MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	Computer II			**Module Delivery**	
Module Type	**Basic**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	Uom103				
ECTS Credits	**3**				
SWL (hr/sem)	**75**				
Module Level	1		**Semester of Delivery**	2	
Administering Department	Environmental Health		**College**	Environmental Sciences	
Module Leader	RAGHEED DURAID AL-DABBAGH		**e-mail**	ragheed2019@uomosul.edu.iq	
Module Leader's Acad. Title	Assistant Teacher		**Module Leader's Qualification**	M.S.C.	
Module Tutor	DAFAR THAMER		**e-mail**	dhafar.thamer@uomosul.edu.iq	
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date			**Version Number**	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	Computer 1	**Semester**	First Class Semester One

Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	**1- the fundamental used of excel.** **2- Creating presentation using a power point program.** **3- Conducting research on the Internet.** **4- An introduction to Artificial Intelligence**
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	**1- The student will learn about the Internet, its types, and ways to troubleshoot and fix problems.** **2- The student will learn about the nature of e-commerce and its concepts.** **3- The student will learn how to troubleshoot computer errors and how to fix them. The student will learn about artificial intelligence and its uses in our daily lives and the current and future applications of artificial intelligence.** **4- The student will learn how to troubleshoot computer errors and how to fix them.** **5- The student will learn about artificial intelligence and its uses in our daily lives, current applications of artificial intelligence, the importance of artificial intelligence in society, and future aspirations for the use of artificial intelligence technologies.**
Indicative Contents المحتويات الإرشادية	**The course covers the following topics over the course of:** **The network and its Types; network components. Network Security Basics. Understanding network threats. Network Troubleshooting. (4 hours)** **Concepts of Electronic banking services this include online banking: ATM and debit card services, Phone banking, SMS banking, electronic alert, Mobile banking. (4 hours)** **Identifying and solving common hardware and software problems that computer users encounter. Basic troubleshooting techniques and tools for diagnosing and resolving issues. (8 hours)** **Definition of Al, History of Al, Al Techniques and Approaches, Challenges and Ethical Considerations. (8 hours)** **Al in smartphones and virtual assistants like Siri or Google Assistant.**

	Education, Healthcare, Finance, Transportation, Marketing and Advertising. (8 hours) **Education, Healthcare, Finance, Transportation, Marketing and Advertising. (12)** **How Al affects social, Al and international relations, Al and the future of humanity. (4 hours)** **Al ethics, privacy and surveillance, the impact of Al on the job market.** **Future trends in Al, recent research and emerging technologies. (4 hours)**

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	**Life today is unimaginable without computers. There is probably no area of life where computers are not used. One of the benefits of having computers in modern society is that they help in speeding up the tasks that need to be done. Most things are done automatically using computers; people's work speed has increased. More information is often stored on a piece of computer media, a phenomenon often known as the information explosion. Secondly, in modern society, people now enjoy more freedom. Computers allow people to access the internet where there is a huge amount of information. What's more, this information is updated by people, ensuring accuracy. Modern computer technology in the modern world has enabled the ability to mass replicate and securely store in hard disks. It has enormous processing power and storage capacity. Through the use of networks, it has become easy to access the internet and share resources. Not only that, but a huge amount of data can be retrieved and stored. For those who love games or whose work involves graphics, such as web designers and graphic designers, computers are a crucial tool in helping them perform their work and making it more enjoyable. Multimedia is also a computer-controlled combination of text, sound, graphics,**

	video, and animation. It has been widely seen in television, advertising, public information and social entertainment. It is interesting to know what the modern computer and its advanced information can offer.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	45	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	30	**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)	2, 5	LO # 1and 4
	Assignments	2	20% (20)	4,7 ,12	LO # 2, 4and 5

