Module Information معلومات المادة الدراسية						
Module Title	Biostatics			Modu	ıle Delivery	
Module Type		Basic			☑ Theory	
Module Code		ENVI-12009			☑ Lecture □ Lab	
ECTS Credits	4				☐ Tutorial	
SWL (hr/sem)		100		☐ Practical ☐ Seminar		
Module Level		1	Semester o	of Delivery 2		2
Administering Dep	partment	Type Dept. Code	College	Type College Code		
Module Leader	Name: Rabah	Salim Shareef	e-mail	eq.raba	nh.s.shareef@uc	anbar.edu.iq
Module Leader's	Acad. Title	Asset. Professor	Module Lea	ader's Qu	ıalification	Ph.D.
Module Tutor	Name (if availa	able)	e-mail	E-mail		
Peer Reviewer Name Name: Rabah Sa Shareef		Name: Rabah Salim Shareef	e-mail	eq.rabah.s.shareef@uoanbar.edu.iq		anbar.edu.iq
Scientific Committee Approval Date		01/06/2023	Version Nu	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 الدر اسية ونتائج التعلم والمحتويات الإرشادية						
	Upon completion of the course the learner is expected to do the following:						
Module Objectives	1. design research questions;						
أهداف المادة الدر اسية	distinguish qualitative and quantitative data;						
	3. Evaluate strength of different biological experimental designs; and						
	4. Evaluate different data analysis methods;						
	Upon successful completion of the course the learner will be able to:						
	 Knowledge of the basics of biological tests 						
Module Learning	2. Know the importance of health and vital data						
Outcomes	3. Know how to collect data and samples						
Outcomes	4. analyze different experimental designs for generation of qualitative and						
مخرجات التعلم للمادة الدراسية	quantitative data;						
محرجات التعلم للمادة الدراسية	5. design research hypotheses and generate appropriate data; and						
	6. generated data to appropriate statistical analysis and give relevant						
	interpretation to the output						
	This course explores the meaning of statistics. It introduces students to some basic						
	terms like variable, continuous variable, discrete or discontinuous variables						
	population, sample, histogram, frequency, classes, class interval and frequency						
	distribution; a distribution in statistical terms: mode, median, mean; measuring the						
	spread of a distribution: range, semi interquartile range, mean deviation, variance,						
Ladiani a Cantania	standard deviation; samples and populations: probability and the normal distribution						
Indicative Contents	curve, distribution of t, calculating the limits of a mean; and comparing the means of						
المحتويات الإرشادية	two samples: null hypothesis, alternate hypothesis, differences between standard						
	deviations, limits for standard deviation and variance. The course also examines a						
	comparison of three or more samples: simple analysis of variance; correlation of two						
	variables: scatter diagram, correlation coefficient, regression lines, mean center; and						
	chi-square test: the 2x2 contingency table. Learners are taken through planning						
	experiments: layout of experiments, controls, precision of measurements, number of						
	replicates, randomization, Latin squares, and interaction.						

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

Student Workload (SWL)					
الحمل الدر اسي للطالب محسوب لـ ١٥ اسبو عا					
Structured SWL (h/sem) Structured SWL (h/w) 3			3		
الحمل الدراسي المنتظم للطالب خلال الفصل	40	الحمل الدراسي المنتظم للطالب أسبوعيا	3		
Unstructured SWL (h/sem)	52	Unstructured SWL (h/w)	3.5		
الحمل الدراسي غير المنتظم للطالب خلال الفصل	32	الحمل الدراسي غير المنتظم للطالب أسبوعيا	5.5		
Total SWL (h/sem)		100			
الحمل الدراسي الكلي للطالب خلال الفصل					

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

Delivery Plan (Weekly Syllabus)					
	المنهاج الاسبوعي النظري				
	Material Covered				
Week 1	INTRODUCTON TO BIOSTATISTICS: Meaning of biostatistics - Types of variables - Population and				
TTCCK 2	samples (Populations, Samples from populations, Random sampling, Parameters and statistics)				
Week 2	Data Collection: (Sources of statistical data, The sources of medical data, Methods of data collection				
	, Sampling Method , Methods of ensuring sample representation of the original population)				
Week 3	PRESENTATION OF BIOLOGICAL DATA: (Frequency distribution)				
Week 4	Graphical presentation: (Bar Charts, Histogram, Frequency polygon, Cumulative Frequency Polygon,				
	The Pie Chart)				
	PROBABILITY AND STATISTICS: 1- Probability (Laws of probability: Counting possible outcomes,				
Week 5	Probability of an event, adding probabilities, Multiplying probabilities) – 2- Permutation and				
	combinations: (Permutations, Combinations)				
Week 6	NORMAL DISTRIBUTION: (Symmetry and Kurtosis • Proportions of normal distribution • The				
	distribution of means • Statistical hypothesis testing • Assessing departures from normality)				

Week 7	BIONOMIAL AND POISSON DISTRIBUTION: (• Binomial distribution • Poisson distribution)
Week 8	STANDRAD ERROR AND CONFIDENCE INTERVAL: (• Standard error • Confidence interval)
Week 9	HYPOTHESIS TESTING: (• Null hypothesis and alternative hypotheses • The standard format for hypothesis testing)
Week 10	THE t- DISTRIBUTION: One group of observations (or one sample test) • Two independent group of observation (Variances not known; Variances known)
Week 11	THE CHI-SQUARE DISTRIBUTION: Ch-Square X ²
Week 12	Correlation Analysis: (Types of correlation, Measuring Correlation, Simple correlation coefficient, Multiple correlation coefficient, Partial Correlation)
Week 13	Regression Analysis: (The importance of regression analysis, The importance of, regression analysis, Simple linear Regression Analysis, Simple Regression Model, Multiple linear regression)
Week 14	ANALYSIS OF VARIANCE: One-way (Single factor) ANOVA
Week 15	ANALYSIS OF VARIANCE: Two-way (factor) ANOVA
Week 16	Preparatory week before the final Exam

Learning and Teaching Resources مصادر التعلم والتدريس				
	Text	Available in the Library?		
Required Texts	Introductory Biostatistics for the Health Sciences	No		
Recommended Texts	Techniques of Medical and Biological Statistics, 2021	No		
Websites				

Grading Scheme مخطط الدر جات						
Group						
	A - Excellent	امتياز	90 - 100	Outstanding Performance		
	B - Very Good	جيد جدا	80 - 89	Above average with some errors		
Success Group (50 - 100)	C - Good	ختر	70 - 79	Sound work with notable errors		
(50 - 100)	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		

Module Information					
معلومات المادة الدراسية					
Module Title	ENGLISH			Module Delivery	
Module Type		S		⊠Theory	
Module Code				⊠Lecture ⊠Lab	
ECTS Credits	4			□Tutorial □Practical	
SWL (hr/sem)		100	□Seminar		
Module Level		First	Semester of Delivery second		second
Administering Dep	partment	Environmet	College of Applied Sciences - Hit		nces - Hit
Module Leader	Dhiyaa F N	Mahmood	e-mail dhiyaafakhri72@gmail.com		com
Module Leader's	Acad. Title		Module Leader's Qualification		
Module Tutor			e-mail		
Peer Reviewer Name			e-mail		
Scientific Committee Approval Date			Version Nu	mber	

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

Modu	le Aims, Learning Outcomes and Indicative Contents أهداف المادة الدر اسية ونتائج التعلم والمحتويات الإرشادية
Module Objectives أهداف المادة الدر اسية	 1.To understand English grammar and develop their ability to increase knowledge of English grammar. 2. Acquire knowledge about many grammatical issues, 3. Improving their ability to learn different grammar
	approaches, techniques and methodologies
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Familiarity with the four English language skills: listening, reading, speaking, and writing. Know the origins of the phonology of the English language. Describing literary phenomena in different eras.
Indicative Contents المحتويات الإرشادية	 a- Methods of teaching and learning 1- Giving lectures. 2- Using the method of recitation, discussion and solving questions. 3- Giving assignments to students to strengthen them and prepare them for the final and final exams. b- Evaluation methods 1- Daily and monthly exams 2- Duties 3- In-class exercises

Learning and Teaching Strategies		
استر اتيجيات التعلم والتعليم		
	Teacher and student strategy	
Strategies	Brainstorming	
	Student and teacher strategy	

