

وصف البرنامج الاكاديمي

اسم الجامعة : جامعة العلوم العراقية

الكلية : كلية العلوم

القسم العلمي : علوم الادلة الجنائية

اسم البرنامج الاكاديمي او المهني : بكالوريوس علوم الادلة الجنائية

اسم الشهادة النهائية : بكالوريوس علوم في علوم الادلة الجنائية

النظام الدراسي : نظام المقررات الدراسية

تاريخ اعداد الوصف : 1/12/2025

تاريخ ملء الملف : 1/12/2025

اللجنة المركزية لضمان الجودة لمسار بولونيا

التوقيع :  : التوقيع :  : التوقيع : 

اسم رئيس اللجنة : د. كوثر محمود : اسم العضو : د. ناعبة الرضوي رشيد : اسم العضو : أ. د. صباح ناصر حسين

التوقيع :

اسم العضو : أ. د. محمد شفيق : اسم العضو : أ. د. محمد شفيق : اسم العضو : أ. د. محمد شفيق

اللجنة الفرعية لضمان الجودة لمسار بولونيا

التوقيع :  : التوقيع :  : التوقيع : 

اسم رئيس اللجنة : اسم العضو : د. علاء عبد الله : اسم العضو : هادي بصير

دقق الملف من قبل :

شعبة ضمان الجودة والاداء الجامعي

اسم مدير شعبة ضمان الجودة والاداء الجامعي :

التاريخ : التوقيع :

Iraqi University of Science / College of Science

جامعة العلوم العراقية / كلية العلوم



First Cycle – Bachelor’s Degree (B.Sc.) Department of
forensic Sciences
College of Sciences



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1. **Mission & Vision Statement**

Vision Statement

Our vision is to inspire new forensic scientists to search for the truth through science and shape the future of the field using new knowledge and innovation. The forensic academic staff of the (Iraqi University of Science) University believes that students come to understand the discipline of forensic through a combination of course work, laboratory experiences, research, and fieldwork. The combination of instructional methods leads students to a balanced understanding of the scientific methods used by biologists to make observations, develop insights and create theories about the living organisms that populate our planet. Small class sizes within the biology program foster a close working relationship between academic staff and students in an informal and nurturing atmosphere.

Mission Statement

This program aims to (1) provide exemplary forensic science education in Criminalistics, including DNA identification analysis, at the graduate level; (2) select students who have successfully completed an undergraduate science degree with a strong GPA and who aspire to become the future forensic scientists in the various forensic science laboratories; and (3) develop in these select students the skill necessary for working in this profession including ethics, integrity, the ability to devise innovative methods and techniques and the capacity to integrate new technology. This comprehensive program incorporates

a unique curriculum that balances breadth and depth of study through scholarly coursework which incorporates the logic and workings of the criminal justice system. In depth coursework covers the theoretical underpinnings of the biological and physical sciences as used in the collection, analysis, interpretation, reporting, and testimony of evidence.

2. Program Specification

Programme code:	BSc-FOR	ECTS	240
Duration:	4 levels, 8 Semesters	Method of Attendance:	Full Time

FORENSIC student is a wonderfully wide-ranging subject, and Leeds, with one of the IRAQ's' largest and most diverse forensic teaching groups, is well equipped to deliver. The emphasis of the programme is the whole organism to which everything is related, be it the molecules that form proteins or communities of organisms in an ecosystem. The degree is popular - –or some it's'the breadth of the subject that appeals, for others it's'a path to specialization. All students have the opportunity to transfer onto our specialist degrees in Genetics, chemistry, and Ecology at the end of the first year.

Level 1 exposes students to the fundamentals of Biology, suitable for progression to all programmes within the biology programme group. Programme-specific core topics are covered at Level 2 preparing for research-led subject specialist modules at Levels 3 and 4. A Leeds Biology graduate is therefore trained to appreciate how research informs teaching, according to the University and School Mission statements.

At Levels 2, 3 and 4 students are free to choose more than half of their module credits with the proviso a range of modules are selected that reflect the complexity of life forms from molecules, through organisms, both plants and animals, to populations to ensure the breadth of knowledge expected of a graduate with a biology degree.

The research ethos is developed and fostered from the start via practicals, which are either embedded in lecture modules or taught in dedicated practical modules, research seminars and tutorials. There is a compulsory field course in Level 1, which students must pass in order to progress into Level 2, and optional field courses in Levels 2, 3 and 4. At Level 4 all students carry out an independent research project, which may be a xx credit library or data analysis project, or a xx credit field or laboratory based project.

Academic tutorials are held at Levels 1 and 2 with the same tutor, who is also the personal tutor, providing continuity and progressive guidance. Level 1 and 2 tutorials include a number of workshops to teach skills, e.g. library use and presentation skills, followed by assessed exercises, e.g. essays and talks, as opportunities to practice these skills in a subject-specific context.

International years and Industrial placements are also offered and individual needs are discussed with the appropriate tutor and accommodated wherever possible.

3. Program Goals

1. To provide a comprehensive education in forensic that stresses scientific reasoning and problem solving across the spectrum of disciplines within forensic
2. Show understanding of the role of physical forensic methods in forensic practice.
3. Demonstrate knowledge of the primary evidence types, their transfer and persistence.
4. Demonstrate understanding of emerging developments in forensic science.
5. Consider a broad range of forensic techniques to determine the examination strategy, sequencing, and probative value.
6. . Demonstrate understanding of quality standards in respect of scene examination.

4. Student Learning Outcomes

1- While all toxicology addresses the adverse effects that agents have on living organisms, clinical and medical toxicology play unique roles not often encountered in traditional toxicology practice or research.