	Projects / Lab.	1	10% (10)	Continuous	All
	Report	0	0	0	0
Summative assessment	**Midterm Exam**	2 hr	10% (10)	7	LO # 1-4
	Final Exam	3 hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	المفردات المعطاة
Week 1	**Security and Networking: What is a network? Types of networks Basic network components. Network Security Basics. Understanding network threats. Network Troubleshooting**
Week 2	**E-Commerce: Concepts of Electronic banking services this include online banking: ATM and debit card services, Phone banking, SMS banking, electronic alert, Mobile banking**
Week 3	**Computer Troubleshooting: Identifying and solving common hardware and software problems that computer users encounter. Basic troubleshooting techniques and tools for diagnosing and resolving issues.**
Week 4	**Computer Troubleshooting: Identifying and solving common hardware and software problems that computer users encounter. Basic troubleshooting techniques and tools for diagnosing and resolving issues.**
Week 5	**Introduction to Al: Definition of Al, History of Al, Al Techniques and Approaches, Challenges and Ethical Considerations.**
Week 6	**Al in Our Daily Lives: Al in smartphones and virtual assistants like Siri or Google Assistant.)**
Week 7	**Applications of Al: Education, Healthcare, Finance, Transportation, Marketing and Advertising.**

Week 8	**Applications of Al: Education, Healthcare, Finance, Transportation, Marketing and Advertising.**
Week 9	**Al and Society: (How Al affects social, Al and international relations, Al and the future of humanity.)**
Week 10	**Al and Society: (How Al affects social, Al and international relations, Al and the future of humanity.)**
Week 11	**Ethical Challenges in Al : (Al ethics, privacy and surveillance, the impact of Al on the job market.)**
Week 12	**Ethical Challenges in Al : (Al ethics, privacy and surveillance, the impact of Al on the job market.)**
Week 13	**The Future of Al (Future trends in Al, recent research and emerging technologies.)**
Week 14	**The Future of Al (Future trends in Al, recent research and emerging technologies.)**
Week 15	**Preparatory week before the final exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	**Microsoft Excel 2016 system, its windows and worksheets**

Week 2	**Microsoft Excel 2016 system, its windows and worksheets**
Week 3	**how to insert graphs, data types, and how to use them.**
Week 4	**How to manpulaute with tables**
Week 5	**How to convert table to graphs**
Week 6	**How to convert table to graphs**
Week 7	**Microsoft power point 2016 system, its windows**
Week 8	**Explanation of PowerPoint program menus in detail**
Week 9	**Explanation of PowerPoint program menus in detail**
Week 10	**How to create a presentation in PowerPoint**
Week 11	**How to create a presentation in PowerPoint**
Week 12	**Using animations and transitions to create an interactive presentation**
Week 13	**Using animations and transitions to create an interactive presentation**
Week 14	**image processing using PowerPoint program**
Week 15	**Preparatory week before the final exam**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	**لا يوجد**	No
Recommended Texts	**1. Graham Brown, David Watson, "Cambridge IGCSE Information and Communication Technology", 3rd Edition (2020)** **2. Alan Evans, Kendall Martin, Mary Anne Poatsy, "Technology In Action Complete", 16th Edition (2020).** **3. Ahmed Banafa, "Introduction to Artificial Intelligence (AI)", 1st Edition (2024).** **4 2016 "الخضر علي الخضر بحاث " أساسيات الحاسوب** **5 2005 " الدكتور عادل عبد النور, مدخل إلى عالم الذكاء الاصطناعي**	**No**
Websites	**https://www.microsoft.com/ar/microsoft-365/powerpoint?market=er** **https://www.xda-developers.com/conditional-formatting-automate-excel-spreadsheet/**	

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	**Human cytology**			**Module Delivery**	
Module Type	**Core**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	ENV107				
ECTS Credits	**7.00**				
SWL (hr/sem)					
Module Level	Second		**Semester of Delivery**	Second	
Administering Department	Human cytology		**College**	كلية العلوم البيئية	
Module Leader	أ.م.د. رحاب عبدالجبار حامد االبكر		**e-mail**	Rehabio39@uomosul.edu.iq	
Module Leader	م. رجاء احمد يونس		**e-mail**	raja.alhasan@uomosul.edu.iq	
Module Leader's Acad. Title	أستاذ مساعد		**Module Leader's Qualification**	دكتوراه	
Module Leader's Acad. Title	مدرس		**Module Leader's Qualification**	دكتوراه	
Module Tutor	م.د. محمد يحيى علاوي م.م. عمرحماد جمعة م.م. بسمة بشار حسيب		**e-mail**		
Module Tutor			**e-mail**		
Scientific Committee Approval Date	2024/2/28		**Version Number**	1.0	

و

Relation with other Modules

العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	**Semester**	
Co-requisites module	Biology	**Semester**	First

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	**-1-Introducing the student to different cells, their different organelles, their chemical composition and the vital functions of the cell** **-2Introducing the student to the difference between normal cells and cancer cells** **-3Educating the student about diseases that cause malfunction in cell functions** **-4Giving the student a broad idea about how to maintain the health of cells and protect them from harmful influences** **-5Adopting the method of scientific participation to build the student's personality** **-6Preparing the student to be able to prepare laboratory models and examine using an electron microscope**
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	**A- Cognitive objectives** **-1What is a cell and its components** **-2The body's various defenses against damage that may affect the cellular system** **-3Preserving the human body and staying away from all environmental influences that cause diseases** **-4Knowing how cancer cells reproduce and how to prevent them** **-5Raising the individual's awareness of dangerous pollutants that are harmful to the human body and how to avoid their dangers**

Indicative Contents المحتويات الإرشادية	**-1History of the Science Development Basic Cytology (2 hours)** **-2Cytoplasm, Cell membrane (2 hours)** **-3Intercellular connections (4 hours)** **-4Ribosomes, Endoplasmic Reticulum, Golgi Complex (2 hours).** **-5Lysosomes (2 hours).** **-6Components of Cytoplasm (2 hours).** **-7Cytoplasm Function (2 hours).** **-8Heterogeneous sugars and their importance (heteropolsaccharides) (2 hours).** **-9Cell division (2 hours).** **-10Meiosis Stages (2 hours).** **-11Introduction to Cytopathology (6 hours). 12- Staining methods in Cytopathology (2 hours).**

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	**Course Skills** **-1Enabling the student to apply the theoretical material practically.** **-2The graduate should be able to think scientifically and practically** **-3To be able to solve problems and think creatively** **-4To be able to work in a team spirit.** **Using illustrative means to convey information, including** **-1Data show** **-2Classroom discussion method** **-3Conducting discussion groups among students and highlighting their points of view to encourage learning** **-4Using scientific films** **-5Homework, seminars and reports**

	-6Learning the skills of writing scientific research by arranging concepts, analyzing the results obtained and discussing them according to the theoretical concepts studied during the course.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	72	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	4
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

Module Evaluation

تقييم المادة الدراسية

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

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered

Week 1	1- المراحل التاريخية لتطور اساسيات علم الخلية History of the Science Development Basic Cytology
Week 2	السايتو بلازم Cytoplasm , جدار الخلية Cell membrane
Week 3	الارتباط والتواصل بين الخلايا Intercellular connections
Week 4	الرايبوسومات Ribosomes , الشبكة الاندو بلازمية Endoplasmic Reticulum , جهاز كولجي Golgi Complex
Week 5	الجسيمات المحللة Lysosomes.
Week 6	مكونات السايتوبلازم GYTOPLASMIC INCLUSONS .
Week 7	وظيفية السايتوبلازم Cytoplasm Function .
Week 8	السكريات الغير متجانسة واهميتها heteropolysaccharides.
Week 9	الانقسام الخلوي Cell division.
Week 10	مراحل الانقسام Meiosis Stages.
Week 11	مدخل الى علم الخلية المرضي Cytopathology
Week 12	مدخل الى علم الخلية المرضي Cytopathology
Week 13	مدخل الى علم الخلية المرضي Cytopathology
Week 14	الصبغات المستخدمة في علم الخلية المرضي Staining methods in Cytopathology
Week 15	الصبغات المستخدمة في علم الخلية المرضي Staining methods in Cytopathology
Week 16	الامتحان النهائي

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Cell structure and functions
Week 2	Functions of cell organelles
Week 3	Types of human cells
Week 4	Nerve cells
Week 5	Blood cells

Week 6	Blood cells
Week 7	Stem cells
Week 8	Bone cells
Week 9	Cartilage cells
Week 10	Skin cells
Week 11	Sex cells
Week 12	Muscle cells
Week 13	Sensory cells
Week 14	Cell division
Week 15	DNA synthesis

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Book of cytology and pathological cytology and modern research	Yes
Recommended Texts	Lectures from similar universities	
Websites	Websites from the net	

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	كيمياء عضوية			**Module Delivery**	
Module Type	B			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	Env104				
ECTS Credits	7				
SWL (hr/sem)	175				
Module Level	One		**Semester of Delivery**	one	
Administering Department	علوم بيئة		**College**	كلية علوم البيئة وتقاناتها	
Module Leader	م. د. لقاء سعيد عبد الله		**e-mail**	liqaasaeed@uomosul.edu.iq	
	م. م. سهى سعد علي			suhasaaad@uomosul.edu.iq	
Module Leader's Acad. Title	مدرس		**Module Leader's Qualification**	دكتوراه في علوم الكيمياء	
Module Tutor	م. م. عمر ادريس صالح		**e-mail**	omersaleh@uomosul.edu.iq	
Peer Reviewer Name	م. م. سهى سعد علي		**e-mail**	suhasaaad@uomosul.edu.iq	
Scientific Committee Approval Date	1/10/2023		**Version Number**	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	لا يوجد	**Semester**	
Co-requisites module	كيمياء تحليلية	**Semester**	الاولى

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	1- Knowing the classes of organic compounds based on the active and substituent group in the compound. 2- Knowing how to write molecular, structural and spatial formulas for organic compounds. 3- The student should master how to distinguish between aliphatic compounds such as alkanes, alkenes and alkynes. 4- The student should know how to distinguish between cyclic and non-cyclic compounds. 5- Knowing how to distinguish between aliphatic and aromatic compounds.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- The student learns how to write organic compounds because most of the materials that pollute the environment are organic chemicals. 2- The student learns to name organic compounds using the common and systematic nomenclature. 3- The student learns to write the equations of the reactions of organic compounds. 4- The student learns how to diagnose these organic compounds. 5- Knowing how to purify organic compounds.
Indicative Contents المحتويات الإرشادية	- Aliphatic hydrocarbons. - Alkanes. - Naming of alkanes. - Reactions of alkanes. - Methods of preparation of alkanes. Delicious alkanes, Naming of delicious alkanes Alkenes, Naming alkenes Physical accuracy of alkenes Reactions of alkenes Preparation of alkenes Delicious alkenes, Naming of delicious alkenes Alkenes, Naming alkenes Physical accuracy of alkenes, Preparation of alkenes Alkenes dienes, Naming alkenes dienes Aromatic hydrocarbons, benzene and its derivatives Substitution reactions on the benzene ring

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	-1Give an overview of organic chemistry and some of the types of these compounds and their importance in various sciences. .Clarify the relationship of organic chemistry with other chemistry sciences -2 Adopt group work in the laboratory by dividing students into groups, each group is -3 assigned to perform laboratory tasks according to the nature of the lecture given in .the laboratory Match the theoretical lectures given with the scientific material given in the -4 .laboratory

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	93	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	6
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	82	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	5
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, 10	5, 6 and 7
	Assignments	2	10% (10)	2, 10	8
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	2
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	1-5
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Aliphatic hydrocarbons: alkanes and functional groups (substituted)
Week 2	Naming of alkanes, physical properties of alkanes
Week 3	Chemical reactions of alkanes
Week 4	Preparation of alkanes
Week 5	Cycloalkanes, naming of cycloalkanes
Week 6	Alkenes, naming of alkenes
Week 7	Physical properties of alkenes
Week 8	Reactions of alkenes
Week 9	Preparation of alkenes
Week 10	Cycloalkenes, naming of cycloalkenes
Week 11	Alkynes, naming of alkynes
Week 12	Physical properties of alkynes, preparation of alkynes
Week 13	Cycloalkenes and dienes, naming of cycloalkenes and dienes
Week 14	Aromatic hydrocarbons, benzene and its derivatives
Week 15	Substitution reactions on the benzene ring

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Laboratory Instructions and Precautions for Organic Chemistry Lab
Week 2	Introduction to Organic Chemistry
Week 3	Melting Point Experiment
Week 4	Boiling Point Experiment
Week 5	Simple Distillation Experiment
Week 6	Fractional Distillation Experiment
Week 7	Steam Distillation Experiment
Week 8	Diffuse Pressure Distillation Experiment
Week 9	Comprehensive Exam on the Above Subject

Week 10	Purification of Organic Materials
Week 11	Recrystallization Experiment for Solids
Week 12	Sublimation Experiment
Week 13	Solvent Extraction Experiment
Week 14	Comprehensive Exam on the Above Purification Experiments
Week 15	Discussion of the Scientific Material for the Course

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Organic Chemistry Basics	
Recommended Texts	Organic Chemistry Book, by Morrison and Boyd	
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 Language**			**Module Delivery**	
Module Type	**Basic**			☒ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**UOM102**				
ECTS Credits	**2**				
SWL (hr/sem)	**50**				
Module Level		1	**Semester of Delivery**		2
Administering Department		Type Dept. Code	**College**	Type College Code	
Module Leader	Wissam Saeed		**e-mail**		
Module Leader's Acad. Title		Lecturer	**Module Leader's Qualification**		M.A.
Module Tutor	Name (if available)		**e-mail**	E-mail	
Peer Reviewer Name		Name	**e-mail**	E-mail	
Scientific Committee Approval Date		21/06/2023	**Version Number**		1.0

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

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	1. To support the highest degree of academic achievement by students who are not native speakers of English. 2. To improve basic English skills. 3. To determine how words function in a sentence. 4. To encourage students to express themselves in English. 5. To understand negatives and questions in English. 6. This course introduces the principles of academic writing.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Identify the main parts of speech in English. Explain English pronouns and how to use them. Illustrate English adjectives and adverbs. Explain English prepositions Discuss conversation skills and encouraging students to participate in a dialogue. Improve the pronunciation skills of students. Introduce the main functions of English grammar. Describe verb to be. Illustrate English present simple tense. Discuss regular and irregular verbs. Describe English past simple tense. Identify Negatives and Question words. Discuss present continuous tense. Explain requests and offers. Review types of sentences in English.

Indicative Contents المحتويات الإرشادية	Indicative content includes the following. Part A- Parts of speech: Introduction - Pronouns (definition, types, and use of pronouns) - Adjectives(definition, types, and use of adjectives) – Adverbs (definition, types, and use of adverbs) – Prepositions (definition, types, and use of prepositions) [14 hrs] Part B- Conversation skills: Encouraging students to express themselves in English – to talk about science using English – improvement of pronunciation skills [4 hrs] Revision problem classes [2 hrs] Part C- English grammar: Introduction - Verb to be – Present continuous tense -Negatives – Questions- Present simple tense –Question words –Past simple tense- Regular and irregular verbs - Requests and offers –Types of sentences in English [22 hrs]

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Some effective strategies will be adopted in delivering this module such as, focusing on academic language, vocabulary exercises. Students will be given an opportunity to produce language through reading and speaking with receiving direct feedback to increase their comprehension and improve their language skills. This will be achieved through classes, group discussion, solving exercises, participation in conversations, interactive learning and writing 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	38	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	12	**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	4	5% (20)	3, 5, 10	LO # 1, 2, ,3, 6, 8, 9, 10, and 13
	Assignments	2	5% (10)	2, 7, 12	LO # 2, 4 , 5, 10, 11, 12, 13 and 14
	Projects / Lab.	0	0% (0)		
	Report	1	10% (10)	13	LO # 1, 6 and 12
Summative assessment	Midterm Exam	2 hr	10% (10)	7	LO # 1-6
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Identify the main parts of speech in English.
Week 2	Explain English pronouns and prepositions.
Week 3	Illustrate English adjectives.
Week 4	Illustrate English adverbs.
Week 5	Discuss present perfect tense.
Week 6	Improve the pronunciation skills of students.
Week 7	Mid-term Exam
Week 8	Introduce the main functions of English grammar.
Week 9	Describe verb to be.
Week 10	Illustrate English present simple tense.
Week 11	Discuss regular and irregular verbs.
Week 12	Describe English past simple tense.
Week 13	Identify Negatives and Question words.
Week 14	Discuss present continuous tense.
Week 15	Discuss conversation skills
Week 16	**The final Exam**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Liz and John Soars, 2010, Headway, Oxford University Press.	No
Recommended Texts	English Grammar in Use, Raymond Murphy , 2nd edition, Cambridge University Press.	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	**فيزياء طبية**			**Module Delivery**	
Module Type	Core			☒ **Theory** ☐ **Lecture** ☒ **Lab** ☐ **Tutorial** ☒ **Practical** ☐ **Seminar**	
Module Code	Env**109**				
ECTS Credits	7				
SWL (hr/sem)	175				
Module Level	Two		**Semester of Delivery**	Four	
Administering Department	الصحة البيئية		**College**	كلية العلوم البيئية	
Module Leader	د.عمر كريم يونس د. أسماء عماد		**e-mail**	omer.abbosh@uomosul.edu.iq asmaaemad@uomosul.edu.iq	
Module Leader's Acad. Title	مدرس		**Module Leader's Qualification**	دكتوراه	
Module Tutor			**e-mail**		
Peer Reviewer Name	م.م. رحاب رعد داؤود م.م. همسة برهان محمد م.م. زينب محمود محمد		**e-mail**	Rihab@uomosul.edu.iq	
Scientific Committee Approval Date	13-2-2024		**Version Number**	1.0	

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

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	1- Learn about the basics of physics in general and medical physics in particular. 2- Giving a general idea of the importance of studying medical physics. 3- Studying the basic branches of medical physics. 4- Identify the sciences related to medical physics. 5- Identify the most important applications and uses of medical physics 6- Identify ways to apply the basics of proper handling of medical physical influences. 7- Proving the ability of medical physics to provide real protection for humans from the effects of radioactive materials. 8- Arrangement of physical effects that have serious implications in medical physics
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- Identify the principles and foundations of physics in general 2- Identify the principles and foundations of medical physics in particular. 3- Knowledge of the main branches of medical physics. 4- Study the precise scientific concept of stimulated radiation. 5- The most important applications of lasers in medical sciences 6- Identify the mechanisms for using these indicators according to their degree of seriousness in useful applications. 7- Learn about the applications of physics in the field of health 8- Identify the most important devices in the field of environmental health.
Indicative Contents المحتويات الإرشادية	1- Introduction to medical physics -Branches of medical physics according to approved academic classifications 2- Identify the scientific meaning of laser beams -Types of lasers -Semiconductor laser -Solid state materials -Liquid state lasers -CO2 laser 3- Identify methods of dealing with sound waves. -Laboratory handling -Practical dealing -Dealing with noise polluted areas. 4- Learn about heat therapy 5- Identifying EKG devices.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1- Give a brief overview of medical physics. 2- Explaining the relationship of medical physics with other sciences, such as chemistry, life science, and environmental science, and supporting that relationship with illustrative pictures.

	3- Study of several systems for laser activity. 4- Study the applicability of thermal physics in various fields. 5- The theoretical lectures given are consistent with the scientific material given in the laboratory.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	108	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	67	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	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, 10	5, 6 and 7
	Assignments	2	10% (10)	2, 12	8
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	2
Summative assessment	**Midterm Exam**	2 hr	10% (10)	7	1-5
	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 medical physics
Week 2	Branches of medical physics
Week 3	Natural radioactivity
Week 4	Radioactive decay chains
Week 5	Industrial radioactivity
Week 6	Laser science and its applications -1
Week 7	Laser science and its applications -2
Week 8	Sound waves and their applications
Week 9	Apply sound waves
Week 10	Ultrasound application
Week 11	Heat wave applications
Week 12	Applications of the basics of thermal physics in the field of environmental health
Week 13	Characterization of ECG devices
Week 14	Characterization of EEG devices
Week 15	(Final Exam)
Week 16	

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Simple pendulum
Week 2	Prove Hooke's law
Week 3	The coefficient of legitimate friction
Week 4	The refractive index of the prism
Week 5	Index of refraction of glass (glass block)
Week 6	Focal length of a convex lens
Week 7	Speed of sound using a resonant tube closed at one end
Week 8	Ohm's law
Week 9	Determine the viscosity coefficient of liquids
Week 10	Archimedes' rule
Week 11	Specific heat of a solid
Week 12	Thermo-mechanical equivalent (Joule equivalent)

Week 13	Measuring the focal length of a concave mirror
Week 14	Determine the frequency of a tuning fork using a sonometer
Week 15	final exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	D.W. Preston and E.R. Dietz, The Art of Experimental Physics. Wiley, 1991	نعم
Recommended Texts	A.C. Melissinos, Experiments in Modern Physics. Academic Press, 1973. Somewhat dated (especially electronics section), but contains excellent descriptions of many experiments typically carried out in an advanced physics lab	
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	**Public health**			**Module Delivery**	
Module Type	**Core**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	ENV205				
ECTS Credits	**3.00**				
SWL (hr/sem)					
Module Level	Second		**Semester of Delivery**	**Three**	
Administering Department	Environmental Health		**College**	College of Environmental Sciences	
Module Leader	Ashraf Saddik Alias		**e-mail**	ashraf.saddik@uomosul.edu.iq	
Module Leader	Liqaa Saeed Abdullah		**e-mail**	liqaasaeed@uomosul.edu.iq	
Module Leader's Acad. Title	Assistant Professor		**Module Leader's Qualification**	Master's	
Module Leader's Acad. Title	Lecturer		**Module Leader's Qualification**	PhD	
Module Tutor	practical teacher		**e-mail**	NO	
Peer Reviewer Name	practical teacher		**e-mail**	No	
Peer Reviewer Name	practical teacher		**e-mail**	No	
Scientific Committee Approval Date	18-9-2024		**Version Number**	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	**Semester**	
Co-requisites module	Water, air and food pollution	**Semester**	Six

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	The goal of public health is to prevent and manage diseases, injuries, and other health conditions by monitoring and controlling conditions and promoting and supporting healthy behaviours, the environment, and the community.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- Learn the concept of public health 2- Health and health care and its relationship to society and the environment 3- Health care and its importance to the individual and society 4- Levels of health care and how to evaluate them. 5- The importance of personal health and its impact on the individual 6- Learn methods of disinfection and sterilization 7- Disease and infection and what is the difference between them 8- Immunity and its relationship to health 9- Preventive health and its impact on the individual and society 10- Combating diseases such as malaria, schistosomiasis, intestinal worms, tuberculosis, tetanus, AIDS, and mental illnesses. 11- Ways to deal with medical cases at home.
Indicative Contents المحتويات الإرشادية	1- A historical overview of the development of the concept of public health (2) 2- Health and health care (2) 3- Health care and its importance to the individual and society (2) 4- Levels of health care. (2) 5- The importance of personal health. (2) 6- Disinfection and sterilization. (4) 7- Disease and infection (2) 8- Immunity. (4) 9- Preventive health (2) 10- Combating diseases such as malaria, schistosomiasis, intestinal worms, tuberculosis, tetanus, AIDS, and mental illness. (6) 11- Managing medical conditions at home. (2)

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1- The student can identify public health and its relationship to other sciences. 1- The student uses theoretical concepts in practical reality.

	2- Learn the skills required to enable him to find the defect in the health of the surrounding environment and find appropriate solutions for it 3- Use illustrative means to convey information, including 1- Data show 2- Classroom discussion method 3- Conduct discussion groups among students and highlight their points of view to encourage learning 4- Use scientific films 5- Homework 6- Learn the skills of writing scientific research by arranging concepts, analyzing the results obtained and discussing them according to the theoretical concepts that he studied during the course.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	33	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	42	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	2
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	75		

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

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Historical view of the development of the concept of public health
Week 2	Health and health care
Week 3	Health care and its importance to the individual and society
Week 4	Health care levels.
Week 5	The importance of personal health.
Week 6	Disinfection and sterilization.
Week 7	Disinfection and sterilization.
Week 8	Disease and infection
Week 9	Immunity.
Week 10	Immunity.
Week 11	Preventive health
Week 12	Combating diseases such as malaria, schistosomiasis, intestinal worms, tuberculosis, tetanus and AIDS, and mental illness.
Week 13	Combating diseases such as malaria, schistosomiasis, intestinal worms, tuberculosis, tetanus and AIDS, and mental illness.
Week 14	Combating diseases such as malaria, schistosomiasis, intestinal worms, tuberculosis, tetanus and AIDS, and mental illness.
Week 15	Managing medical cases at home.
Week 16	**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	
Week 8	
Week 9	
Week 10	
Week 11	
Week 12	
Week 13	
Week 14	
Week 15	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Principles of Public Health and Safety https://books-library.net/files/books-library.online-06192004Bz7P0.pdf	Yes
Recommended Texts		
Websites		

Grading Scheme مخطط الدرجات				
Group	**Grade**	التقدير	**Marks (%)**	**Definition**
Success Group (50 - 100)	**A** – Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C – Good	جيد	70 - 79	Sound work with notable errors
	D – Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E – Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX** – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

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