Student Workload (SWL)					
١ اسبوعا	الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا				
Structured SWL (h/sem)	63	Structured SWL (h/w)			
الحمل الدراسي المنتظم للطالب خلال الفصل	03	الحمل الدراسي المنتظم للطالب أسبوعيا			
Unstructured SWL (h/sem)		Unstructured SWL (h/w)			
الحمل الدراسي غير المنتظم للطالب خلال الفصل	37	الحمل الدراسي غير المنتظم للطالب أسبوعيا			
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل		100			

	riodule Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome	
	Quizzes	10				
Formative	Assignments	10				
assessment	Projects / Lab.					
	Report	20				
Summative	Midterm Exam	10				
assessment	Final Exam	50				
Total assessme	ent					

	Delivery Plan (Weekly Syllabus)			
	المنهاج الاسبوعي النظري			
	Material Covered			
Week 1	The auxiliary verb, its morphological uses, definite and indefinite articles			
Week 2	Demonstrative nouns, pronouns, and abbreviations			
Week 3	Simple present			
Week 4	Compound sentences			
Week 5	The present continuous, the base negative, and the interrogative			
Week 6	Exam			
Week 7	Recurrence conditions			
Week 8	Countable and uncountable			
Week 9	Plural, how many, how many			
Week 10	Addition rules ing and s			
Week 11	Simple future			
Week 12	Present Continuous			
Week 13	Present simple			
Week 14	Simple past			
Week 16	Preparatory week before the final Exam			

	Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر		
	Material Covered		
Week 1	Lab 1: dripping		
Week 2	Lab 2: Use it , in , on		
Week 3	Lab 3: Explain any ,som , a lot , a lot of		
Week 4	Lab 4: Use of possessive forms		
Week 5	Lab 5: Solving exercises		
Week 6	Lab 6: Solving exercises		
Week 7	Lab 7: Solving exercises		

	Learning and Teaching Resources مصادر التعلم والتدريس							
•				Text	لطنادر التعلم			Available in the Library?
	Required Texts	Jean Gram	Praninskas mar	Rapid	Review	of	English	Yes
	Recommended Texts							
ĺ	Websites							

	Grading Scheme مخطط الدرجات					
Group	Grade	التقدير	Marks %	Definition		
	A - Excellent	امتياز	90 - 100	Outstanding Performance		
Success Group (50 - 100)	B - Very Good	جيد جدا	80 - 89	Above average with some errors		
	C - Good	ختخ	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		

Module Information معلومات المادة الدراسية Module Title Geology علم الارض Module Delivery						
Module Title الموحدة	Geology	علم ا	Module	e Delivery		
Module Type نوع الوحدة				⊠Theory		
Module Code كود الوحدة				⊠Lecture ⊠Lab □Tutorial		
ECTS Credits		6			□Practical □Seminar	
SWL (hr/sem)		150				
Module Level المرحلة الدراسية	1		Semeste س الدر اسي	r of Deliv الكور س	ery	1
Administering Dep	partment	قسم البيئة Department of Environment	College الكلية	کلیة العلوم التطبیقیة ـ هیت College of Applied Sciences - Heat		iences - Heat
Module Leader مسؤول الوحدة	ة جاسم محد سويد	اسام	e-mail الاميل	msc.osamajm@uoanbar.edu.i		uoanbar.edu.iq
Module Leader's A إكاديمي لمسؤول الوحدة				Leader's ىؤ ھلات مسؤ	Qualification	ماجستیر Master's
Module Tutor مدرس مساعد	None		e-mai الاميل	None		
Peer Reviewer Name اسم البديل		م.م. درید رسمي څح	e-mai duradalkaisy@uoanbar.edu.iq		r.edu.iq	
Scientific Committee Approval Date تاريخ موافقة اللجنة العلمية			Version Number قم الكورس		1	

Relation with other Modules				
العلاقة مع المواد الدراسية الأخرى				
Prerequisite module	None	Semester		
مادة اساسية تدرس قبلها	None	الفصل الدر اسي		
Co-requisites module	None	Semester		
مادة در اسية تدرس معها مشتركة	None	الفصل الدراسي		

Module Aims, Learning Outcomes and Indicative Contents						
	أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية					
Module Objectives أهداف المادة الدر اسية	Course objectives Introducing the student to the planet Earth, its components and its history since its inception, the formation of the universe to the present day, what are the events and forces that contributed to making it in its current form, and how to benefit from its components					
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Cognitive goals A 1- How did the earth form? A 2- What is the Earth made of? a3- What are the forces acting on it? A4- Economic materials and elements A 5- Earth study methods B - The soft skills objectives of the course. B1 - Building students' imaginative abilities B2 - Providing students with reasoning skills B3 - Developing the students' analytical and research side					
Indicative Contents المحتويات الإرشادية	Emotional and value goals 1-Expanding the student's awareness of the size of the variables in the earth 2- Supporting his imagination to comprehend the enormous time for the formation of the earth and the events that passed over it					

Learning and Teaching Strategies استراتیجیات التعلم والتعلیم				
Strategies	1-Developing the student's ability to deal with the various means of technology 2- Developing the student's ability to deal with the calculator and the Internet and how to find information 3-Developing the student's ability to deal with multimedia 4- Developing the student's ability to dialogue and discuss and express his opinions and perceptions			

Student Workload (SWL) الفصل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) Structured SWL (h/w) 4 الحمل الدراسي المنتظم للطالب أسبوعيا 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) الحمل الدراسي الكلي للطالب خلال الفصل		150	

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

	Delivery Plan (Weekly+Lab Syllabus)		
	Material Covered		
Week 1	General introduction to geology		
Week 2	Earth coverings		
Week 3	Earth's structure and composition		
Week 4	tectonic geology		
Week 5	Minerals and crystals		
Week 6	Rocks - types of rocks and the rock cycle in nature		
Week 7	امتحان		
Week 8	Igneous rocks		
Week 9	Metamorphic rocks		
Week 10	Sedimentary rocks		
Week 11	Petroleum geology		
Week 12	Earthquakes		
Week 13	Volcanoes		
Week 14	erosion and weathering		
Week 15	Water geology		
Week 16	Preparatory week before the final Exam		

Learning and Teaching Resources					
مصادر التعلم والتدريس					
	Text	Available in the Library?			
Required Texts	 General Natural and Historical Geology / / Dr. easy annualet al General Geology // Dr. Farooq Al-Omari and others Fundamentals of Environmental Geology / Dr. Emad Mohamed Ibrahim Khalil General Geology for non-specialty departments / d. Abdel-Hamid Abdel-Mohammed Al-Hadithi Dr Jassim Muhammad Hamad Al-Halbousi 	ـ الكتب المقررة المطلوبة Required textbooks			
Recommended Texts مصادر للاطلاع	Essentials of Geology by Stephen Marshak	Recommended books and references (scientific journals, reports			
Websites	Electronic references, websites Virtual library				
مواقع الويب	Library locations in some international universities				

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
	A - Excellent	امتياز	90 - 100	Outstanding Performance
Success Group (50 - 100)	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C – Good	ختخ	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	roup FX – Fail (قيد المعالجة) More work required but credit awa		More work required but credit awarded	
(0 – 49)	F – Fail	راسب	(0-44)	Considerable amount of work required

مدرس المادة / م.م اسامة جاسم محد

msc.osamajm@uoanbar.edu.iq / البريد الالكتروني

Module Information معلومات المادة الدراسية						
Module Title	Aı	nalytical chemistr	y	Modu	ıle Delivery	
Module Type		Core			⊠Theory	
Module Code					⊠Lecture ⊠Lab	
ECTS Credits		8			□rutorial □Practical	
SWL (hr/sem)	200				□Seminar	
Module Level		1	Semester o	Delivery 1		1
Administering Dep	partment	Type Dept. Code	College	Type College Code		
Module Leader	Rasim Farraj N	Muslim	e-mail	dr.rasim92hmts@uoanbar.edu.iq		oar.edu.iq
Module Leader's	Acad. Title	Assistant professor	Module Leader's Qualification Ph.D.		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 Nu	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	 The analytical chemistry course is determined according to the study plan prepared in the Applied Chemistry Department. The course aims to introduce the student to the general concepts of the organic compounds and their importance and uses in various fields. It also aims at a detailed study of the different structural compositions and naming principles for the compounds of organic chemistry, by focusing on the compounds. And help the student to know the composition of these substances, including drugs, and to know how interactions occur and the mechanism of interaction. 			
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	 The student should know the general concepts of the compounds of the analytical chemistry curriculum. That the student is acquainted with the basics and rules of naming, different structural structures and physical properties, and focuses on the same different rings for their vital activity, and recognizes their physical and chemical properties, and that the student distinguishes between the different structural structures. That the student knows the basic principles of preparation methods To familiarize the student with the different bases of their interactions. That the student is aware of the importance of these compounds and their applications. 			
Indicative Contents المحتويات الإرشادية	a- Methods of teaching and learning 1- Giving lectures. 2- Using the method of recitation, discussion and solving questions. 3- Giving assignments to students to strengthen them and prepare them for the final and final exams. b- Evaluation methods 1- Daily and monthly exams 2- Duties 3- In-class exercises			

Learning and Teaching Strategies استراتیجیات التعلم والتعلیم			
Strategies	Type something like: The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering 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) Structured SWL (h/w) 7 الحمل الدر اسي المنتظم للطالب أسبو عيا الحمل الدر اسي المنتظم للطالب خلال الفصل 7			
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	91	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل		200	

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

	Delivery Plan (Weekly Syllabus)		
	المنهاج الاسبوعي النظري		
	Material Covered		
Week 1	Introduction to qualitative analytical chemistry		
Week 2	Methods for the detection of elements and ions		
Week 3	Sedimentation methods		
Week 4	Methods of separation		
Week 5	Macro and micro Qualitative analysis		
Week 6	Chromatographic separation column		
Week 7	Detection and estimation of items		
Week 8	First month exam		
Week 9	Introduction to Volumetric Analysis Chemistry		
Week 10	Methods for expressing concentrations		
Week 11	Solutions, ionic balance and chemical balance		
Week 12	Equilibrium constants, inverse reactions and common ion		
Week 13	Second month exam		
Week 14	Titration		
Week 15	Solubility product constant and slightly soluble salts		
Week 16	Comprehensive review, applications and problem solving		

Delivery Plan (Weekly Lab. Syllabus)			
	المنهاج الاسبوعي للمختبر		
	Material Covered		
Week 1	Test Reducing Flame		
Week 2	Flame test		
Week 3	Detection of halogens, nitrogen and sulfur		
Week 4	Extraction		
Week 5	Week 5 Solubility		
Week 6	Titration methods		
Week 7	Chromatography methods		

Learning and Teaching Resources							
	مصادر التعلم والتدريس						
	Text	Available in the Library?					
	Fundamentals of analytical chemistry. 9th Edition						
Required Texts	by <u>Douglas</u> A. <u>Skoog</u> (Author), <u>Donald</u> <u>M.</u>	Yes					
noquired rexis	West (Author), F. James Holler (Author), Stanley R.	105					
	Crouch (Author). 10 EDITION. July 16, 2021						
Recommended	ANALYTICAL CHEMISTRY: A Fundamental						
Texts	Approach To Modern Separation Techniques. by <u>Stanley Chris (Ph.D)</u> (Author) August 15, 2022						
https://www.amazon.com/Fundamentals-Analytical-Chemistry-Douglas-							
	Skoog/dp/0357450396/ref=d_pd_sbs_vft_none_sccl_3_1/145-7711462- 5419924?pd_rd_w=CSlfi&content-id=amzn1.sym.3676f086-9496-4fd7-8490-						
Websites	77cf7f43f846&pf rd p=3676f086-9496-4fd7-8490-						
	77cf7f43f846&pf rd r=7EZR6MGHA0J9A87C0JF0&pd rd wg=KzlqI&pd rd r=6cd67e00-						
	88f2-4c85-8c5e-a2822ac1d629&pd_rd_i=0357450396&psc=1						

Grading Scheme مخطط الدرجات					
Group	Grade	التقدير	Marks %	Definition	
	A - Excellent	امتياز	90 - 100	Outstanding Performance	
C	B - Very Good	جيد جدا	80 - 89	Above average with some errors	
Success Group (50 - 100)	C - Good	ختر	70 - 79	Sound work with notable errors	
(30 - 100)	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	

Assist. Prof. Dr. Rasim Farraj Muslim

Module Information معلومات المادة الدراسية							
Module Title	O	rganic chemistr	y	Modu	ıle Delivery		
Module Type		Core			⊠Theory		
Module Code					⊠Lecture ⊠Lab		
ECTS Credits		8			□Tutorial □Practical		
SWL (hr/sem)	200				Seminar		
Module Level		1	Semester o	of Delivery 1		1	
Administering Dep	partment	Type Dept. Code	College	Type College Code			
Module Leader	Rasim Farraj N	luslim	e-mail	Dr.rasir	n92hmts@uoanl	par.edu.iq	
Module Leader's	Module Leader's Acad. Title		Module Lea	eader's Qualification Ph.D.		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 Nu	mber	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	 The chemistry of organic compounds course is determined according to the study plan prepared in the Medical Physics Department. The course aims to introduce the student to the general concepts of the organic compounds and their importance and uses in various fields. It also aims at a detailed study of the different structural compositions and naming principles for the compounds of organic chemistry, by focusing on the compounds. And help the student to know the composition of these substances, including drugs, and to know how interactions occur and the mechanism of interaction. 				
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	 The student should know the general concepts of the compounds of the organic chemistry curriculum. That the student is acquainted with the basics and rules of naming, different structural structures and physical properties, and focuses on the same different rings for their vital activity, and recognizes their physical and chemical properties, and that the student distinguishes between the different structural structures. That the student knows the basic principles of preparation methods To familiarize the student with the different bases of their interactions. That the student is aware of the importance of these compounds and their applications. 				
Indicative Contents المحتويات الإرشادية	a- Methods of teaching and learning 1- Giving lectures. 2- Using the method of recitation, discussion and solving questions. 3- Giving assignments to students to strengthen them and prepare them for the final and final exams. b- Evaluation methods 1- Daily and monthly exams 2- Duties 3- In-class exercises				

Learning and Teaching Strategies					
	استر اتيجيات التعلم و التعليم				
Strategies	Type something like: The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering 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) Structured SWL (h/w) 7 الحمل الدر اسي المنتظم للطالب أسبوعيا الحمل الدر اسي المنتظم للطالب أسبوعيا 7			7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	91	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
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				
	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
Formative	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
assessment	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
assessment	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

	Delivery Plan (Weekly Syllabus)		
	المنهاج الاسبوعي النظري		
	Material Covered		
Week 1	Introduction and principles in organic techniques		
Week 2	Chemistry of carbon and hydrogen compounds		
Week 3	Concept of energy		
Week 4	Organic formulations		
Week 5	Reaction relationship and physical properties of organic compounds		
Week 6	Alkanes		
Week 7	Alkenes		
Week 8	First month exam		
Week 9	Alkynes		

Week 10	Alcohols and phenols
Week 11	Ethers
Week 12	Carbonyl compounds
Week 13	Second month exam
Week 14	Amine derivatives
Week 15	Basic principles in the techniques of organic preparations
Week 16	Comprehensive review, applications and problem solving

Delivery Plan (Weekly Lab. Syllabus)			
	المنهاج الاسبوعي للمختبر		
	Material Covered		
Week 1	Melting point		
Week 2	Boiling point		
Week 3	Distillation		
Week 4	Extraction		
Week 5	Detection of organic compounds		
Week 6	Detection of alcoholic compounds		
Week 7	Chromatography methods		

Learning and Teaching Resources مصادر التعلم والتدريس			
	Text	Available in the Library?	
Required Texts	Organic Chemistry, 6th Edition. Robert T. Morrison. 4.3 out of 5 stars 70; Organic Chemistry, 7th Edition; Organic Chemistry Fundamentals (Quick Study Academic).	Yes	
Recommended Texts	Introductory Organic Chemistry and Hydrocarbons A Physical Chemistry Approach. 1st Edition. By Caio Lima Firme. Copyright 2020.	No	
Websites	https://www.amazon.com/Organic-Chemistry-Morrison-Boyd/	/dp/8131704815	

Grading Scheme مخطط الدر جات				
Group	Grade	التقدير	Marks %	Definition
6	A - Excellent	امتياز	90 - 100	Outstanding Performance
Success Group (50 - 100)	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	ختر	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

Assist. Prof. Dr. Rasim Farraj Muslim

3 / 6 / 2023

Module Information معلومات المادة الدر اسية						
Module Title		General Botany		Modu	le Delivery	
Module Type		Basic			☑ Theory	
Module Code		ENVI-11003			Lecture Lab	
ECTS Credits		7			☐ Tutorial	
SWL (hr/sem)		175		☐ Practical ☑ Seminar		
Module Level		1	Semester o	f Delivery 3		3
Administering Dep	partment	Type Dept. Code	College	Type College Code		
Module Leader	Name: Ra	bah Salim Shareef	e-mail	eq.rabah.s.shareef@uoanbar.edu.iq		anbar.edu.iq
Module Leader's	Acad. Title	Asset. Professor	Module Leader's Qualification Ph.D.		Ph.D.	
Module Tutor	Name (if available)		e-mail	E-mail		
Peer Reviewer Name		Name: Rabah Salim Shareef	e-mail	eq.rabah.s.shareef@uoanbar.edu.id		anbar.edu.iq
Scientific Committee Approval Date		01/06/2023	Version Nu	umber 1.0		

Relation with other Modules					
العلاقة مع المواد الدراسية الأخرى					
Prerequisite module Plant Taxonomy Semester 3					
Co-requisites module	Plant Environmental	Semester	4		

Module Aims, Learning Outcomes and Indicative Contents						
	أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية					
Module Objectives أهداف المادة الدر اسية	 Here are the module objectives for plant taxonomy based on the search results: Understand the basic concepts of botany in relation to its allied core courses Perceive the significance of microbes and plants for human welfare Work closely with a supervisor regarding the subject matter and content of the selected seminar topic Conduct a research project on a topic of their choice approved by the academic staff Analyze data to determine the general tendency of a character Provide a general introduction to the study of plant structures and functions Emphasize the aspects of plant structures and functions as they relate to the natural survival and growth of plants 					
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Here are the module learning outcomes for plant taxonomy based on the search results: 1- Mapping learning outcomes to corresponding competencies 2- Analyzing data to determine the general tendency of a character 3- Working closely with a supervisor regarding the subject matter and content of the selected seminar topic 4- Applying the scientific method to questions in biology by formulating testable hypotheses and gathering data that address these hypotheses 5- Understanding the study of plants in the context of general science					
Indicative Contents المحتويات الإرشادية	 Indicative content includes the following. Here are the indicative contents for general botany based on the search results: Research project approved by the department Basic botanical nomenclature needed to describe plant morphology Collection and identification of native flowering plants of Georgia Study of plants in the context of general science Laboratory content incorporated with lecture content during exams Working closely with a supervisor regarding the subject matter and content of the selected seminar topic Understanding the approach, methods, research goals, evidence, and terminology of plant systematics 					

Learning and Teaching Strategies			
	استراتيجيات التعلم والتعليم		
Strategies			

Type something like: The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering 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) Structured SWL (h/w) 5 الحمل الدر اسي المنتظم للطالب خلال الفصل الحمل الدر اسي المنتظم للطالب خلال الفصل 5			5	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	96	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6.4	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	125			

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

Delivery Plan (Weekly Syllabus)		
	المنهاج الاسبوعي النظري	
	Material Covered	

	Plant overview
Week 1	General characteristics of the plant
	1
	• The foundations of distinguishing between the plant kingdom and the animal kingdom
Week 2	Introduction for non-flowering plants:
Week 3	Flowering plants: General characteristics of flowering plants, Division of flowering
Weeks	plants
Week 4	Seeds and their germination.
	_
Week 5	Plant parts: root, stem, leaves (definition - functions)
Week 6	Plant parts: Flower, Inflorescences, fruits, Seeds
Week 7	Reproduction in flowering plants: Asexual reproduction in flowering plants.
Week 8	Reproduction in flowering plants: Sexual reproduction in flowering plants, Pollination
Week o	and fertilization in flowering plants, Life cycle of flowering plants
March 0	Definition of plant physiology and its importance in agricultural production,
Week 9	Photosynthesis
	•
Week 10	Respiration, transpiration and gastrulation in plants
Week 11	Water relations in the plant
Week 12	The role of basic elements in plant nutrition
	-
Week 13	Introduction to plant anatomy; vascular plant organization: Shoot apical meristems;
	root apical meristems
Week 14	Epidermis, Parenchyma; collenchyma; sclerenchyma
Week 15	Xylem, Phloem
Week 16	Duanavatawy week hafaya tha final Evam
WCCK 10	Preparatory week before the final Exam

	Delivery Plan (Weekly Lab. Syllabus)		
	المنهاج الاسبوعي للمختبر		
	Material Covered		
Week 1	Lab 1: Germination for some seeds		
Week 2	Lab 2: Electron microscope: parts and function		
Week 3	Lab 3: Identify the Plant Cell		
Week 4	Lab 4: Identify the leaf tissues		
Week 5	Lab 5: Identify the stem tissues		
Week 6	Lab 6: Identify the fruits tissues		
Week 7	Lab 7: Identify the flower parts		

Learning and Teaching Resources	
مصادر التعلم والتدريس	

	Text	Available in the Library?
Required Texts	Botany Illustrated - Introduction to Plants, Major Groups	No
Recommended Texts	Anatomy of Flowering Plants - Book	No
Websites		

Grading Scheme مخطط الدر جات					
Group	Grade	التقدير	Marks %	Definition	
	A - Excellent	امتياز	90 - 100	Outstanding Performance	
Success Group (50 - 100)	B - Very Good	جيد جدا	80 - 89	Above average with some errors	
	C - Good	ختر	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	

Module Information معلومات المادة الدراسية								
Module Title اسم المادة او الوحدة	GENERAL PHYSICS العامة			الفيزياء	Module	: Delivery		
Module Type نوع الوحدة			Base				⊠Theory ⊠Lecture	
Module Code کود الوحدة						⊠Lab ⊟Tutorial		
ECTS Credits			6				□Practical □Seminar	
SWL (hr/sem)			150					
Module Level المرحلة الدراسية			1	Semester of Delivery الكورس الدراسي		1		
Administering Department		Department of Environment	قسم البيئة	College الكلية	كلية العلوم التطبيقية ـ هيت College of Applied Sciences - Heat		iences - Heat	
Module Leader مسؤول الوحدة	انمار شاكر جاسم				e-mail الاميل	anmar90.a9@uoanbar.edu		oanbar.edu.iq
Module Leader's Acad. Title العنوان الاكاديمي لمسؤول الوحدة		assistant teacher مدرس مساعد			Leader's Qualification ستير Master's		ماجستیر Master's	
Module Tutor مدرس مساعد	None				e-mai الاميل	None		
Peer Reviewer Name اسم البديل		بد الكريم عبدالواحد	م.م رفاء عب	e-mai الاميل	rafaa1987abd@uoanbar.edu		oanbar.edu.iq	
Scientific Committ Date يخ موافقة اللجنة العلمية		pproval			Version Number قم الكورس	er 1		

Relation with other Modules				
	العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester		
مادة اساسية تدرس قبلها	None	الفصل الدر اسي		
Co-requisites module	None	Semester		
مادة در اسية تدرس معها مشتركة	None	الفصل الدراسي		

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Introduction to Physics: Introduce students to the scope and nature of physics as a fundamental science that seeks to understand the behavior of the physical universe.

Mechanics: Develop an understanding of classical mechanics, covering topics such as kinematics, dynamics, Newton's laws of motion, work, energy, momentum, and rotational motion.

Thermodynamics: Explore the principles of thermodynamics, including concepts such as temperature, heat, laws of thermodynamics, thermal expansion, heat transfer mechanisms, and thermodynamic processes.

Waves and Vibrations: Study the properties of waves and oscillations, including wave mechanics, wave interference, standing waves, sound waves, and the behavior of waves in different mediums.

Module Objectives أهداف المادة الدر اسية

Electromagnetism: Introduce the fundamentals of electricity and magnetism, including electric charge, electric fields, Gauss's law, electric potential, capacitance, current, resistance, Ohm's law, magnetic fields, electromagnetic induction, and Maxwell's equations.

Optics: Explore the principles of geometric and wave optics, covering topics such as reflection, refraction, lenses, mirrors, diffraction, polarization, and optical instruments.

Modern Physics: Introduce key concepts of modern physics, including special relativity, quantum mechanics, atomic structure, nuclear physics, and particle physics.

Problem-Solving Skills: Develop problem-solving skills by applying physics principles to solve quantitative and qualitative problems in various contexts.

Experimental Skills: Provide opportunities for hands-on laboratory experiments to reinforce theoretical concepts, develop experimental techniques, and enhance understanding of the scientific method. **Critical Thinking and Analytical Skills**: Foster critical thinking

abilities by encouraging students to analyze and interpret physical phenomena, evaluate experimental results, and draw logical conclusions based on evidence. **Mathematical Proficiency**: Enhance mathematical proficiency by applying mathematical techniques such as algebra, trigonometry, calculus, and vector analysis to solve physics problems. **Interdisciplinary Connections**: Highlight interdisciplinary connections between physics and other fields such as engineering, chemistry, biology, environmental science, and astronomy. **Communication Skills**: Improve communication skills through written reports, oral presentations, and discussions of physics concepts, experiments, and applications. **Ethical and Societal Implications**: Discuss ethical and societal implications of physics-related technologies, scientific discoveries, and environmental issues. At the end of the course the student is expected to be able to: 1. Dealing with physical unit systems, distinguishing between physical quantities and vector analysis and their applications. 2. Using linear motion relationships, Newton's laws of motion, and the theory of flame-energy and its transformations in various applications. 3. Determine the center of mass of a system of objects and calculate its speed and acceleration. 4. Distinguish between types of collisions. 5. Distinguish between linear, circular, and rotational movements, **Module Learning** Outcomes and between moments of inertia and torques of coupling. 6. Applying the laws of conservation of energy and linear and مخرجات التعلم للمادة الدراسية angular momentum. 7. Distinguish between moments of inertia and moments of coupling, and calculate the moments of inertia for rigid bodies containing common shapes. 8. Determine the center of gravity, and achieve the conditions for static equilibrium. 9. Use the law of universal gravitation on movement near the Earth's surface and on the movement of the planets. **Indicative Contents** المحتويات الإرشادية

Learning and Teaching Strategies استراتیجیات التعلم والتعلیم				
Strategies	1-Developing the student's ability to deal with the various means of technology 2- Developing the student's ability to deal with the calculator and the Internet and how to find information 3-Developing the student's ability to deal with multimedia 4- Developing the student's ability to dialogue and discuss and express his opinions and perceptions			

Student Workload (SWL) الفصل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	64	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) الحمل الدراسي الكلي للطالب خلال الفصل		150	

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

	Delivery Plan (Weekly+Lab Syllabus) المنهاج الاسبوعي النظري والعملي
	Material Covered
	Physical quantities. Prime and non-prime quantities - standard quantities - units.
Week 1+2	Vectors: General properties of vectors - scalar product - cross product - unit vector -
	decomposition of vectors into components.
	Motion in a straight line: Motion in one dimension - Newton's relations for constant
Week 3+4	acceleration - Motion in two dimensions - Projectiles - Motion in a circular path with
	constant speed.
	exam
Week 5+6	Newton's Laws: Description of Newton's laws of motion - static friction - kinetic friction -
Treek 5.0	centripetal force - types of forces in nature - applications of Newton's laws of motion.
	Work and energy: kinetic energy - work - work-energy theory, work resulting from
	movement in one direction and with a constant force - work resulting from a variable
	force - spring forces - power - potential energy - conservative forces - work resulting from
Week 7+8	conservative forces - non-conservative forces - Potential energy and equilibrium in one
	dimension - conservation of mechanical energy - applications to conservation of
	mechanical energy - internal energy - formulation of the law of conservation of total
	energy - mass and energy - quantization of energy.
	Linear momentum and collisions: center of mass - movement of the center of mass -
Week 9+10	Newton's second law of a system of particles - linear momentum of a system of particles -
	conservation of linear momentum - collisions - thrust and linear momentum - elastic and
	inelastic collisions in one and two dimensions.
	exam
	Rotation of solid bodies and angular momentum: translation and rotation - rotational
Week	variables - rotation with constant angular acceleration - the relationship between linear
11+12	and angular variables - rotational kinetic energy - calculation of rotational moment of
	inertia - torque - Newton's second law of rotation - roll - angular momentum -
	conservation of angular momentum - quantization Angular momentum.
	Static equilibrium: conditions for static equilibrium - center of gravity - applications - static
Week	equilibrium in an accelerating frame - stable rotational equilibrium. The law of general
13+14	gravitation: the theory of the shell - the principle of superposition - gravitational potential
	energy - escape velocity - classification of orbits in relation to energy.

Learning and Teaching Resources					
مصادر التعلم والتدريس					
	Available in the Library?				
Required Texts	 "Physics for Scientists and Engineers" by Paul A. Tipler and Gene Mosca "Fundamentals of Physics" by David Halliday, Robert Resnick, and Jearl Walker "University Physics" by Hugh D. Young and Roger A. Freedman "Conceptual Physics" by Paul G. Hewitt "Physics: Principles with Applications" by Douglas C. Giancoli 	ـ الكتب المقررة المطلوبة Required textbooks			
Recommended					
Texts					
مصادر للاطلاع					
Websites					
مواقع الويب					

Grading Scheme مخطط الدر جات					
Group Grade التقدير Marks % Definition					
	A - Excellent	امتياز	90 - 100	Outstanding Performance	
6 6	B - Very Good	جيد جدا	80 - 89	Above average with some errors	
Success Group (50 - 100)	C – Good	ختر	70 - 79	Sound work with notable errors	
(30 - 100)	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	

مدرس المادة / م.م. أنمار شاكر جاسم

anmar90.a9@uoanbar.edu.iq / البريد الالكتروني

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية						
Module Title	ية		اللغة العربيا	Modu	le Delivery	
Module Type	S				⊠Theory	
Module Code					⊠Lecture ⊠Lab	
ECTS Credits		4			☐Tutorial ☐Practical	
SWL (hr/sem)		100			□ Seminar	
Module Level		الأول	Semester o	nester of Delivery		الثاني
Administering Dep	partment	البيئة	College	كلية العلوم التطبيقية _هيت		
Module Leader	دالواحد عبدالجبار	م. د سوزان عب	e-mail	Suzan2	018@uoanbar.ed	du.iq
Module Leader's	Acad. Title		Module Lea	ıder's Qı	alification	
Module Tutor	e Tutor		e-mail			
Peer Reviewer Name			e-mail			
Scientific Committee Approval Date			Version Nu	mber		

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

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Modu	le Aims, Learning Outcomes and Indicative Contents		
Module Objectives أهداف المادة الدر اسية	Explaining the importance of the Arabic language and its benefits for university students in terms of: • Introducing the parts of speech in the Arabic language from sound to context • Introducing the sections and types of the Qur'anic sentence. • Definition of parsing and its connection to the grammatical meaning in the types of Quranic sentences. • Defining the structure within Quranic expression. • Introducing progress and delay in Quranic expression, its types and causes • Introducing the scientific miracle within the Qur'anic text. • Introducing the method of semantic analysis of the Qur'anic text. • Introducing the method of semantic analysis of poetic literary text. • Introducing some grammatical topics in the language, such as the indefinite article knowledge knowledge.		
	such as the indefinite article, knowledge, knowledge, and number		
	 Study the types of Qur'anic sentences Study of parsing and its connection to meaning within 		
Module Learning	the types of Quranic sentences		
Outcomes	 Study grammatical topics when analyzing the parsing of 		
مخرجات التعلم للمادة الدراسية	a Qur'anic sentence.		
	Studying the scientific miracle within the Qur'anic tex		
	Study the semantic analysis of the Qur'anic context		
Indicative Contents المحتويات الإرشادية	 For the student to become familiar with the types of Qur'anic sentences That the student acquires the ability to analyze the parsing of a Qur'anic sentence. The student will learn the ability to understand Arabic language topics through analyzing the parsing of Qur'anic sentences 		

- For the student to become familiar with the scientific miracle and its types within the Qur'anic text.
- For the student to become familiar with the characteristics of the word structure within the Qur'anic expression in terms of definition, indefiniteness, introduction, delay, mention, and deletion, and the reason for choosing the word structure in terms of nominal and verbal terms, and modulation or variation in verb tenses within the Qur'anic context.

Learning and Teaching Strategies			
استراتيجيات التعلم والتعليم			
Teaching and learning methods			
Strategies Whiteboard – display screen			

Student Workload (SWL)				
الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا				
Structured SWL (h/sem)	63	Structured SWL (h/w)		
الحمل الدراسي المنتظم للطالب خلال الفصل	03	الحمل الدراسي المنتظم للطالب أسبوعيا		
Unstructured SWL (h/sem)	37	Unstructured SWL (h/w)		
الحمل الدراسي غير المنتظم للطالب خلال الفصل	57	الحمل الدراسي غير المنتظم للطالب أسبوعيا		
Total SWL (h/sem)	100			
الحمل الدراسي الكلي للطالب خلال الفصل	100			

Module Evaluation							
	تقييم المادة الدراسية						
		Time/Number	Weight (Marks)	Week Due	Relevant Learning		
		Time, Humber	weight (Marks)	Week Due	Outcome		
	Quizzes	10					
Formative	Assignments	10					
assessment	Projects / Lab.						
	Report	20					
Summative	Midterm Exam	10					
assessment	Final Exam	50					
Total assessme	ent						

Delivery Plan (Weekly Syllabus)				
	المنهاج الاسبوعي النظري			
	Material Covered			
Week 1	Introducing the parts of speech in the Arabic language from sound to context			
Week 2	Definition of the sentence and its types with applied examples in parsing			
	The verbal sentence and its components with applied examples of parsing, intransitive and			
Week 3	transitive verbs, the subject and types of subject, and when to delete the subject and the			
	reasons for deleting it.			
	The nominal sentence and its components with applied examples of parsing, types of			
Week 4	subject, types of predicate, deleting the predicate, introducing it, and reasons for			
	introducing and delaying it.			
	The semi-sentence and its components, what is related to the adverb and the adverb, the			
Week 5	reasons for its connection, and the types of what is related to it, with applied examples in			
	parsing.			
Week 6	Memorizing and interpreting the first ten verses of Surat Al-Kahf			
Week 7	Semantic analysis of the first ten verses of Surat Al-Kahf			
Week 8	Memorizing and interpreting the first five verses of Surat Al-Hujurat			
Week 9	Semantic analysis of the first five verses of Surat Al-Hujurat			
Week 10	Indefinite nouns and knowledge, types of knowledge (science)			
Week 11	Explanation of the topic of the number, and the sections of the number, with applied			
Week 11	examples			
Week 12	Memorizing and analyzing eight verses in the poem Al-Hamas by the poet Abu Al-Tayeb Al-			
WCCK 12	Mutanabbi with the life of the poet			
Week 13	Memorizing and analyzing ten lines from the poem of the Iraqi poet Badr Shaker Al-Sayyab			
WCCK 13	along with the poet's life			
Week 14	The structure of the singular in the Holy Qur'an, the singular between the nominal and the actual			
Week 15	Submitting and delaying, its parts and reasons			
	Preparatory week before the final Exam			
Week 16				

	Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبو عي للمختبر			
	Material Covered			
Week 1	Lab 1:			
Week 2	Lab 2:			
Week 3	Lab 3:			
Week 4	Lab 4:			
Week 5	Lab 5:			
Week 6	Lab 6:			
Week 7	Lab 7:			

Learning and Teaching Resources مصادر التعلم والتدريس					
	Text Available in the Library?				
Required Texts	The Holy Qur'an, the book explaining Ibn Aqeel, the Arabic language curriculum for non-specialists, the book of rhetoric and application, Quranic interpretations	نعم			
Recommended					
Texts					
Websites					

Grading Scheme مخطط الدرجات						
Group	Group Grade التقدير Marks % Definition					
	A - Excellent	امتياز	90 - 100	Outstanding Performance		
C C	B - Very Good	جيد جدا	80 - 89	Above average with some errors		
Success Group (50 - 100)	C - Good	ختخ	70 - 79	Sound work with notable errors		
(30 - 100)	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	ر اسب	(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 Information معلومات المادة الدر اسية						
عنوان الوحدة	حقوق أنسان و ديمقراطية		الوحدة	تسليم		
نوع الوحدة		جوهر			نظربة ⊤⊠	
كود الوحدة		UoB12345			محاضرة ⊠ مختبر⊾	
ائتمانات ECTSC		8			درس تعليمي ⊤ □ عملي □	
SWL (hr/sem)		200			ي ك ندوة □	
1 مستوى الوحدة		1	سي من التسليم	فصل درا		1
الادارة الادارية		البيئة	كلية	Type C	Type College Code	
قائد الوحدة	ر عبد الرحيم	أ م عبد صبا	e-mail	Abd .s.1	1971@uoanbar.e	du.iq
وحدة قائد الوحدة اكاد عنوان		استاذ مساعد	هيل قائد الوحدة	تاهيل		Ph.D.
وحدة المعلم	Name (if available)		e-mail	E-mail	E-mail	
اسم المراجع الزميل		Name	e-mail	E-mail		
تاريخ موافقة اللجنة العلمية		01/06/2023	رقم الاصدار		1.0	

Relation with other Modules					
العلاقة مع المواد الدراسية الأخرى					
وحدة المتطلبات المسبقة	لا احد	نصف السنة			
وحدة المتطلبات المشتركة	لا احد	نصف السنة			

Modu	le Aims, Learning Outcomes and Indicative Contents		
	أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية		
Module Objectives أهداف المادة الدراسية	 Introducing the student to human rights and democracy and their advantages Knowledge of the historical development of human rights and democracy The relationship between the public rights and freedoms of individuals Learn about the democratic system in Iraq (pros and cons) Knowing corruption, its causes, and ways to address it Getting to know human rights in the Holy Qur'an and the Sunnah of the Prophet Identify the most important organizations working in the field of human rights Learn about the negative and positive effects of technological progress on public freedoms 		
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	 Full knowledge of democracy and human rights Knowing the general conditions for the success of a democratic system What are the components and pillars of democracy? The roots of democracy in Iraq The advantages and disadvantages of the democratic system Accuracy and knowledge of some political terminology Understanding that Islam was the first to establish the foundations of freedom and human rights 		
Indicative Contents المحتويات الإرشادية	Includes instructional content Introducing and training students on democracy and freedom and how to express their opinions in a transparent and systematic manner so that their opinions are positive and the possibility of interaction with them by the concerned party or parties and the possibility of supporting these opinions by the government and public opinion, as the more opinions are expressed in a civilized manner, the more influential their echo is in all political circles. At various levels, the main goal of this article is to create a generation that is aware and capable of leading the country in a democratic manner that believes in one opinion and the other, in addition to knowing the rights of every human being and how to exercise them and benefit from them in order to enjoy public life and live freely and safely, as well as understanding that every human being has duties as well as rights and the duty to implement them. What should he do before demanding his rights?		

Learning and Teaching Strategies					
استراتيجيات التعلم والتعليم					
	Creating a conscious generation that knows well its money and				
	what it owes, to contribute to building a civilized state, to feel an				
	absolute sense of belonging to this state, regardless of the				
الاستراتيجيات	circumstances and situations it is going through, and to preserve				
	public property as if it were private, in addition to raising the spirit				
	of good citizenship, in addition to enhancing cooperation among				
	citizens themselves.				

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا					
Structured SWL (h/sem) الحمل الدر اسي المنتظم للطالب خلال الفصل	109	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	7		
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	91	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6		
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل		200			

Module Evaluation						
تقييم المادة الدراسية						
	الوقت / الرقم			الاسبوع	التعليم ذو الصلة	
		الولك ٢ الرعم	الوزن / العلامات	المستحق	pwdgm	
	الاختبارات	2	10% (10)	5 and 10	LO #1, #2 and #10, #11	
التكويني	تعيينات	2	10% (10)	2 and 12	LO #3, #4 and #6, #7	
تقدير	المشاريع او المعمل	1	10% (10)	Continuous	All	
	تقرير	1	10% (10)	13	LO #5, #8 and #10	
تلخيص	اختبارات نصف السنة	2hr	10% (10)	7	LO #1 - #7	
تقدير	امتحان نهائي	3hr	50% (50)	16	All	
التقييم الاجمالي			100% (100 Marks)			

Delivery Plan (Weekly Syllabus)					
	المنهاج الاسبوعي النظري				
	Material Covered				
Week 1	The importance of studying human rights and their concept in addition to their characteristics				
Week 2	Human rights in Islamic law				
Week 3	Generations and forms of human rights				
Week 4	Human rights guarantees				
Week 5	Public organizations in the fields of human rights				
Week 6	Administrative corruption, its concept and definition, types of corruption				
Week 7	Causes of corruption and treatments for corruption				
Week 8	The concept of freedom				
Week 9	Electoral systems				
Week 10	Distinguishing elections from similar systems				
Week 11	Stages of the democratic system in Iraq, the most important articles of the Iraqi Constitution 2005				
Week 12	Fundamental freedoms and individual freedoms				
Week 13	Elections and democracy				
Week 14	Some political terms (constitution, federal court, presidential and parliamentary system)				
Week 15	Terms (secularism, aristocracy, liberalism, bureaucracy, imperialism)				
Week 16	Review to prepare for the final exam				

Learning and Teaching Resources مصادر التعلم والتدريس				
	Text	متوفر في المكتبة		
النصوص المطلوبة	Human rights, democracy and public freedoms Prof. Dr. Maher Sabry Kazem	نعم		
مستحسن نصوص	History of the emergence of human rights concepts 2006 Raed Suleiman Al-Faqir	No		
مواقع الويب				

Grading Scheme مخطط الدرجات					
Group	Grade	التقدير	Marks %	Definition	
	A - Excellent	امتياز	90 - 100	Outstanding Performance	
Success Group (50 - 100)	B - Very Good	جيد جدا	80 - 89	Above average with some errors	
	C - Good	ختر	70 - 79	Sound work with notable errors	
(30 - 100)	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 Information معلومات المادة الدراسية Module Title علم البيئة Module Delivery						
Module Title			علم البيئة	Modu	ıle Delivery	
اساسي (core) اساسي		⊠rheory				
Module Code			⊠Lecture ⊠Lab			
ECTS Credits					□Tutorial □Practical	
SWL (hr/sem)					□ Seminar	
Module Level			Semester o	of Delivery		
Administering Department		مدرس مساعد	College			
Module Leader	مود يعقوب علي	مصطفی محد	e-mail	mustaf	a.yacoub1980@	uoanbar.edu.iq
Module Leader's Acad. Title			Module Lea	der's Qu	ualification	
Module Tutor	odule Tutor		e-mail			
Peer Reviewer Name			e-mail			
Scientific Committee Approval Date			Version Nu	mber		

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

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

- Familiarity with the concept of the environment, its nature, classifications, resources, and sustainable development.
- Learn about the concept of the ecosystem, its types, its balance, the movement of food within it, and its importance.
- Identifying the most important environmental factors and their impact on the ecosystem, environmental laws and their importance to the ecosystem.
- Know the aquatic environment, the importance of water, its characteristics and sources, the marine environment and its origins.

Module Objectives أهداف المادة الدراسية

- Familiarity with soil characteristics, their importance, formation factors and components, the risks that threaten agricultural soil, and how to increase the area of the agricultural plot.
- Follow the vital cycles that occur in the ecosystem, including the water cycle carbon, nitrogen, phosphorus, and sulfur, and their importance in environmental balance.
- Exploring the most important industrial environmental changes, their causes and risks, such as: global warming, the ozone hole, black clouds, acid rain, drought, and desertification.

 Reaching the concept of energy, knowing its traditional sources,

and learning about alternative sources of energy (solar energy, its uses, and the most important ways to convert it into electrical energy - wind energy - tidal energy - geothermal energy - and energy from garbage and waste

Module Learning Outcomes

مخرجات التعلم للمادة الدراسية

- Familiarity with the concept of the environment, its nature, classifications, resources, and sustainable development.
- Deducing the concept of the ecosystem, its types, its balance, the movement of food within it, and the importance of studying it
- Classification of the most important environmental factors and their impact on the ecosystem.
- Identify environmental laws and their importance to the

	 ecosystem. Study of the biosphere and its components. Studying the soil, its importance and formation factors - its components, the risks that threaten agricultural soil, and how to increase the area of the agricultural plot. Tracking the vital cycles that occur in the ecosystem, including the water cycle - carbon, nitrogen, phosphorus, and sulfur. Studying the most important industrial environmental changes, their causes, consequences, and how to address them
Indicative Contents المحتويات الإرشادية	 Tracking the cycles of some elements in nature. Using the international information network to identify the most important environmental problems And how to treat it. Using references in preparing research

Learning and Teaching Strategies استراتيجيات التعلم والتعليم			
Strategies	 Thinking and solving environmental problems. Interest in preserving the environment and spreading awareness about it. Using social networking sites to raise awareness of environmental problems and ways to solve and overcome them. Identify the most important environmental problems in the environment surrounding the college and propose solutions To treat it. Collaboration and subsequent social skills among colleagues 		

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	109	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	91	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
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
	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
Formative	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
assessment	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
assessment	Final Exam	3hr	50% (50)	16	All
Total assessment				100% (100 Marks)	

Delivery Plan (Weekly Syllabus)		
المنهاج الاسبوعي النظري		
	Material Covered	
Week 1	The concept of the environment, its nature, classifications, resources, and sustainable development.	
Week 2	The concept of the ecosystem, its types, its balance, the movement of • • .food within it, and the importance of studying it	
Week 3	The most important environmental factors and their impact on the ecosystem.	
Week 4	Environmental laws and their importance to the ecosystem.	

Week 5	The biosphere and its components.
Mark C	The aquatic ocean, the importance of water, its characteristics and
Week 6	sources, the marine environment and its origins
Week 7	The atmosphere, its constituent layers, and its importance.
Week 8	The dry ocean, the Earth's layers, and the characteristics of each
Week 8	layer
	Soil, its importance and formation factors - its components, the
Week 9	risks that threaten agricultural soil, and how to increase the area of
	the agricultural area
Week 10	The biological cycles that occur in the ecosystem, including the
	water - carbon and nitrogen cycle
Week 11	The biological cycles that occur in the ecosystem, including the
	phosphorus and sulfur cycles
	The most important industrial environmental changes, including
	global warming - its causes and effects, the ozone hole - its causes
Week 12	and risks, the black cloud - its causes and dangers, acid rain - its
	causes and effects, drought and its causes, and desertification - its
	causes and risks.
Week 13	The concept of energy and its traditional sources (oil - secondary
	extraction - oil rocks - tar sands - coal oil - natural gas - coal)
	Alternative sources of energy (solar energy, its uses, and the most
Week 14	important methods of converting it into electrical energy - wind
	energy - and tidal energy)
Week 15	Alternative sources of energy (geothermal energy and energy from
	garbage and waste(
Week 16	Preparatory week before the final Exam

	Delivery Plan (Weekly Lab. Syllabus)		
	المنهاج الاسبوعي للمختبر		
	Material Covered		
Week 1	The first laboratory: learning about the method of estimating pH		
Week 2	Second laboratory: Identifying the method for estimating electrical conductivity		
Week 3	Third laboratory: Identify some methods of estimating productivity		
Week 4	Fourth laboratory: Identifying the method of estimating soil texture		
Week 5	Fifth laboratory: Learn how to determine the soil's need from the C/N ratio		
Week 6	Sixth laboratory: Learn how to classify agricultural soil and survey it morphologically and		
Week 7	Seventh laboratory: measuring some pollutants in the atmosphere		
	——————————————————————————————————————		

Learning and Teaching Resources مصادر التعلم والتدريس			
	Text	Available in the Library?	
Required Texts	Lectures by Professor Dr. Mustafa Mahmoud Al-Fahdawi		
Recommended Texts	Basics of soil science		
Websites	Scientific Researcher, Iraqi electronic scientific journals, re	esearchgate	

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
	A - Excellent	امتياز	90 - 100	Outstanding Performance
C	B - Very Good	جيد جدا	80 - 89	Above average with some errors
Success Group (50 - 100)	C - Good	ختخ	70 - 79	Sound work with notable errors
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Module Information معلومات المادة الدراسية						
Module Title اسم المادة او الوحدة	computers		حاس	Module	e Delivery	
Module Type نوع الوحدة	Base				⊠Theory	
Module Code كود الوحدة				⊠Lecture ⊠ S Lab □Tutorial		
ECTS Credits					□Practical □Seminar	
SWL (hr/sem)						
Module Level المرحلة الدراسية		1	Semeste الكورس	er of Delivery		1
Administering Department		Department of قسم البيئة Environment	College الكلية	كلية العلوم التطبيقية ـ هيت College of Applied Sciences - Heet		ences - Heet
Module Leader ابر اهيم خليل سعود مسؤول الوحدة		م.م	e-mail الاميل	ibrahem.abomusab@uoanbar.edu.		uoanbar.edu.iq
Module Leader's Acad. Title العنوان الاكاديمي لمسؤول الوحدة		assistant teacher مدرس مساعد		dule Leader's Qualification Master's منير مسؤول ال		ماجستیر Master's
Module Tutor مدرس مساعد	None		e-mai الاميل	None		
Peer Reviewer Name اسم البديل			e-mai الاميل			
Scientific Committee Approval Date تاريخ موافقة اللجنة العلمية			Version Number قم الكورس)	1	

Relation with other Modules				
العلاقة مع المواد الدراسية الأخرى				
Prerequisite module	None	Semester		
مادة اساسية تدرس قبلها		الفصل الدراسي		
Co-requisites module	None	Semester		
مادة در اسية تدرس معها مشتركة	Notice	الفصل الدراسي		

Module Aims, Learning Outcomes and Indicative Contents				
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية				
Module Objectives أهداف المادة الدر اسية	 C1 - Knowledge of what computers are and their capabilities and uses. 2- Identify the components of personal computers. 3- Learn the basics of operating systems and deal with them. 4- General knowledge of computer software types. 5- The ability to use computer software to raise efficiency and increase individual productivity. 6- Recognizing the use of computers as an educational tool. 7- Get acquainted with the ready-made educational programs.ourse objectives 			
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	A- Cognitive goals: 1- Identify the physical components of a computer and their connections. 2- Getting acquainted with computer accessories and their connections. 3- Use and familiarize yourself with the keyboard. 4- Getting to know the Windows system. B- Subject-specific skills: 1- Providing the student with additional information about electronic developments. 2- Introducing the student to the Microsoft Office package. 3- Developing students' skills in working on the computer.			
Indicative Contents المحتويات الإرشادية	 1- Statement of the concept of e-learning. 2- Developing students' skills in using computers in their academic and practical lives. 3- Discover everything new in the computer world. 4- Training the students properly on how to use the computer 			

Learning and Teaching Strategies				
استراتيجيات التعلم والتعليم				
	1-Developing the student's ability to deal with the various means			
	of technology			
	2- Developing the student's ability to deal with the calculator and			
Strategies	the Internet and how to find information			
	3-Developing the student's ability to deal with multimedia			
	4- Developing the student's ability to dialogue and discuss and			
	express his opinions and perceptions			

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

Module Evaluation تقييم المادة الدراسية							
Time/Number Weight (Marks) Week Due Relevant Learning Outcome							
	Quizzes	2	15% (15)	5 and 10			
Formative	Assignments	2	15% (15)	2 and 12			
assessment	Projects / Lab.	0	0	Continuous			
	Report	1	10% (10)	13			
Summative	Midterm Exam	2hr	10% (10)	7			
assessment	Final Exam	3hr	50% (50)	16			
Total assessme	ent		100% (100 Marks				

	Delivery Plan (Weekly Syllabus)				
	المنهاج الاسبوعي النظري				
	Material Covered				
Week 1	Introduction to computer basics				
Week 2	What is a computer				
Week 3	Computer's components				
Week 4	Windows 10 operating system				
Week 5	Microsoft Office program				
Week 6	Run Microsoft Word				
Week 7	Exam				
Week 8	Entering texts and dealing with the file				
Week 9	Text editing				
Week 10	Dealing with tables				
Week 11	Page setup and printing				
Week 12	Keyboard shortcuts				
Week 13	Excel program				
Week 14	PowerPoint program				
Week 15	Internet networks				
Week 16	Preparatory week before the final Exam				

Learning and Teaching Resources مصادر التعلم والتدريس					
	Text	Available in the Library?			
Required Texts	Fundamentals of computer and its office applications - Part I /a.m.d. Ziyad Muhammad Abboud, Prof. Dr. Ghassan Hamid, Prof. Dr. Amir Hussein Computer Applications / Prof. Dr. Haider Nema Bakhit Microsoft Windows 10 system Word 2010 Microsoft Corporation	ـ الكتب المقررة المطلوبة Required textbooks			
Recommended Texts مصادر للاطلاع	A workshop on the topic Refer to the websites	Recommended books and references (scientific journals, reports			
Websites مواقع الويب	lectronic references, websites Virtual library Library locations in some international universities				

Grading Scheme مخطط الدرجات						
Group	Grade	التقدير	Marks %	Definition		
	A - Excellent	امتياز	90 - 100	Outstanding Performance		
S G	B - Very Good	جيد جدا	80 - 89	Above average with some errors		
Success Group (50 - 100)	C – Good	ختر	70 - 79	Sound work with notable errors		
(50 - 100)	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		

مدرس المادة / م.م ابراهيم سعود خليل

ibrahem.abomusab@uoanbar.edu.iq البريد الالكتروني /

			Module Inforn ت المادة الدراسية				
Module Title المرحدة	Mathematics		-	Module	e Delivery		
Module Type نوع الوحدة			Base			☑ Theory	
Module Code كود الوحدة					- ⊠ Lecture ⊠ Lab □ Tutorial		
ECTS Credits			4			☐ Practical ☐ Seminar	
SWL (hr/sem)			100			Li Sellillai	
Module Level المرحلة الدراسية			Semeste بن الدراسي		er of Deliv. الكور س	ery ery	1
Administering Department		ent	قسم البيئة Department of Environment	College الكلية	كلية العلوم التطبيقية ـ هيت College of Applied Sciences - Heat		ences - Heat
Module Leader مسؤول الوحدة	لواحد	عبدالكريم عبدا	م.م. میثاق	e-mail الاميل	Methaq90alheety@uoanbar.edu.iq		oanbar.edu.iq
Module Leader's A لاكاديمي لمسؤول الوحدة			assistant teacher مدرس مساعد		Leader's و هلات مسؤ	Qualification	ماجستیر Master's
Module Tutor مدرس مساعد	None		e-mai الاميل	None			
Peer Reviewer Name اسم البديل			e-mai الاميل				
Scientific Committee Approval Date تاريخ موافقة اللجنة العلمية			Version Number قم الكورس		1		

Relation with other Modules						
العلاقة مع المواد الدراسية الأخرى						
Prerequisite module	None	Semester				
مادة اساسية تدرس قبلها	None	الفصل الدراسي				
Co-requisites module	None	Semester				
مادة دراسية تدرس معها مشتركة	None	الفصل الدر اسي				

Modu	Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية					
Module Objectives أهداف المادة الدراسية	 A student's acquisition of the concept of words and mathematical logic and ways of dealing with them algebraically. Clarify the concept of sets, relationships, functions and links between them and theories related to them. 					
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	 Upon completing this course, students will: An ability to apply knowledge of mathematics, science and engineering. Evaluate the indefinite and improper integrals by using different integration techniques. Identify the definition and properties associated with definite integrals. Evaluate integrals using the method of substitution. Solve problems involving applications of integrals including finding volume of solids of revolution and area between curves. Discover determinants and matrices and their properties. Learn Crammer rule for solving a set of matrix system. 					
Indicative Contents المحتويات الإرشادية	 Familiarity with basic mathematical concepts and principles required for all branches of mathematics. Recognize the importance of integration and its applications. Knowledge of the concept of specific values and related issues. Studying methods of finding integration and identifying the most appropriate method. 					

Learning and Teaching Strategies						
Strategies	 Thinking creatively and critically. Talk with a partner or in a small group. Express ideas with linear activities. Explore personal positions and values through debate, argument, and discussion. Meditation in the educational process 					

Student Workload (SWL) الفصل الدراسي للطالب محسوب لـ ١٥ اسبوعا				
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	48	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	3.2	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	52 Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا			
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	100			

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

Delivery Plan (Weekly+Lab Syllabus) المنهاج الاسبوعي النظري والعملي **Material Covered** The Real numbers, Slope, Equation of straight line, function Week 1 Even and odd, Inequalities Week 2 Domain, range and Sketch Week 3 Limits Week 4 Week 5 Continuity The Derivative Week 6 Week 7 Second and higher derivatives, Derivative of natural logarithm Derivative of a^x , Chain Rule Week 8 Week 9 Exam Integration, Definite integration Week 10 Integration by parts Week 11 Integration by partial fractions Week 12 **Partial Fraction** Week 13 Week 14 Area Area between two curves Week 15 Preparatory week before the final Exam Week 16

Learning and Teaching Resources مصادر التعلم والتدريس						
	Text	Available in the Library?				
Required Texts	 Calculus with analytic Geometry, Swokowski, Olinickand Pence, 1994. Calculus, 8th edition (2007) by Howard Anton, (John Wiley & Sons, Inc, New York). 	Required textbooks				
Recommended Texts مصادر للاطلاع	 Professors lectures. The internet. 	Recommended books and references (scientific journals, reports				
Websites مواقع الويب	Electronic references, websites Virtual library Library locations in some international univers	sities				

Grading Scheme مخطط الدرجات				
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	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
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	F – Fail	راسب	(0-44)	Considerable amount of work required

مدرس المادة / م.م. ميثاق عبدالكريم عبدالواحد البريد الالكتروني / methaq90alheety@uoanbar.edu.iq