2-The subset of toxicology focus on the immediate needs of patients suspected of being poisoned.

3-The toxicology require extensive knowledge of diseases and etiology as well as a thorough understanding of the effects of potential poisons, both of which are commonly used to make diagnoses.

4- medical toxicologists must consider three points—the substance involved, the toxic response, and the mechanism by which it occurs—in order to determine the best treatment options for each patient.

5- introduce participants to the basics of clinical and medical toxicology along with new and old tools that may be used by the clinical toxicologist.

Outcome 1

Identification of Complex Relationships

Graduates will be able to illustrate the structure and function of cellular components and explain how they interact in a living cell.

Outcome 2

Oral and Written Communication

Graduates will be able to formally communicate the results of biological investigations using both oral and written communication skills.

Outcome 3

Laboratory and Field Studies

Graduates will be able to perform laboratory experiments and field studies, by using scientific equipment and computer technology while observing appropriate safety protocols.

Outcome 4

Scientific Knowledge

Graduates will be able to demonstrate a balanced concept of how scientific knowledge develops, including the historical development of foundational theories and laws and the nature of science.

Outcome 5

Data Analyses

Graduates will be able to demonstrate scientific quantitative skills, such as the ability to conduct simple data analyses.

Outcome 6

Critical Thinking

Graduates will be able to use critical-thinking and problem-solving skills to develop a research project and/or paper.

5. Academic Staff

- 1- Prof. Dr. Basima Mohsin sarhan | Prof. in inorganic chemistry | Prof.
Email: basima.m.s@baghdadcollege.edu.iq
- 2- Asst. Prof. Majed Hassan Karbon | Prof in Chemistry Biochemistry | prof.
Email: dr.majidkarbon@baghdadcollege.edu.iq
- 3- Zainab.Sadiq.cheether | MSc.in Physiology, Biochemistry and Pharmacology | Assistant
Lecture
Email: zainab.altememi@baghdadcollege.edu.iq
- 4- Ayat kareem Berilyk | MSc.in Microbiology | Assistant Lecture
Email: ayaatkarem@baghdadcollege.edu.iq
- 5- Mohammed Hameed abdulhasan | MSc.in Medical Instrumentation | Assistant Lecture
Email: M.hameed.hassen97@baghdadcollege.edu.iq
- 6- Dr. Mohammed Abdulfatah A.Rahman | PhD. in Molecular Genetics| Lecturer
Email: dr.mohammed@baghdadcollege.edu.iq
- 7- Hiba qahtan abduljabbar | MSc.in Computer Science Data Security | Assistant Lecture
Email: hibaalmufty@yahoo.com
- 8- Marwa Jassim Abbood | MSc.in Specialization Criminal Law | Assistant Lecture
Email: marwajaj94@baghdadcollege.edu.iq
- 9- Hamza Yasser Salman | | MSc.in Mathematics Differential Equations | Assistant Lecture
Email: hamzayasser@baghdadcollege.edu.iq

6. Credits, Grading and GPA

Credits

(Iraqi University of Science) is following the Bologna Process with the European Credit Transfer System (ECTS) credit system. The total degree program number of ECTS is 240, 30 ECTS per semester. 1 ECTS is equivalent to 25 hrs student workload, including structured and unstructured workload.

Grading

Before the evaluation, the results are divided into two subgroups: pass and fail. Therefore, the results are independent of the students who failed a course. The grading system is defined as follows:

GRADING SCHEME				
مخطط الدرجات				
Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 – 100	Outstanding Performance
	B - Very Good	جأد جدا	80 – 89	Above average with some errors
	C - Good	جأد	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 - قأد المعالفة	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note:				
Number 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.				

Calculation of the Cumulative Grade Point Average (CGPA)

- The CGPA is calculated by the summation of each module score multiplied by its ECTS, all are divided by the program total ECTS.

CGPA of a 4-year B.Sc. degree:

$$CGPA = [(1st^{m}odule score \times ECTS) + (2nd^{m}odule score \times ECTS) + \dots] / 240$$

7. Curriculum/Modules

Semester 1 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
FOR1104	General Biology 1	86	89	7.00	C	
FOR1105	General Chemistry	90	85	7.00	C	
kus1102	Basics of computer science	58	17	3.00	C	
kus1101	mathematics	72	53	5.00	S	
KUS1103	Democracy and human rights	44	6	2.00	B	
FOR1106	Principles of forensic science	72	78	6.00	B	

Semester 2 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
FOR007	General Biology 2	100	75	7.00	C	General Biology 1
FOR008	Organic Chemistry	100	75	7.00	C	General Chemistry
FOR011	Languages / English	58	17	3.00	C	
KUS012	General Physics	100	75	7.00	S	
KUS010	Languages / Arabic	58	17	3.00	B	
FOR009	Legal regulation of the criminal expert	58	17	3.00	B	

Semester 3 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
FOR013	Biochemistry	86	64	6.00	C	
FOR114	Genetics	86	64	6.00	C	
FOR015	Anatomy and physiology	86	64	6.00	C	

FOR016	fluids Secretions and vital	86	64	6.00	C	
FOR017	forensic applications Statistics and	42	33	3.00	B	
FOR018	crime since	42	33	3.00	B	

Semester 4 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
FOR119	Biology Molecular	86	89	7.00	C	
FOR120	Analytical Chemistry	86	89	7.00	C	
FOR021	Laboratory equipment and techniques	86	64	6.00	S	
FOR022	applications Forensic computer	58	17	3.00	C	
FOR023	criminal investigation Investigation and	72	28	4.00	B	
FOR124	English language 1	44	31	3.00	B	

Semester 5 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
FOR125	Molecular application	100	75	7.00	C	
FOR126	Analytical Chemistry	100	75	7.00	C	
FOR027	Forensic chemistry	72	53	5.00	C	
FOR028	Chemical and microscopic detection methods	72	53	5.00	C	
FOR029	Introduction to explosive materials and booby traps	44	31	3.00	S	
FOR130	English language	30	45	3.00	B	

Semester 6 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
FOR131	Introduction to toxins and drugs	86	89	7.00	C	
FOR032	The effects of criminal evidence	58	42	4.00	C	
FOR033	Criminal insects	86	89	7.00	C	
FOR034	Genetic statistical analysis and databases	58	42	4.00	C	
FOR035	Inks and dyes and their warnings	72	28	4.00	S	
FOR036	tissue , haier and fibers science	58	42	4.00	S	

Semester 7 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
FOR037	enviromental toxins and distrial pollution	86	89	7.00	C	
FOR038	identify difintion tools	86	89	7.00	C	
FOR039	bioinformatics	86	89	7.00	C	
FOR040	Basics of fingerprint analysis and fonts	86	64	6.00	C	
FOR141	english language	44	31	3.00	B	
FOR037	enviromental toxins and distrial pollution	86	89	7.00	C	

Semester 8 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
FOR042	Principles of Medical jurisprudence	114	86	8.00	C	
FOR043	Identity Definition Tool and Fingerprints	114	86	8.00	C	
FOR044	Ethics of scientific research	44	56	4.00	S	
FOR045	Cybercrime	72	78	6.00	B	

FOR046	Graduation project	86	14	4.00	B	
FOR042	Principles of Medical jurisprudence	114	86	8.00	C	

8. Contact

Program Manager:

Basima.m. sarhan | Prof. in inorganic chemistry | Prof.

Email: basima.m.s@baghdadcollege.edu.iq

Mobile no.:964-07902490161

Program Coordinator:

Basima.m. sarhan | Ph.D. in inorganic chemistry | Prof.

Email: basima.m.s@baghdadcollege.edu.iq

Mobile no.:964-07902490161



Republic of Iraq - Ministry of Higher Education and Scientific Research
 Al-Karkh University of science
 Bachelor's degree in Forensic science (First cycle)
 Four years (Eight semesters) - 240 ECTS credits - 1 ECTS = 25hr
 Program Curriculum (2023 - 2024)

جمهورية العراق - وزارة التعليم العالي والبحث العلمي
 جامعة الكرخ للعلوم
 بكالوريوس في علوم الأدلة الجنائية (الدورة الأولى)
 أربع سنوات (ثمانية فصول دراسية) - 240 وحدة ائتمانية - كل وحدة ائتمانية = 25 ساعة
 المنهاج الدراسي للعام 2023-2024



Level	Semester	No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	SSWL (hr/w)							Exam hr/sem	SSWL hr/sem	USSW L hr/sem	SWL hr/sem	ECTS	Module Type	Prerequisite Module(s) Code
							CL (hr/w)	Lect (hr/w)	Lab (hr/w)	Pr (hr/w)	Tut (hr/w)	Semn (hr/w)								
UGI	One	1	FOR1101	General Biology 1	احياء عام 1	English	2		2			2	3	87	88	175	7.00	C		
		2	FOR1102	General Chemistry	كيمياء عام	English	2		2				2	3	86	89	175	7.00	C	
		3	FOR12011	Fundamental of Computer Science	اساسيات علم الحاسوب	English	2		2					3	86	16	102	4.08	C	
		4	KUS1101	mathematics	رياضيات	English	2				2			3	59	66	125	5.00	B	
		5	FOR1105	Freedoms and human rights	حريات وحقوق الانسان	Arabic	2				1			3	45	5	50	2.00	B	
		6	FOR1106	Principles of forensic science	مدائى علم الادلة الجنائية	English	2					2		3	59	91	150	6.00	C	
						Total	12	0	6	0	7	2	18	86	355	777	31.08			
	Two	1	FOR1217	General Biology 2	احياء عام 2	English	2		2				3	87	113	200	8.00	C		
		2	FOR1228	Organic Chemistry	كيمياء عضوية	English	2		2				3	87	113	200	8.00	C		
		3	KUS1102	Arabic Language	اللغة العربية	Arabic	2				2			3	87	88	175	7.00	C	
		4	FOR1209	General Physics	فيزياء عام	English	2		2			1		3	54	5	50	2.00	S	
		5	KUS1101	English Language	اللغة الانكليزية	English	2		2			1		3	54	5	50	2.00	B	
6		FOR12012	Legal regulation of the criminal ex	التنظيم القانوني للجدير الجنائي	Arabic	2					1		3	44	56	100	4.00	B		
					Total	12	0	8	0	9	0	18	413	380	775	31.00				
UGII	Three	1	FOR23013	Biochemistry	الكيمياء الحيائية	English	3		2				2	86	64	150	6.00	C		
		2	FOR23114	Genetics	الوراثة	English	3		2				2	86	64	150	6.00	C		
		3	FOR23015	Anatomy and physiology	التشريح والفسلجة	English	3		2		1		2	86	64	150	6.00	C		
		4	FOR23016	Secretions and vital fluids	الافرازات والموائل الحيوية	English	3		2		1		2	86	64	150	6.00	C		
		5	FOR23017	Statistics and forensic applications	علم الاحصاء والتطبيقات الجنائية	English	2					1		2	42	33	75	3.00	B	
		6	FOR23018	crime science	مدرج جريمة	English	2						1	2	42	33	75	3.00	B	
						Total	16	0	8	0	5	1	12	428	332	750	30.00			
	Four	1	FOR24119	Molecular Biology	الاحياء الجزيئي	English	3		2				2	86	89	175	7.00	C		
		2	FOR24120	Analytical Chemistry	الكيمياء التحليلية	English	3		2		1		2	86	89	175	7.00	C		
		3	FOR24021	laboratory equipment and technique	اجهزة وتقنيات مختبرية	English	2		2			1		2	86	64	150	6.00	S	
		4	FOR24022	Forensic computer applications	تطبيقات الحاسوب الجنائية	English	2		2				2	58	17	75	3.00	C		
		5	FOR24023	estigation and criminal investigat	التحقيق والبحث الجنائي	Arabic	2		2			1		2	72	28	100	4.00	B	
6		FOR24124	english language 1	لغة الانكليزية 1	English	2						1	2	44	31	75	3.00	B		
					Total	14	0	10	0	5	0	12	432	318	750	30.00				
UGIII	Five	3	FOR35027	Foneric chemistry	الكيمياء الجنائية	English	3		2			1	2	72	53	125	5.00	C		
		4	FOR35028	tical and microscopic detection me	طرق الكشف الكميوي والمجوري	English	2		2			1	2	72	53	125	5.00	C		
		5	FOR35029	tion to explosive materials and bo	بقصة في المواد المتفجرة والتماس الجنائية	Arabic	2					1	2	44	31	75	3.00	S		
		6	FOR35130	english language 2	لغة انكليزية 2	English	2						2	30	45	75	3.00	B		
							Total	15	0	8	0	7	0	12	418	332	750	30.00		
		Six	1	FOR36131	Introduction to toxins and drugs	مقدمة في السموم والمخدرات	English	3		2				2	86	89	175	7.00	C	
	2		FOR36032	The effects of criminal evidence	اثر الادلة الجنائية	English	3		2			1		2	58	42	100	4.00	C	
	3		FOR36033	Criminal insects	الحشرات الجنائية	English	2		2			1	1	2	86	89	175	7.00	C	
	4		FOR36034	Genetic statistical analysis and da	التحليل الاحصائي الوراثي وقواعد البيانات	English	2		1				2	58	42	100	4.00	C		
	5		FOR36035	Inks and dyes and their warnings	الانحار والاصباغ ومخاطرها	English	2				2		2	72	28	100	4.00	S		
	6		FOR36036	issue , hair and fibers science	انسجة وشعر وجلد	English	2					1	1	2	58	42	100	4.00	S	
						Total	14	1	4	2	6	2	12	418	332	750	30.00			
UGIV	Seven	1	FOR47037	ronmental toxins and distrial pollut	السموم البيئية والتلوث الصناعي	English	3		2			1	2	86	89	175	7.00	C		
		2	FOR47038	identify dftinction tools	اوترات تعريف البويه	English	2		2			2	2	86	89	175	7.00	C		
		3	FOR47039	bioinformatics	المعلومات الحيوية	English	3		2				1	2	86	89	175	7.00	C	
		4	FOR47040	stics of fingerprint analysis and for	اساسيات تحليل بصمة الاصابع والمخروط	English	3		2				1	2	86	64	150	6.00	C	
		5	FOR47141	english language 3	لغة انكليزية 3	English	2						1	2	44	31	75	3.00	B	
							Total	13	0	8	0	3	3	10	388	362	750	30.0		
	Eight	1	FOR48042	inciples of Medical Jurispruden	مدائى الطب الشرعي	English	3		2			2	2	114	86	200	8.00	C		
		2	FOR48043	ity Definition Tool and Fingerrp	مقارنة المخروط و القويمة	Arabic	3		2			2	2	114	86	200	8.00	C		
		3	FOR48044	Ethicos of scientific research	اخلاقيات البحث العلمي	Arabic	2					1	2	44	56	100	4.00	S		
		4	FOR48045	Cybercrime	التجريمه الالكترونية	English	2					1	2	2	72	78	150	6.00	B	
		5	FOR48046	Graduation project	مشروع بحث تخرج	Arabic	2		2				1	2	86	14	100	4.00	B	
							Total	12	0	6	0	6	6	10	430	320	750	30.0		
							Total	108	1	58	2	48	14	104	3013	2721	6052	242.1	Must be 240 ECTS	

Note: The student should complete 4 weeks of Summer Internships to fulfill the requirements of the Bachelor's degree

Structured SWL (hr/w) type	CL	Class Lecture	Module type	B	Basic learning activities	SWL: Student Workload
	Lab	Laboratory		C	Core learning activity	
	Pr	Practical Training		S	Support or related learning activity	
	Tut	Tutorial		E	Elective learning activity	
Lect sem	Online lecture Seminar	Note: Columns O, Q and R are prograamed, protected and should not be edited				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Organic chemstery		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	FOR1228		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	1	Semester of Delivery	1
Administering Department	FORN	College	SC
Module Leader	Prof . Basima Mohsin Sarhan	e-mail	basima.m.s@baghdadcollege.edu.iq
Module Leader's Acad. Title	Professor	Module Leader's Qualification	Ph.D.
Module Tutor		e-mail	
Peer Reviewer Name	Asst. Prof. Majed Hassan Karbon	e-mail	dr.majidkarbon@baghdadcollege.edu.iq
Scientific Committee Approval Date		Version Number	

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	General chemstery	Semester	1
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<p>Module Aims أهداف المادة الدراسية</p>	<p>On completion of this module students should be able to:</p> <ol style="list-style-type: none">1. Understand the structures of organic molecules and recognize and name examples of them.2. Predict the properties and reactions of a molecule from its structure.3. Discuss the reactions of common organic compounds.4. Design the synthesis of a simple molecule from available starting materials.5. Understand the molecular basis of life.6. Safely perform a simple chemical synthesis in the laboratory.7. Understand the structures of organic molecules and recognize and name examples of them.8. Predict the properties and reactions of a molecule from its structure.9. Discuss the reactions of common organic compounds.10. Safely perform a simple chemical synthesis in the laboratory.
<p>Module Learning Outcomes مخرجات التعلم للمادة الدراسية</p>	<p>On successfully completing the module you will be able to...</p> <ol style="list-style-type: none">1. Evaluate and choose appropriate reducing or oxidising agents for selective functional group transformations2. Design protecting group strategies to enable chemoselective transformations to be carried out3. Perform retrosynthetic analysis on complex organic molecules4. Devise multi-step syntheses of complex organic molecules5. Discuss the mechanisms of important organic transformations6. Explain how synthetic procedures can be modified to allow the simultaneous generation of a wide range of structurally related compounds and address environmental issues
<p>Indicative Contents المحتويات الإرشادية</p>	<p>Indicative content includes the following.</p> <p>Module content: First part; [43h]</p> <ul style="list-style-type: none">• identify and draw organic compounds• provide the IUPAC name for some organic compounds• classify alcohols

	<ul style="list-style-type: none"> • explain the properties of alcohols and ethers <p>Second part:[43]</p> <ul style="list-style-type: none"> • Some organic chemistry fundamentals, basic concepts and terminology • Naming and classification of organic compounds • Basic reactions of alcohols, ethers and carbohydrates • Natural polysaccharides: modification and utilization in various applications • Group work (including presentation and evaluation of the other group works)
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Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	<p>This module builds upon the entry-level knowledge of students covered in A-Level Chemistry. It introduces basic chemical concepts within the context of Organic Chemistry, and starts to develop the more specialist knowledge of organic reactions required for later modules. The latter will be further developed in the Organic Chemistry 2 module.</p> <p>The module will include:</p> <ol style="list-style-type: none"> 1. General concepts in organic chemistry for predicting atom and electronic structure of molecules, stability, reactivity and molecular properties (bond strength, pH etc.) 2. General concepts and mechanisms underlying organic reactions and ability to draw the mechanism for a given reaction or to give reagents required for an organic reaction.
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Student Workload (SWL)

الحمل الدراسي للطالب

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	86	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعياً	6.1
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	89	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعياً	6.3
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	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	Projects / Lab.	1	10% (10)	Continuous	
	Report	1	10% (10)	13	LO # 5, 8 and 10
Summative assessment	Midterm Exam	2 hr	10% (10)	7	LO # 1-7
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	An Introduction to Organic Chemistry
Week 2	Nomenclature of hydrocarbon
Week 3	Nomenclature of hydrocarbon and stereo chemistry
Week 4	Hydrocarbons
Week 5	Unsaturated Hydrocarbons
Week 6	Exam
Week 7	Aromatic Hydrocarbons
Week 8	Organic Halogen Compound
Week 9	Alcohols and Phenols
Week 10	Ethers, Aldehydes and ketones
Week 11	Cyclic compound
Week 12	Carboxyl acid, Esters and Sulfonic acid
Week 13	Nitro compounds, Amines and Amides
Week 14	Review Week
Week 15	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Lab 1: Material Safety Data Sheet (MSDS)
Week 2	Lab 2: Determination of melting points
Week 3	Lab 3: Determination of boiling points
Week 4	Lab 4: Recrystallization
Week 5	Lab 5: Density of Some Organic Compounds
Week 6	Lab 6: exam
Week 7	Lab 7: Identification tests of Alkanes, Alkenes, Alkynes and Aromatic
Week 8	Lab 8: Identification tests of primary, secondary and ternary alcohol
Week 9	Lab 9: Identification tests of Ketones and Aldehydes
Week 10	Lab 10: Identification tests of flash point
Week 11	Lab 11: exam theoretical
Week 12	Lab 12: exam practical
Week 13	Application by identification organic compound
Week 14	Application by identification organic compound
Week 15	Review before final exam

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	J. Clayden, N. Greeves and S. Warren, Organic Chemistry (Second Edition), Oxford University Press, 2012, ISBN 0-19-927029-5 (essential core text)	Yes
Recommended Texts	C. Willis and M. Wills, Organic Synthesis, (Oxford Chemistry Primer 31), Oxford University Press, 1995, ISBN 0-19-855791-4	No
Websites	ELE page: https://vle.exeter.ac.uk/course/view.php?id=9255	

Grading Scheme

مخطط الدرجات

Group	Grade	التقدير	Marks (%)	Definition
Success Group	A - Excellent	امتياز	90 - 100	Outstanding Performance

(50 - 100)	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قييد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	chemistry		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	FOR1102		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	1	Semester of Delivery	1
Administering Department	Type Dept. Code	College	Type College Code
Module Leader	Prof . Basima Mohsin Sarhan	e-mail	basima.m.s@baghdadcollege.edu.iq
Module Leader's Acad. Title	Professor	Module Leader's Qualification	Ph.D.
Module Tutor		e-mail	
Peer Reviewer Name	Asst. Prof. Majed Hassan Karbon	e-mail	dr.majidkarbon@baghdadcollege.edu.iq
Scientific Committee Approval Date	2025-12-1	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

<p>Module Aims</p> <p>أهداف المادة الدراسية</p>	<p>1-To develop skills and understanding of different types of elements through the application of techniques.</p> <p>2. To understand metals, physical and chemical properties.</p> <p>3. This course deals with the basic concept of general chemistry.</p> <p>4. To understand periodic table and distribution elements on it</p>
<p>Module Learning Outcomes</p> <p>مخرجات التعلم للمادة الدراسية</p>	<ol style="list-style-type: none"> 1. Recognize the classification of elements. 2. List the various terms associated with periodic table. 3. Summarize what is meant by a basic chemical property. 4. Discuss the reaction and involvement of atoms in chemical reaction. 5. Describe bonds, oxidation number, and Lewis term. 6. Identify the elements according to conductivity and their applications. 7. Discuss the electrons distribution in the atomic levels. 8. Identify the primary terms that used to characterized physical and chemical properties.
<p>Indicative Contents</p> <p>المحتويات الإرشادية</p>	<p>Indicative content includes the following.</p> <p>Part A-Circuit Theory Starting from atomic theory and electron distribution in the outer and inner shells the details required make enough information for the principle of chemistry. [15hrs]</p> <p>Enhance the principle of general chemistry when highlight in more information about losing and acceptance electrons with the abilities for forming any bonds and forming new molecules with new properties. [16hrs]</p> <p>Periodic table with highlight in the orientations of molecules to show different and variance in properties. [12hrs]</p> <p>·</p> <p>Revision problem classes [6hrs]</p> <p>Part B-Analogue chemistry</p> <p>3-Fundamentals Electron configuration, oxidation number, The ratios of forming molecules. [15hrs]</p> <p>Components and active site. [9hrs]</p> <p>Identification of general properties.[9hrs]</p>

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies

To describe the learning activities of the students and the teaching methods of the staff. Effective module design should result in a varied range of active learning experiences for students, including learning activities which are 'research-like'.

Activities should, of course, motivate and encourage deep learning (reflection on wider meanings, rather than superficial memorisation of information). They should also be varied and flexible enough to accommodate different learning styles and orientations, and allow for inclusivity of students from different backgrounds and with different kinds of learning abilities.

Learning activities therefore need to include reference to independent, interdependent (peer- supported) and online activities, as well as participation in different kinds of taught class.

Student Workload (SWL)

الحمل الدراسي للطالب

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	86	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعياً	6.1
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	89	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعياً	6.3
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	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	Projects / Lab.	1	10% (10)	Continuous	
	Report	1	10% (10)	13	LO # 5, 8 and 10
Summative assessment	Midterm Exam	2 hr	10% (10)	7	LO # 1-7
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction to chemistry
Week 2	Periodic table
Week 3-4	Atomic structure types of bonding
Week 5	Physical and chemical properties/ Drawing Lewis Structures
Week 6	Chemical Reactions
Week 7	Preparation solution (types of concentration)
Week 8	Exam
Week 9-10	Acids and Bases and titration
Week 11-12	Titrimetric Methods
Week 13-14	Separation method of elements
Week 15	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Lab 1: General safety rules for Laboratory and equipments
Week 2	Lab 2: Standard Solution
Week 3	Lab 3: Preparation of standard solution from liquid solutions
Week 4	Lab 4: Preparation of standard solution from solid materials
Week 5	Lab 5: Titration Strong Acid with Strong Base
Week 6	Lab 6: Titrating Sodium Carbonate With Hydrochloric Acid
Week 7	Lab 7: pH - Metric Titration
Week 8	Lab 8 : exam
Week 9	Lab 9 : Conductometric Titrating of Strong Acid With Strong Base
Week 10	Lab 10: Titration of Acetic Acid in Vinegar
Week 11	Lab 11: Titration of a Mixture of Carbonate (CO_3^{2-}) and Bicarbonate (NaHCO_3^-)
Week 12-	Lab 12: Separation of I Group Cations (Ag^+ , Pb^{2+} , Hg_2^{2+})
13	
Week 14	Lab 14: exam
Week 15	Review All Previous Experiences

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	A Textbook of Physical Chemistry Vol-6 Kapoor,K.L Mc Graw-Hill 2019	Yes
Recommended Texts	Introductory Chemistry Essentials, Global Edition Tro, N. J. Pearson 2015	yes
Websites	https://openstax.org/details/books/chemistry-2e https://open.umn.edu/opentextbooks/textbooks/219	

Grading Scheme

مخطط الدرجات

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

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MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Legal regulation of the criminal expert		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	FOR009		
ECTS Credits	3		
SWL (hr/sem)	75		
Module Level	1	Semester of Delivery	1
Administering Department	Type Dept. Code	College	Type College Code
Module Leader	Marwa Jassim Abbood	e-mail	marwajaj94@baghdadcollege.edu.iq
Module Leader's Acad. Title	Asst. Lect.	Module Leader's Qualification	Asst. Lect.
Module Tutor	Marwa Jassim Abbood	e-mail	marwajaj94@baghdadcollege.edu.iq
Peer Reviewer Name		e-mail	
Scientific Committee Approval Date	2025-12-1	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	تزويد الطالب بالمعلومات القانونية المتعلقة بعمله الفني بيان النصوص القانونية التي تنظم عمل خبير الادلة الجنائية تبصير الطالب بالمسؤولية الجزائية والمدنية والانضباطية التي تترتب على مخالفته للقانون
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	اعداد خبير جنائي قادر على فهم وتطبيق القانون بالشكل السليم اعداد ملاكات متكلمة من الناحية القانونية والفنية
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	اتباع الاساليب القانونية المقارنة مع التشريعات العراقية وذلك من خلال التطبيقات العملية والمناقشات فضلا عن العصف الذهني
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Student Workload (SWL)

الحمل الدراسي للطالب

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	102	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	98	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6.5
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	200		

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

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	التعريف بالخبير
Week 2	خصائص الخبرة الجنائية
Week 3	شروط الخبير الجنائي
Week 4	العلاقة بين الخبير والشهادة
Week 5	الطبيعة القانونية لعمل الخبير الجنائي
Week 6	المسؤولية القانونية للخبير الجنائي
Week 7	المسؤولية المدنية للخبير
Week 8	المسؤولية الانضباطية
Week 9	علاقة الخبرة بالبحث والتحقيق
Week 10	كيفية انتداب الخبرة
Week 11	الحماية القانونية للخبير
Week 12	القيمة القانونية للخبرة
Week 13	الامتحان الفصلي
Week 14	تطبيقات عملية للخبير في مجال المهارات المعرفية للخبير الجنائي
Week 15	تطبيقات عملية للخبير في مجال المهارات المعرفية للخبير الجنائي
Week 16	Preparatory week before the final Exam

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

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

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

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	English\languge		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	KUEN 005		
ECTS Credits	3		
SWL (hr/sem)	75		
Module Level	1	Semester of Delivery	1
Administering Department	Type Dept. Code	College	Type College Code
Module Leader	Asst. Lect. Zainab . sadiq		e-mail
Module Leader's Acad. Title			Module Leader's Qualification
Module Tutor			e-mail
Peer Reviewer Name	Asst. Lect. Zainab sadiq		e-mail
Scientific Committee Approval Date	1-12-2025	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

<p>Module Aims أهداف المادة الدراسية</p>	<p>a. to enable the learner to communicate effectively and appropriately in real life situation;</p> <p>b. to use English effectively for study purpose across the curriculum;</p> <p>c. to develop interest in and appreciation of Literature;</p> <p>d. to develop and integrate the use of the four language skills i.e. Reading, Listening, Speaking and Writing; e.to revise and reinforce structure already learnt.s</p>
<p>Module Learning Outcomes مخرجات التعلم للمادة الدراسية</p>	<ol style="list-style-type: none">1. Enhance the efficiency of student to use many reference or books which reported in English language.2. To develop the competence that students need to read a wide range of general and academic texts in English.3. To develop students competence in reference skills [locating and evaluating information needed for assignments in a library.4. demonstrate adequate general and detailed comprehension of a range of advanced general and academic texts5. undertake research in an academic library
<p>Indicative Contents المحتويات الإرشادية</p>	<p>Indicative content includes the following.</p> <p>Attention will be given to both grammatical form and communicative function. Controlled practice will be given to consolidate form and meaning. Classroom activities will be designed to maximize active participation and use of the target language. The Language Labs will be used for students to work on their own individual needs and problems.</p> <p>Students' language skills will improve through completion of a range of tasks, both individual and group-based.</p> <p>In this programme module the Teacher / Tutor will ensure that the Learner uses correct pronunciation and grammatical constructions , to include: ☐ sentence connectors, for example, and, or, with, but, then ☐ question words, for example, why, where, who, when when communicating in the English language.</p> <p>An ability to read a minimum of 10 introductory level reading texts, on both social information and work-related information. In reading the texts, the Learner will</p>

	<p>complete tasks to demonstrate an understanding of the context and content of the text</p> <ul style="list-style-type: none"> ☑ An ability to read the message being communicated in a minimum of 6 common notices and signs ☑ The capacity to complete a simple form requiring personal details such as name, address, phone number, age, date of birth <p>The collection of work may include work sheets, cloze tests, multiple choice statements or other appropriate evidence in the form of written, oral, graphic, audio, visual or any combination of these. Any audio or video evidence must be provided on tape.</p> <p>Make different activity for the student to be able to use huge amount of sources such report, books, journals to enhance the abilities and skills.</p> <p>Revision problem classes [6 hrs]</p> <p><u>Part B -</u> Develop the toking and spooking skills</p>
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Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	<p>Use will be made of individual, pair and groupwork to develop students abilities to read increasingly complex academic and general texts. Other skills will be practised and developed within this modules and students will be expected to work extensively out of class to develop their reading fluency.</p> <p>Students will study the specialist vocabulary in the context of published listening and reading materials produced particularly for these ESP situations and also explore lexis within authentic sources.</p> <p>Groups will be managed according to specialist areas and students will be expected to work extensively outside class contact time. Emphasis will be placed on integrating this module to work done within the International Foundation option module programme</p>
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Student Workload (SWL)

الحمل الدراسي للطالب

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	102	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	7
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Module Evaluation

تقييم المادة الدراسية

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

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Reading Comprehension
Week 2	Writing I
Week 3	Writing I
Week 4	Learning English through Literature
Week 5	Advanced Reading
Week 6	Linguistics
Week 7	Advanced Writing
Week 8	Grammar I
Week 9	Grammar II
Week 10	Introduction to Literature
Week 11	Debate and Dialogue

Week 12	General Translation
Week 13	Listening & Speaking
Week 14	Listening & Speaking
Week 15	Exam
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Lab 1: Introduction to Agilent VEE and PSPICE
Week 2	Lab 2: Thévenin's / Norton's Theorem and Kirchhoff's Laws
Week 3	Lab 3: First-Order Transient Responses
Week 4	Lab 4: Second-Order Transient Responses
Week 5	Lab 5: Frequency Response of RC Circuits
Week 6	Listening & Speaking
Week 7	Listening & Speaking

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Haarman et al. <i>Reading Skills for the Social Sciences</i> . OUP Cotton, D. et al. <i>Business Class</i> . Nelson	NO
Recommended Texts	An appropriate selection of Collins Specialist English Dictionaries, ArangeofA-leveltypeStudyGuides	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	General Biology		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	FOR1104		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	1	Semester of Delivery	1
Administering Department	Type Dept. Code	College	Type College Code
Module Leader	e-mail		
Module Leader's Acad. Title	Professor	Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	e-mail		
Scientific Committee Approval Date		Version Number	1.0

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

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<p>Module Aims أهداف المادة الدراسية</p>	<ol style="list-style-type: none">1. This module gives students an understanding of the science and techniques that underpin forensic biology.2. Topics covered will include identification of biological fluids, the analysis the human genome in forensic biology, blood stain pattern analysis and forensic anthropology.3. Material covered in lectures will be illustrated through lab work.4. Highlight in most theories that was deal with biology system for live.5. Our aim is to provide students with opportunities to develop academically, professionally and personally: to broaden their ambitions, extend their attitudes, challenge their assumptions, and assist towards unlocking their potential to succeed in their studies and future lives.
<p>Module Learning Outcomes مخرجات التعلم للمادة الدراسية</p>	<ol style="list-style-type: none">1. Explain the analytical, laboratory and legal requirements of producing DNA profiles.2. Summarize what is meant by a basic biology science.3. Perform interpretation of DNA profiling results, including calculation of likelihood ratios.4. Critically evaluate DNA profiling results citing significant research in the field.5. Show an understanding of the scientific basis and utilisation of techniques of bone anthropometry and pathology in the study of human tissue.6. Demonstrate the ability to critically evaluate body fluid evidence and blood stain patterns.
<p>Indicative Contents المحتويات الإرشادية</p>	<p>Indicative content includes the following.</p> <p>On completion of this module, students are expected to be able to:</p> <ol style="list-style-type: none">1 Demonstrate knowledge of the basic structures, functions and growth characteristics of cells.[13h]2 Demonstrate knowledge of the structure and function of the four principal tissue types.[13h]3 Demonstrate an understanding of Mendelian genetic inheritance. [15hrs] <p>Demonstrate understanding of the role of variation in speciation and evolution. [15 hrs]</p> <p>Evolution of the eukaryotic cell, membrane structure and membrane transport mechanisms, structure and function of the nucleus, ribosomes, endoplasmic</p>

	reticulum, Golgi Body, lysosomes, mitochondria and chloroplasts. [15 h] Mitosis and meiosis. Structure and function of epithelial, connective, nervous and muscle tissue. Mendel's Laws, inheritance, genotype, phenotype, dominance, sex determination, sex-linkage, variation, speciation and evolution.. [15 hrs]
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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	<p>To describe the learning activities of the students and the teaching methods of the staff. Effective module design should result in a varied range of active learning experiences for students, including learning activities which are 'research-like'.</p> <p>Activities should, of course, motivate and encourage deep learning (reflection on wider meanings, rather than superficial memorisation of information). They should also be varied and flexible enough to accommodate different learning styles and orientations, and allow for inclusivity of students from different backgrounds and with different kinds of learning abilities.</p> <p>Learning activities therefore need to include reference to independent, interdependent (peer- supported) and online activities, as well as participation in different kinds of taught class.</p>

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	86	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعياً	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	89	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعياً	6.5
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	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	Projects / Lab.	1	10% (10)	Continuous	
	Report	1	10% (10)	13	LO # 5, 8 and 10
Summative assessment	Midterm Exam	2 hr	10% (10)	7	LO # 1-7
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Course introduction; What is biology?
Week 2	The nature of life
Week 3	Atomic structure and chemistry of water
Week 4	Carbohydrates, proteins, and lipids
Week 5	Nucleic acids
Week 6	Exam Mid-term Exam
Week 7	Cells, Part I
Week 8	Cells, Part 2
Week 9	Energy & metabolism, Part I
Week 10	Energy & metabolism, Part 2
Week 11	Cellular respiration, Part I
Week 12	Cellular respiration, Part 2
Week 13	Photosynthesis
Week 14	DNA & its role in heredit
Week 15	EXAM
Week 16	Preparatory week before the final Exam

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

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Course introduction; What is biology?
Week 2	The nature of life
Week 3	Atomic structure and chemistry of water
Week 4	Carbohydrates, proteins, and lipids
Week 5	Nucleic acids
Week 6	Exam Mid-term Exam
Week 7	Cells, Part I
Week 8	Cells, Part 2
Week 9	Energy & metabolism, Part I
Week 10	Energy & metabolism, Part 2
Week 11	Cellular respiration, Part I
Week 12	Cellular respiration, Part 2
Week 13	Photosynthesis
Week 14	DNA & its role in heredit
Week 15	EXAM
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)	
المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Introduction to Measurement

Week 2	Lab 2: Course intro; Life and the scientific theory
Week 3	Lab 3: Enzyme function I
Week 4	Lab 4: Enzyme function 2
Week 5	Lab 5: Microscope & cell structure
Week 6	Lab 6: Cell behavior
Week 7	Lab 7: Respiration
Week 8	Lab 8 : Photosynthesis
Week 9	Lab 9 : Restriction digest of plasmids
Week 10	Lab 10: Gene transformation
Week 11	Lab 11: Mitosis, meiosis, and gametogenesis
Week 12	Lab 12: Mendelian crosses
Week 13	Lab 13: Outcomes of evolution
Week 14	Lab 14: Blood Typing
Week 15	Exam

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Freece J, Urry L, