البرمجيات المستخدمة في حزمة مايكرو سوفت المكتبية (5 ساعة) 3. التعرف على واجهة برنامج word وال power point (5 ساعة) 4. اهم المكونات الاساسية لبرنامجي word و power point (8 ساعة) 5. انشاء الجداول الالكترونية المستخدمة في تقارير ومشاريع التخرج (8 ساعة) 6. استخدام الرسومات التوضيحية المستخدمة في الطباعة (7 ساعة) 7. انشاء الشرائح التي توضح الهدف من انشاء العرض التقديمي (7 ساعة) The student studies the following most important topics: 1. Operating systems used in modern computers. (6 hours) 2. Software used in the Microsoft Office package (5 hours) 3. Getting to know the interface of Word and Power Point (5 hours) 4. The most important basic components of Word and Power Point (8 hours) 5. Creating electronic tables used in graduation reports and projects (8 hours) 6. Using illustrations used in printing (7 hours) 7. Create slides that explain the purpose of creating the presentation (7 hours)

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	تعزيز وصقل مهارات الطلبة باستخدام الحاسوب والتدريب على استخدام الانظمة الخاصة به وكيفية تطوير من قدرات الاستخدام الكفؤ لجهاز الحاسوب من خلال المحاضرات التفاعلية في المختبر اضافة الى المخطوطات الورقة والكتب المنهجية والمحاضرات وملفات PPT Enhancing and refining students' skills in using the computer, training in using its systems, and how to develop the capabilities of efficient use of the computer through interactive lectures in the laboratory, in addition to manuscripts, papers, methodological books, lectures, and PPT files.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	62	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	13	**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 and 10	LO #1, #2, #3
	Assignments	2	10% (10)	2 and 12	LO #2, #3, #4
	Projects / Lab.	1	10% (10)	Continuous	LO #1, #2, #3, #4, #5
	Report	1	10% (10)	13	LO #1, #2, #3, #4, #5
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Operating systems

Week 2	Windows operating system
Week 3	Microsoft Office 2010 package
Week 4	Word user interface
Week 5	Basic components of Word
Week 6	File tab
Week 7	Home tab
Week 8	Page Layout tab
Week 9	Insert tab
Week 10	Tables tab (Design)
Week 11	Tables tab (Layout)
Week 12	View and review tab
Week 13	Presentation software
Week 14	Create and edit slides
Week 15	Different ways of displaying and issuing slides
Week 16	Review for the final exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Using Word program
Week 2	Applications in the File tab
Week 3	Home tab commands
Week 4	Page layout tab commands
Week 5	Insert tab commands
Week 6	View tab commands
Week 7	Create and design presentations

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	كتاب (اساسيات الحاسوب وتطبيقاته المكتبية) الجزء الثاني	Yes
Recommended Texts		

Websites	https://www.abanoubhanna.com/2018/05/Arabic-Microsoft-Word-2010-tutorial.html

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	**اللغة العربية**			**Module Delivery**	
Module Type	**Support**			☒ **Theory** ☐ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**ScMath 1103**				
ECTS Credits	**2**				
SWL (hr/sem)	**50**				
Module Level	1		**Semester of Delivery**	1	
Administering Department	Math		**College**	Sc	
Module Leader	عبد الكريم محمد خلف		**e-mail**	karemaljanaby@uoanbar.edu.iq	
Module Leader's Acad. Title	استاذ مساعد		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Name (if available)		**e-mail**	E-mail	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	12/06/2023		**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 Objectives أهداف المادة الدراسية	تأهيل الطلبة لجعلهم قادرين على استعمال اللغة العربية استعمالا صحيحا ليكونوا اصحاب لغة عربية سليمة وتجنب الاغلاط اللغوية واطلاعهم على قدر معين من مفردات اللغة العربية النحوية واللغوية والاملائية وكذلك دراسة بعض النصوص القرآنية والشعرية والنثرية ليطلعوا على الاساليب اللغوية الرصينة.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	محور المعرفة والفهم 1. الالمام بقواعد اللغة العربية 2. الالمام بقواعد الاملاء العربي 3. الالمام بقواعد الصرف العربي 4. الالمام بأسلوب القران الكريم والحديث القدسي والحديث النبوي بدراسة بعض النصوص 5. التعرف على اساليب الشعر العربي وبعض نصوص النثر العربي محور المهارات الخاصة بالموضوع 1- التحدث بطلاقة 2- قراءة النصوص بصورة دقيقة 3- الانصات الى المتحدثين ومعرفة ما هو صحيح وغلط من الكلام 4- التدقيق في الاساليب اللغوية
Indicative Contents المحتويات الإرشادية	1-دراسة في التعبير القرآني والقدسي والنبوي (نماذج من سورة القصص ومن الأحاديث القدسية ومن القصص النبوي) ، وسيتعلم الطالب منها: أ-التلاوة المنضبطة حسب معطيات اللغة العربية. ب-استخراج دلالات النصوص التعبيرية وفهم دلالة السياق في اللغة العربية. ت-فهم خصائص التعبير في الحديث القدسي والفرق بينها وبين القرآن الكريم والحديث النبوي الشريف. ج- معرفة خصائص القصة القصيرة في الحديث النبوي الشريف من خلال أمثلة متنوعة. د- التطبيق العملي لمعرفة دلالة الزمان والمكان في القصة والحدث والشخصيات. (4 ساعات) 2- دراسة نصوص من الشعر العربي وستعلم الطالب منه: أ-حفظ أبيات شعرية من شعراء جدد. ب-تعلم مهارة الإلقاء. ت- تفسير نصوص الشعر العربي. د- معرفة حياتهم وأبرز مؤهلاتهم الأدبية ومواهبهم الفنية. (4ساعات). 3-دراسة مختارات من مواضيع النحو العربي، وسيتعلم الطالب منها: أ-معرفة صور المبتدأ والخبر. ب- معرفة العدد وأحواله وتراكيبه. ت- معرفة علامات الترقيم وكيفية استعمالها. د- معرفة الأسس الصحيحة لقواعد الإملاء. (4 ساعات) 4-دراسة مختارات بلاغية، وستعلم الطالب منها الآتي: أ-فهم لغة الجسد وكيفية استعمالها للتأثير في المتعلم. ب- دراسة التشبيه والمجاز والاستعارة والكناية للحصول على تعبير مؤثر. ت-دراسة التورية والجناس بصفتها ملامح جمالية في النصوص العربية. (4 ساعات). 5-دراسة بعض الحكم والأمثال ،وسيتعلم الطالب منها: أ-فهم حكم العلماء وأثرها في صياغة الشخصية العربية. ب- محاولة الصياغة والنسج على منوالها. ت- فهم سبب الحكم ومناسبته. (2 ساعات).

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
.	سيتم اتخاذ ستراتيجية رئيسة يتم تبنيها في تقديم مادة اللغة العربية في هذا الفصل الدراسي تتمثل في تشجيع الطلاب وحثهم على المشاركة في المنهاج النظري بغية تحصيل الإلمام الشامل بمفردات المنهج والتي بدورها ستعزز من القدرات التعبيرية وقدرات التواصل الاجتماعي وتحقق أسلوبا مميزا في استلهام مفردات لغة الضاد ومهارات الالقاء والكتابة التعبيرية المنضبطة وهنا تكمن اهمية المعرفة التامة بنصوص التراث العربي.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	30	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	18	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	1.2
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 and 10	
	Assignments	2	10% (10)	2 and 12	
	Projects / Lab.				
	Report	1	10% (10)	13	
Summative assessment	Midterm Exam	2hr	20% (10)	7	
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered

Week 1	دراسة في التعبير القرآني
Week 2	نواسخ الابتداء ، كان واخواتها ، ان واخواتها ، لا النافية للجنس
Week 3	مختارات من نصوص الحديث القدسي
Week 4	مختارات من نصوص الحديث النبوي
Week 5	مختارات من نصوص الشعر العربي
Week 6	الافعال
Week 7	الفاعل والمفعول به
Week 8	مقدمة في الاملاء العربي
Week 9	علامات الترقيم
Week 10	رسم الهمزة
Week 11	العدد ، احوال العدد ، تذكير العدد وتأنيثه ، تميز العدد ، تعريف العدد وتنكيره
Week 12	دراسة جوانب بلاغية من التراث العربية
Week 13	مهارة الإلقاء للشعر العربي
Week 14	القصة القصيرة
Week 15	الحكم والأمثال
Week 16	لغة الجسد في التراث العربي

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	كتاب اللغة العربية للأقسام غير الاختصاص	Yes
Recommended Texts	كتب اخرى ضمن الاختصاص ذات اسلوب أكاديمي مفصل	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

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**حقوق الانسان والديمقراطية**			**Module Delivery**	
Module Type	**Support**			☒**Theory** ☐ **Lecture** ☐**Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	**ScMath 1102**				
ECTS Credits	2				
SWL (hr/sem)	50				
Module Level	1		**Semester of Delivery**	1	
Administering Department	Math		**College**	Sc	
Module Leader	م.م لينا خالد كامل		**e-mail**	lina.kamel@uoanbar.edu.iq	
Module Leader's Acad. Title	ماجستير		**Module Leader's Qualification**		
Module Tutor	/		**e-mail**	/	
Peer Reviewer Name	/		**e-mail**	/	
Scientific Committee Approval Date	14/06/2023		**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 Objectives أهداف المادة الدراسية	تهدف المادة لمعرفة الطالب الجامعي حقوقه كإنسان وحقوق البشر الآخرين هذه الحقوق التي اقرتها الشرائع السماوية ومن ثم القوانين الوضعية على كافة مستوياتها الدولية والإقليمية والوطنية وتهدف المادة أيضا لمعرفة الطالب الجامعي ما هي الحريات العامة ولماذا سميت عامة وما هي الحريات المقرة بالشرائع السماوية ومن ثم المواثيق الإقليمية والوطنية ،لكي يتمتع بها ويمارسها بشكلها الصحيح دون الاعتداء على حريات الآخرين، ومن ثم معرفه نظام بلده السياسي عبر التعرف على النظام الديمقراطي الذي تمارسه أغلب دول العالم والذي يعد كضمانة للحقوق والحريات .
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	**المعرفة والفهم :** - زيادة معرفة الطالب بالجانب المفاهيم النظري والتطور التاريخي لمادة حقوق الانسان والديمقراطية - تنمية مهارات الطالب التحليلية والنقدية فيما يتعلق بواقع ومستقبل حقوق الانسان والديمقراطية - تدريب الطالب على اهمية المشاركة الفاعلة في جوانب الحياة العامة كتعزيز احترام مبادى حقوق الانسان العامة والمشاركة الفاعلة في الحياة السياسية والثقافية. - تمكين الطلاب من فهم اهمية التعليم ودوره في نشر ثقافة حقوق الإنسان والديمقراطية في بناء مجتمع حضاري يقوم على أساس الحكم الصالح الذي من اهم مقوماته الإيمان بحقوق الإنسان والتربية عليها. **المهارات الخاصة بالمقرر:** 1- معرفة الطالب بحقوق الأنسان والحريات العامة في الدساتير العراقية. 2- ان يتعرف الطالب على حقوق الإنسان على المستوى الدولي. 3- ن يتعرف الطالب على الحقوق والحريات في الإعلان العالمي والعهدين الدوليين الخاصين في حقوق الإنسان. 4- التعرف على حقوق الإنسان الحديثة. من ضمنها حق التنمية والحق في بيئة نظيفة **طرائق التعليم و التعلم:** 1- عن طريق المحاضرة 2- المناقشة المباشرة 3- التدريبات والأنشطة داخل قاعة الدرس 4- التحضير 5- زيارة المكتبة. 6- من خلال التعليم الإلكتروني. **طرائق التقييم:** 1- من خلال مشاركة الطلبة بالمحاضرة بالاعتماد على تحضيرهم المسبق للمادة. 2- كتابة البحوث والتقارير المتعلقة بمفردات المادة المقررة. 3- نظام الكوز لتحفيز الطلبة على متابعة المادة 4- التقييم من خلال الامتحانات الشهرية والفصلية الأهداف الوجدانية والقيمية . - أن يشعر الطالب بأهمية حقوق الإنسان والحريات العامة. - تشجيع الطالب على المحافظة على حقوق الآخرين. - ضبط النفس خلال الالقاء. - ان يشعر باقتداء حقوق الإنسان الصحيحة. المهارات العامة والتأهيلية المنقولة)المهارات الأخرى المتعلقة بقابلية التوظيف والتطور

	الشخصي.) - **تشجيع الطلبة على الابداع وخلق روح المثابرة ونكر الذات لديهم من خلال التشجيع المستمر على ضرورة التعاون المشترك والفاعل فيما بينهم لإنجاز متطلباتهم الدراسية** - **تم تزويدهم بالموقع الالكتروني الخاص بالجامعة المتعلق بتوافر فرص مستقبلية للتعيين والتوظيف** - **اكتسابهم معرفة بأهمية تطوير قابلياتهم من خلال تثقيف الذات بالاطلاع على مختلف المعارف والتأكيد على تطوير المواهب الذاتية لدى الطلبة كالرياضة والفنون بكافة انواعه في اوقات الفراغ.**
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. زيادة الوعي والمعرفة بحقوق الإنسان والقيم الديمقراطية. 2. تطوير المهارات اللازمة للتفاعل والمشاركة الفعّالة في المجتمع. 3. تعزيز القيم والأخلاق المرتبطة بحقوق الإنسان والديمقراطية. 4. توفير أمثلة واقعية لتطبيق حقوق الإنسان ومبادئ الديمقراطية. 5. تشجيع المشاركة المجتمعية والوعي السياسي. 6. تطبيق المعرفة في حل المشكلات العملية ذات الصلة. 7. تعزيز الوعي العالمي بأهمية حقوق الإنسان والديمقراطية.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	30	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	18	**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	10% (10)	5 and 10	
	Assignments	2	10% (10)	2 and 12	
	Projects / Lab.				
	Report	1	10% (10)	13	
Summative assessment	Midterm Exam	2hr	20% (10)	7	
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	تعريف حقوق الإنسان وخصائصها المختلفة.
Week 2	أنواع حقوق الإنسان وأهميتها في المجتمع.
Week 3	تاريخ تطور حقوق الإنسان عبر العصور.
Week 4	الفساد الإداري وتأثيره على حقوق الإنسان.
Week 5	مفهوم الديمقراطية ودورها في حماية حقوق الإنسان.
Week 6	شروط نجاح الديمقراطية وأهميتها في المجتمعات.
Week 7	العناصر الأساسية لنظام ديمقراطي فاعل.
Week 8	السلطات الرئيسية في النظام الديمقراطي ودور كل منها.
Week 9	تعريف وأهمية الانتخابات في الديمقراطية.
Week 10	تكييف الانتخابات وفقًا للسياق القانوني والاجتماعي.
Week 11	تأثير جماعات الضغط في صنع القرارات السياسية.
Week 12	دور المنظمات الحقوقية في حماية حقوق الإنسان.
Week 13	التحديات المعاصرة التي تواجه حقوق الإنسان والديمقراطية.
Week 14	استراتيجيات التعلم والتعليم لنشر وتعزيز حقوق الإنسان.
Week 15	تأثير حقوق الإنسان والديمقراطية على بناء مجتمعات عادلة ومتقدمة.
Week 16	أسبوع مراجعة قبل الامتحان 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	الكاظم، ماهر صبري. (الطبعة الثانية). حقوق الإنسان والديمقراطية والحريات العامة: محاضرة للمرحلة الدراسية الأولى في الجامعات العراقية.	Yes
Recommended Texts	الشعباني، أحمد. (2020). الديمقراطية في العالم العربي: التحديات والفرص. دار الكتب العلمية.	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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Calculus 2**			**Module Delivery**	
Module Type	**Core**			☒**Theory** ☒**Lecture** ☐ **Lab** ☒**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	**ScMath 3104**				
ECTS Credits	**8**				
SWL (hr/sem)	**200**				
Module Level		1	**Semester of Delivery**		2
Administering Department		Math	**College**	Sc	
Module Leader	Malath Raheem Jasim		**e-mail**	sc.malathrj@uoanbar.edu.iq	
Module Leader's Acad. Title		Lecturer	**Module Leader's Qualification**		Ph.D.
Module Tutor	Name (if available)		**e-mail**	E-mail	
Peer Reviewer Name		Name	**e-mail**	E-mail	
Scientific Committee Approval Date		20/1/2024	**Version Number**		1.0

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	**ScMath 3101**	**Semester**	
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Use finite approximation to estimate the area under the graph. 2. Descript method Finding a formula for Riemann sum. 3. Present The Fundamental Theorem of Calculus. 4. Calculate indefinite integrals and the substitution method. 5. Finding area between curves. 6. The concept Inverse Function and Their Derivatives. 7. Learn Natural Logarithms, Exponential Functions. 8. Finding limits by use L'Hopital's Rule. Inverse Trigonometric Function, Hyperbolic Functions. 9. Learn integration methods, Integration by Parts, Trigonometric Integrals, Trigonometric Substitutions, Integration of Rational Functions by Partial Fraction and Improper Integrals.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Recognize how Use finite approximation to estimate the area under the graph, a lower sum, an upper sum and the midpoint rule. 2. Concept of integration by using formula for Riemann sum . 3. Calculate indefinite integrals and the substitution method. 4. Learn how to determine the area to be found between curves. 5. The concept Inverse Function and Their Derivatives. 6. Describe Logarithms, Exponential Functions, how graphing, them domain and range, them derivatives and integrals. 7. Role and importance The Fundamental Theorem of Calculus. 8. Finding limits by use L'Hopital's Rule. Inverse Trigonometric Function, Hyperbolic Functions. 9. Skill acquisition to calculate integrals by using integration methods, Integration by Parts, Trigonometric Integrals, Trigonometric Substitutions, Integration of Rational Functions by Partial Fraction and Improper Integrals.
Indicative Contents المحتويات الإرشادية	<u>Integration</u> Area and Estimating with Finite Sum, Sigma Notation and Limit of Finite Sums, The Definite Integral, The Fundamental Theorem of Calculus, The Substitution Method, Substitution and Area Between Curves. [40 hrs] <u>Transcendental Function</u> Inverse Function and Their Graphs, Natural Logarithms, Exponential Functions, L'Hopital's Rule, Inverse Trigonometric Function, Hyperbolic Functions. [43 hrs] <u>Techniques of Integration</u> Integration by Parts, Trigonometric Integrals, Trigonometric Substitutions, Integration of Rational Functions by Partial Fraction. [30 hrs] Improper Integrals. [8 hrs]

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	It is important at the outset to introduce students to the importance and role of calculus, which is considered a basis and a paving ground for studying academic subjects in the next stages. The basic tasks that the student is required to learn through teaching this subject, with the importance of every mathematical concept from the first lecture until the end of the fifteenth week, because its concepts are interrelated, and every mathematical concept paves the way for the subsequent concept. For a proper understanding, the student is required to focus on the lecture, the importance of reviewing the records at home, and doing the required assignments regularly. .

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	94	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	6
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	106	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	7
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 and 10	LO #1, #2, # 3and #8, #9
	Assignments	2	10% (10)	2 and 12	LO #4, #5 and #6, #7
	واجبات داخل الكلية	1	10% (10)	9	# 3and #7
	Report	1	10% (10)	13	LO #5, #6 and #9

Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Area and Estimating with Finite Sum
Week 2	Sigma Notation and Limit of Finite Sums, The Definite Integral
Week 3	The Fundamental Theorem of Calculus, The Substitution Method
Week 4	Substitution and Area Between Curves
Week 5	Volume Using Cross- Section and Cylindrical Shells, Arc Length
Week 6	Areas of Surfaces of Revolution, Moments and Centers of Mass
Week 7	Inverse Function and Their
Week 8	Natural Logarithms, Exponential Functions
Week 9	L'Hopital's Rule, Inverse Trigonometric Function
Week 10	Hyperbolic Functions
Week 11	Integration by Parts
Week 12	Trigonometric Integrals
Week 13	Trigonometric Substitutions
Week 14	Integration of Rational Functions by Partial Fraction
Week 15	Improper Integrals
Week 16	**Preparatory week before the final Exam**

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	Calculus,George B. Thomas,11,PEARSON,2009	Yes
Recommended Texts	Calculus And Analytic Geometry, 9Th Edition, GEORGE B. THOMAS, JR. & ROSS L, 2010	No
Websites	https://www.alfreed-ph.com/p/blog-page_39.html	

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	**Linear algebra 2**			**Module Delivery**	
Module Type	**Core**			☒**Theory** ☒**Lecture** ☐ **Lab** ☒**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	**ScMath 3105**				
ECTS Credits	**7**				
SWL (hr/sem)	**175**				
Module Level		1	**Semester of Delivery**		2
Administering Department		Math	**College**	Sc	
Module Leader	Ali Rashid Ibrahim		**e-mail**	Sc.alirashed@uoanbar.edu.iq	
Module Leader's Acad. Title		Professor	**Module Leader's Qualification**		Ph.D.
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	ScMath 3102	**Semester**	1
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Introducing the student to the basics and concepts of Linear Algebra 1 according to the topics being studied. 2. Study the different methods of solving the studied topics. 3. Giving a visualization of some important applications of the studied methods and how to relate them to practical reality. 4. Raising the student's level of awareness to understand the work of modern applications that depend mainly on the development of the used solution methods. 5. Consolidate the studied concepts to be an introduction for the student to learn about the concept of mathematics and its applications, which are the basis for the progress of various other sciences.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	A- Knowledge and understanding: 1. Study spaces and subspaces. 2. Studying vectors, their properties, operations on them, and their fields of application. 3. Studying the concept of linear independence, linear dependence, and the used solution methods. 4. Study the basis, dimension and subjective values. 5. Addressing applications that use the concept of vectors, especially with regard to finding areas and volumes of geometric shapes, which is considered one of the practical applications of vectors. B- Subject-specific skills 1. Reports on daily activities and duties. 2. Weekly discussions of the topics raised and addressing the student's knowledge conclusions on these topics.
Indicative Contents المحتويات الإرشادية	Vectors and vector space: A simple introduction to vectors and vector space. [2 hrs] Geometric vectors: A simplified explanation of the vector and the geometric interpretation of the vector, the expression of the vector, illustrative examples. [2 hrs] Transition from geometric vectors to algebraic vectors: An explanation of the geometric and algebraic representation of the vector, the transition from the geometric concept of the vector to the algebraic concept, illustrative examples. [2 hrs] Magnitude of a vector, vector addition, scalar multiplication, unit vector: Studying how to find the Magnitude (length, or norm) of a vector, interpretation or geometric interpretation of the value of a vector, illustrative examples. Explanation of some operations on vectors, vector addition, vector subtraction, scalar multiplication, geometric explanation of vector addition, subtraction, scalar multiplication, illustrative examples. Definition of a unit vector, how to find a unit vector, illustrative

	examples. [10 hrs] vector in physics: Explanation of vectors in physics, force vectors, velocity vectors, geometric interpretation of these vectors, illustrative examples. [2 hrs] Angle between vectors: Explanation of the concept of the angle between two vectors, the method of finding the angle, illustrative examples with geometric interpretation. [3 hrs] Vector in 3-space: Explanation of vectors in three-dimensional space, giving illustrative examples of a vector in three-dimensional space. [2 hrs] The distance d between two points in 2-space or 3-space: Explanation of the distance between two points in two- or three-dimensional space, how to find this distance, representation of the distance with a vector, illustrative examples. [2 hrs] Properties of vector arithmetic: Explanation of properties of operations on vectors, related theorems and axioms, illustrative examples. [2 hrs] Visualize the norm geometrically in 2 and 3-space: Generalization of the method of finding the magnitude of a vector in two- and three-dimensional spaces, illustrative examples. [2 hrs] Dot product of vectors: Defining the dot product process for vectors, the properties of the dot product, explaining some related theories and axioms, illustrative examples. [4 hrs] Orthogonal vectors and parallel vectors: Explanation of parallelism and orthogonality of vectors, properties of orthogonality and parallelism, knowledge of ways to determine the parallelism or orthogonality of vectors, related axioms, illustrative examples. [6 hrs] Theorem Cauchy-Schwartz inequality and angle in R^n and the triangle inequality theorem. View the proof of the theory and related axioms, illustrative examples. [4 hrs] Distance between a point and a line: Learn how to find the distance between a point and a straight line in two- and three-dimensional spaces, illustrative examples. [3 hrs] Cross product, definition and examples: Definition of the cross product of vectors, related theories and axioms, deriving the formula of the cross product of vectors using the concept of determinants, illustrative examples. [4 hrs] Relationships involving cross product and dot product: Explanation of the relationship between the dot product and the cross product of vectors, properties of the relationship, related theories and axioms, illustrative examples. [6 hrs] Direction of cross product: Explanation of the direction of the cross product of vectors, geometric interpretation, illustrative examples. [3 hrs] Geometric interpretation of cross product: Explanation of the geometric interpretation of cross product of vectors, illustrative examples. [4 hrs] Application of cross product, area of triangle, area of parallelogram: Explanation of

	the practical applications of cross product of vectors, finding the area of a triangle, finding the area of a parallelogram, related theories and axioms, illustrative examples. [2 hrs] Scalar triple product: Explanation of the Scalar triple product, illustrative examples. [2 hrs] Application of the scalar triple product, volume of the parallelepiped: Use the concept of scalar triple product to find volume of the parallelepiped, illustrative examples. [3 hrs] LaGrange's identity: Explanation of the LaGrange's identity. [2 hrs] Line and planes in 3-space: Understand the concept of Line and planes in 3-space, illustrative examples. [2 hrs] Equation of a plane through three points and Vector form of equation of a plane: Understand the formula of Equation of a plane through three points and Vector form of equation of a plane, illustrative examples. [5 hrs] Vector space: Explanation of vector space and its conditions, illustrative examples. [2 hrs] Subspaces: Explanation of vector space and its conditions, illustrative examples. [8 hrs] Linear combination: Explanation of the concept of linear combination of vectors, how to express a vector in the form of linear combination of other vectors, methods of solving used, illustrative examples. [6 hrs] Linear independence and linear dependence. Explanation of linear independence and linear dependence of vectors, identification of linearly independent and linearly dependent vectors, methods of solution, illustrative examples. [8 hrs] Basis and dimension: Explanation of Basis and dimension, illustrative examples. [4 hrs] Eigenvalue and eigenvectors: definition of Eigenvalue and eigenvectors, the conditions required, illustrative examples. [6 hrs]

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Reports on daily activities and duties. 2. Weekly discussions of the topics raised and addressing the student's knowledge conclusions on these topics.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	75	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	96	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**175**		

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

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Vectors and vector space. Geometric vectors and addition. Transition from geometric vectors to algebraic vectors.
Week 2	Magnitude of a vector, vector addition, scalar multiplication, unit vector, vector in physics and angle between vectors.
Week 3	Vector in 3-space, the distance d between two points in 2-space or 3-space, properties of vector arithmetic, visualize the norm geometrically in 2 and 3-space.
Week 4	Dot product of vectors, definition, properties of the dot product, theorem and examples. Orthogonal vectors and parallel vectors.

Week 5	Theorem Cauchy-Schwartz inequality and angle in Rn. The triangle inequality theorem. An orthogonal projection.
Week 6	The length of the vector component of the vector along another vector. Distance between a point and a line. Cross product, definition and examples. Relationships involving cross product and dot product.
Week 7	Standard unit vectors. Direction of cross product. Geometric interpretation of cross product. Application of cross product, area of triangle, area of parallelogram
Week 8	Scalar triple product. Application of the scalar triple product, volume of the parallelepiped. LaGrange's identity.
Week 9	Line and planes in 3-space. Equation of a plane through three points. Vector form of equation of a plane.
Week 10	Vector space, definition and examples. Some properties of vectors. A vector space of real-valued function.
Week 11	Subspaces, definition, theorem, examples. Subspace of $M_{n\times n.}$ Solution space of homogeneous systems.
Week 12	Linear combination. Span of vectors. Space spanned by one or two vectors. Linear independence and linear dependence.
Week 13	Linear independence and linear dependence. Basis and dimension Coordinate relative to a basis. Standard basis for P_n. Standard basis for $M_{m\times n}$.
Week 14	Linear transformation and matrices. The kernel and range of a linear transformation. The matrix of a linear transformation.

Week 15	Eigenvalue and eigenvectors. Applications(graph theory).
Week 16	**Preparatory week before the final Exam**

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	1. Introductory linear algebra with applications, Bernard Kolman, first edition, 1976. 2. Elementary Linear Algebra Subsequent Edition, Arthur Wayne Roberts,1985.	Yes
Recommended Texts	1. Elementary Linear Algebra, Ninth Edition, Howard Anton, Chris Rorres, 2005. 2. Student Solutions Manuals for use with College Algebra with Trigonometry: graphs and models, by Raymond A. Barnett, Michael R. Ziegler and Karl E. Byleen, 2005.	No
Websites	https://www.coursera.org/browse/physical-science-and-engineering/electrical-engineering	

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

(50 - 100)	**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	**Foundations of Mathematics II**			**Module Delivery**	
Module Type	**Core**			☒ **Theory** ☒ **Lecture** ☐ **Lab** ☒ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**ScMath 3106**				
ECTS Credits	6				
SWL (hr/sem)	150				
Module Level		1	**Semester of Delivery**		2
Administering Department		Math	**College**	Sc	
Module Leader	Dr. Rifaat Saad Abduljabbar		**e-mail**	Drrifaat1974@uoanbar.edu.iq	
Module Leader's Acad. Title		Lecturer	**Module Leader's Qualification**		Ph.D.
Module Tutor			**e-mail**		
Peer Reviewer Name		Name	**e-mail**	E-mail	
Scientific Committee Approval Date		12/06/2023	**Version Number**		1.0

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	Foundations of Mathematical I	**Semester**	1
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	We will cover some ideas from set theory and we will introduce the concept of mathematical proof. In section 2 we will study an important algebraic structure called a group. We aim to give a thorough grounding in the basics of group theory and to build confidence working with abstract definitions and concepts. In section 3 we will focus on number theory. In particular, we will introduce Z/(n), the integers modulo n, and we will learn methods to solve equations in this new setting. Finally, in section 4 we will study another important algebraic structure called a field which is a generalization of the real numbers
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. To begin the study of Mathematics is one of the most important and well-developed strands of pure mathematics with many elegant and beautiful theorems, and also with applications to many areas of mathematics . 2. To introduce students to the ideas of formal definitions and rigorous proofs (one of the fundamental features of modern mathematics, and something that is not familiar from), and to develop their powers of logical thinking.
Indicative Contents المحتويات الإرشادية	Binary operations [25 hrs] Math. Systems [25 hrs] Relations [25 hrs] Groups [25 hrs]

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	60	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	86	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	5.7
Total SWL (h/sem)	**150**		

الحمل الدراسي الكلي للطالب خلال الفصل	

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

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Binary operations
Week 2	Math. Systems
Week 3	Relations
Week 4	Types of relations
Week 5	Equivalent relations
Week 6	Equivalent classes
Week 7	Semi groups
Week 8	Groups
Week 9	Examples on groups
Week 10	7 Multiplication tables
Week 11	Subgroups.....
Week 12	Groups of small order
Week 13	Homomorphisms
Week 14	Kernels and quotients
Week 15	Theorems concerning homomorphisms
Week 16	**Preparatory week before the final Exam**

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	Set theory and related topics. Shcome series	Yes
Recommended Texts		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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Programming Basic**			**Module Delivery**	
Module Type	**Basic**			☒ **Theory** ☐ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**UoA 121**				
ECTS Credits	**3**				
SWL (hr/sem)	**75**				
Module Level	1		**Semester of Delivery**	2	
Administering Department	Mathematics		**College**	Sc	
Module Leader	Safwat Abd Alkadar Hamad		**e-mail**	mcssafr@uoanbar.edu.iq	
Module Leader's Acad. Title	Assistant Lecturer		**Module Leader's Qualification**	MSc.	
Module Tutor	Name (if available)		**e-mail**	E-mail	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	20/02/2024		**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	Studying programming basics develops vital skills for today's digital world, fostering problem-solving abilities and computational thinking. It provides a solid foundation for further learning in computer science and related fields, empowering individuals to navigate and contribute to the ever-changing technological landscape.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Understanding fundamental programming concepts like variables, data types, and control structures. 2. Proficiency in algorithmic thinking and problem-solving techniques. 3. Ability to design, code, and debug simple programs using programming languages like Python, Java, or C++. 4. Familiarity with software development environments and tools, including integrated development environments (IDEs) and version control systems. 5. Cultivation of logical reasoning and analytical skills necessary for tackling complex computational problems.
Indicative Contents المحتويات الإرشادية	1. Study fundamental programming concept (variables, data type, control structure (12 hours). 2. Problem solving technique (12 hours). 3. Write code and debugging and first program (16 hours). 4. Software development environment (IDEs) (12 hours). 5. Solve complex computation problems (10 hours).

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The basics of programming course employ a hands-on approach, combining lectures with practical coding exercises. Students engage in active learning through problem-solving tasks and collaborative projects, reinforcing concepts in real-time. Regular feedback and assessment ensure comprehension and progress tracking. Additionally, online resources and forums facilitate self-paced learning and peer support. Overall, the strategy prioritizes practical application, fostering a deep understanding of programming fundamentals.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	62	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	13	**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	12% (12)	4 and 8	LO #1, #2
	Assignments	2	12% (12)	3 and 9	LO #3, #4 and #5
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	6% (6)	12	All
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #3
	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 Programming Concepts
Week 2	Variables and Data Types
Week 3	Control Structures: Loops and Conditionals
Week 4	Functions and Modular Programming
Week 5	Input and Output Operations
Week 6	Arrays and Lists
Week 7	String Manipulation
Week 8	Object-Oriented Programming (OOP) Basics
Week 9	Exception Handling
Week 10	File Handling and I/O Operations
Week 11	Basic Algorithms and Problem Solving
Week 12	Debugging Techniques
Week 13	Introduction to Version Control Systems
Week 14	Introduction to Web Development: HTML and CSS Basics
Week 15	Introduction to Databases and SQL Basics
Week 16	Preparation before the final exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Simple calculator program (addition, subtraction, multiplication, division).
Week 2	Program to find the largest number among three given numbers.
Week 3	Program to check whether a given number is prime or not.
Week 4	Program to calculate the factorial of a given number.
Week 5	Program to reverse a given string.
Week 6	Program to check whether a given string is a palindrome or not.

Week 7	Program to convert temperature from Celsius to Fahrenheit and vice versa.
Week 8	Program to find the sum of digits of a given number.
Week 9	Program to generate Fibonacci series up to a given number of terms.
Week 10	Program to find the factorial of a number using recursion.
Week 11	Program to sort an array of integers in ascending order (using bubble sort or insertion sort).
Week 12	Program to implement a basic calculator with GUI (using tkinter in Python or any other suitable GUI library).
Week 13	Program to calculate the area of different geometric shapes (circle, triangle, rectangle, etc.).
Week 14	Program to implement a basic text-based game (e.g., guess the number, hangman, tic-tac-toe).
Week 15	Final project

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	"Programming: Principles and Practice Using C++" by Bjarne Stroustrup	yas
Recommended Texts	"C++ Primer" by Stanley B. Lippman, Josée Lajoie, and Barbara E. Moo	no
Websites	**Udemy - "Beginning C++ Programming - From Beginner to Beyond" by Tim Buchalka's Learn Programming Academy**	

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	**General Mechanic**			**Module Delivery**	
Module Type	**Basic**			☒ **Theory** ☐ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**CoS121**				
ECTS Credits	**3**				
SWL (hr/sem)	**100**				
Module Level	1		**Semester of Delivery**	2	
Administering Department	mathematics		**College**	College of Science	
Module Leader	Abdulkareem Hammoodi Assaf		**e-mail**	cds.kareem.assaf@uoanbar.edu.iq	
Module Leader's Acad. Title	Lecturer		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Name (if available)		**e-mail**	E-mail	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	20/2/2024		**Version Number**	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	**Semester**	
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	تحاول الفيزياء أن تفهم وتفسر الظواهر الطبيعية والقوى والحركة المؤثرة في سيرها، وصياغة القوانين التي تخص العمليات الطبيعية والتنبؤ بمسيرة العمليات الطبيعية بنماذج تقترب من الواقع. يعتبر علم الفيزياء من أحد أقدم التّخصصات الأكاديمية،التي تفسر الظواهر الطبيعية التي لها علاقة بحياتنا العامة بالاضافة الى الظواهر الطبيعة وفقا لقوانين خاصة بها .
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Recognize physical quantities and laws of it and measurements . 2. List the various between scalar and vector. 3. Summarize what is meant by a Newton Laws. 4. Define motion in one and two and three dimension. 5. Describe energy and kinds of it. 6. Define power. 7. Static electricity - Coulomb's law - electric field - electric potential. 8. Electric current - resistors - Ohm's law - electrical power. 9. Magnetic fields, Ampere's law.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. Introduction ,Measurements: Mass, Location, and Time الايضاح للطالب ماهي الفيزياء والظواهر الطبيعية في واقع الحياة وكيفية تفسيرها والقوانيين الخاصة بالظواهر التي تفسر فيزيائيا وطرق القياس ووحدات القياس [4hrs] Motion in one dimension, two dimensions, and three dimensions [4hrs] توضيح الحركة والقانون الخاص بها ووحدات قياسها وكيفية حاسبها وماهو الموقع وماهي انواعها للحركة الحركة باتجاه واحد او بعد واحد او بعدين او ثلاثة ابعاد او استنادا للمحاور المعروفة وهي x,y ,z Vectors, component of vectors and Vector Arithmetic الايضاح للطالب ماهي المتجهات وماهي الغير متجهات وامثلة لكل نوع والقوانين الخاصة بكل نوع .[4hrs] Vector Multiplication تعليم الطالب عملية ضرب المتجهات وهي الضرب النقطي والضرب الاتجاهي والعمليات الفيزيائية والرياضية الخاصة بكل نوع.[4hrs] Force and Motion-I: Newtonian Mechanics, Newton’s First Law, Force, Mass, Newton’s second Law, Some Particular Forces توضيح ماهي الحركة استنادا الى انواعها وماهي القوة وتنتج عن ماذا وبسبب من ومالذي تعمله للجسم التي تسلط

	عليه استنذا الى قوانين نيوتن في الحركة ومثال لكل قانون من قوانينه الثلاثة وماهي انواع القوة الي توثر على الجسم سواء قوى خارجية او داخلية والقانون الخاص بهن ووحدة القياس [4hrs] Applying Newton's Laws تطبيق قوانين نيوتن في الامثلة والمسائل [4hrs] Force and Motion-II: Friction, Properties of Friction الايضاح ماهو الاحتكاك وتم دراسته عمليا وكيف يتم وماعلاقته بقوانين نيوتن مع بعض المسائل والحلول [4hrs] Energy ,Kinds of Energy ,Kinetic energy and Potential Energy تعريف ماهي الطاقة وما هي انواعها ووحدة قياسها وامثلة ومسائل تخصها وكيفية حلها وكلها بالاخير ترجع الى قانون نيوتن الثاني [4hrs] Work, Work and Kinetic Energy ماهو الشغل والقانون الخاص به وما علاقته بالقوة وقانون نيوتن الثاني ووحدة قياسه وماعلاقته بالطاقة [4hrs] Work Done by the Gravitational Force, Work Done by a Spring Force الايضاح كيف يتم انجاز الشغل بسبب قوة الجاذبية الارضية وكذلك قوة الشد وماهي قوة رد الفعل وكل قانون خاص بهن ووحدة قياسهن ومسائل حولهن [4hrs] Energy & Momentum and collision ماعلاقة الطاقة بالقوة وعلاقتهن بالعزم والزخم وتفسير هذه الظواهر الفيزيائية والقوانين الخاصة بهن ووحدة قياسهن [4hrs] PREOEDIC MOTION [4hrs] الايضاح للطالب ماهي الحركة الدورية واعطاء مثال له عن الحركة الدورية والمعادلة الاساسية والمهمة في الحركة الدورية [4hrs] Static electricity شرح ماهي الكهربائية الساكنة وتعريف قانون كولوم والمجال الكهربائي والجهد الكهربائي ووحدات القياس لكل منها وبعض المسائل لتطبيقات الكهرباء الساكنة [4hrs] Electric current الايضاح للطالب ما هو التيار الكهربائي وقانون اوم وكيفية وأنواع ربط المقاومات, والايضاح بمسائل خاصة بهن [4hrs] Magnetic fields تعريف الطالب بمعنى المجال المغناطيسي وقانون امبير وبعض المسائل المتعلقة بالمجال المغناطيسي .

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	الفيزياء هي فرع من العلوم الأساسية، وليس العلوم التطبيقية العلوم التطبيقية هي تطبيق المعرفة في أحد حقول العلوم الطبيعية لحل مشاكل عملية. لذلك تعتبر جزء أساسيا من تطوير التقنية. تهتم الفيزياء في نفس الوقت بدقة القياس وابتكار طرق جديدة للقياس تزيد من دقتها؛ فهذا هو أساس التوصل إلى التفسير السليم للظواهر الطبيعية. وتقدم الفيزياء ما توصلت إليه من طرق القياس للاستخدام في جميع العلوم الطبيعية والحيوية الأخرى قابلة للاختبار مثل الطب والكيمياء والبايولوجي. إضافة إلى مفاهيم أخرى او علوم اخرى يمكن قياسها مثل القوة والسرعة اي انها تفسر الظواهر الطبيعة والقوانين الخاصة بها.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	62	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	13	**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% (10)	5 and 10	
	Assignments	2	10% (10)	2 and 12	
	Projects / Lab.	1	10% (10)	Continuous	
	Report	1	10% (10)	13	
Summative assessment	Midterm Exam	2hr	10% (10)	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 ,Measurements: Mass, Location, and Time
Week 2	Motion in one dimension, two dimensions, and three dimensions
Week 3	Vectors, component of vectors and Vector Arithmetic
Week 4	Vector Multiplication
Week 5	Force and Motion-I: Newtonian Mechanics, Newton's First Law, Force, Mass, Newton's second Law, Some Particular Forces
Week 6	Applying Newton's Laws
Week 7	Force and Motion-II: Friction, Properties of Friction
Week 8	Energy ,Kinds of Energy ,Kinetic energy and Potential Energy .
Week 9	Work, Work and Kinetic Energy

Week 10	Work Done by the Gravitational Force, Work Done by a Spring Force.
Week 11	ENERGY & Momentum and collisions
Week 12	Static electricity - Coulomb's law -
Week 13	Electric field - Electric potential
Week 14	Electric current - Resistors - Ohm's law - Electrical power
Week 15	Magnetic fields, Ampere's law.
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Introduction to lab
Week 2	Lab 2: Acceleration of free fall by mean of the Simple pendulum
Week 3	Lab 3: spiral spring
Week 4	Lab 4: forces
Week 5	Lab 5: Realization of Ohm's law
Week 6	Lab 6: inductance measurements

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Textbook: Fundamentals of Physics Extended, 9th edition, Author: Halliday, Resnick, and Walker, 2011	Yes
Recommended	Based Physics I by Jeffrey W. Schnick Copyright 2005-2008, Jeffrey W. Schnick, Creative Commons	No

Texts	Attribution Share-Alike License 3.0. You can copy, modify, and rerelease this work under the same license provided you give attribution to the author.	
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	**English Language1**			**Module Delivery**	
Module Type	**Support**			☒**Theory** ☐**Lecture** ☐**Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	**ScMath 1105**				
ECTS Credits	**2**				
SWL (hr/sem)	**50**				
Module Level	1		**Semester of Delivery**	2	
Administering Department	Math		**College**	Sc	
Module Leader	Yaareb Qahtan Hameed		**e-mail**	Sc.yaarub2003@uoanbar.edu.iq	
Module Leader's Acad. Title	Assist. Lecturer		**Module Leader's Qualification**	M.A.	
Module Tutor	Name (if available)		**e-mail**	E-mail	
Peer Reviewer Name			**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 Objectives أهداف المادة الدراسية	1. Its aim is to strengthen students' education in using English as a foreign language in order to help them enrich 2. their knowledge and understanding of terms and phrases and strengthen their four skills (reading, writing and speaking). 3. And listening).. Also, learning English helps them communicate with different people around the world. 4. Teaching the student how to use English grammar in conversation 5. Teaching students verbs (present and past as well as present continuous and past continuous) and the use of adjectives and adverbs and how to question using verbs and the use of question tools 6. Introduce students to the rules, principles, concepts, vocabulary and meanings of the English language according to the prescribed curriculum.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Course outcomes and methods of teaching, learning and assessment 2. A- Cognitive goals 3. A1- To be able to understand the material and use blended learning 4. 2a- Knowing and understanding the study subjects. 5. 3a- Possessing clarity in the cognitive aspect to reach a high degree of sober scientific awareness. 6. 4a- Acquisition of practical skills that qualify the student to perform the applied part of the class. 7. B - The skill objectives of the course. 8. B1 - The student's acquisition of self-skills at the level of the method to be accomplished. 9. B2 The student acquires the intellectual knowledge skills required to be achieved. 10. B3 The student acquires the practical skills required to be completed. 11. B4- Participates in the discussion and dialogue using the words "English vocabulary" in the classroom.
Indicative Contents المحتويات الإرشادية	Teaching and learning methods Traditional teaching methods (lecture, discussion, observation) and others, as well as the use of blended learning. Modern teaching methods (brainstorming, skills outside the academic framework) Modern educational technology And the program of self-learning and e-learning using multimedia technology through (the Internet). evaluation methods A - Daily exams, oral exams, monthly exams, semester reports for the theoretical subject. B- Distribution of evaluation scores: for the English language subject (20% for the first semester), (20% for the second semester) / 60 % final exam.

	C- Allocate additional grades for classroom and extra-curricular activity

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	C- Emotional and value goals C1 - Developing the student's awareness of the importance of the English language in daily and academic life. C 2 The ability to analyze, conclude, evaluate and pass judgment C 2- Contribute to the student's intellectual, personal and professional development C 3 - Promoting and developing the student's positive attitude towards learning English C 4 - Developing the student's awareness of foreign culture Teaching and learning methods Page 4 A- Education curricula for innovation Knowledge of the rules and principles of the English language B- Adopting blended learning by using multimedia technology, extracurricular curricula and assignments. evaluation methods 1- A form based on performance according to a standard that depends on the nature of the scientific material 2- It works within the group work. 3- Examinations (written and oral) 4- Transferred general and qualifying skills (other skills related to employability and personal development (. 5- Training students to use modern teaching methods and methods, including blended learning using technology. Multimedia. 6- Assign students to conduct research related to all areas of the English language 7- Enabling students to use their personal skills D - Transferred general and qualifying skills (other skills related to employability and personal development). D1 - Benefiting from the scientific department program. D2 Using the curricula of the corresponding departments in other faculties, with the

	English language among their curricula D3 - Communication with external means of artistic presentation (audio-visual) that adopt the English language.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	30	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	18	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	1.2
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 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.				
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	2hr	60% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to course/ This is . . . How are you? o Good morning! .. What's this in English?
Week 2	Countries * he/she/they, his/her e Where's he from? fantastic/ awful / Numbers ll-30
Week 3	Jobs o am/are/is Negatives and questions. Personal information
Week 4	our/their * Possesive's * The family * ha/have * The alphabet
Week 5	Sports/Food/Drinks Present Simple' I/you/we/the * a/an languages and nationalities e Numbers and prices

Week 6	The time / Present Simple- he/she / always/sometimes/never Words that go together / Days of the week
Week 7	**Mid-term Exam**
Week 8	Question words. Me/him/us/them. This/that. Adjectives
Week 9	Rooms and furniture. There is/are . preposition
Week 10	Saying. Was/were born. Past simple irregular verbs. Have/do/go
Week 11	Past simple-regular and irregular. Questions and negatives
Week 12	Can/can't requests and offers
Week 13	Want and would like * food and drink
Week 14	Present Continuous •color and clothes
Week 15	**Oral-term Exam**
Week 16	**Preparatory week before the final Exam**

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	-New-headway-plus-Beginner-students-book.. -New-headway-plus-Beginner-work-book.	Yes
Recommended Texts	**Archived lectures by the professor of specialization for each material, whether it was paper or video** **A- Books and references that are recommended (scientific**	No

	journals, reports,....) textbooks and methodologies approved by the scientific committee, accreditation committees, and academics.	
Websites	https://www.adelaide.edu.au/englishfor-uni/tenses-in-academic-writing/ https://elt.oup.com/student/headway/beg/test_builder?cc=us&selLanguage=en https://ptetutorials.com/samplequestions/listening-multiple-choice-question-single-answer	

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.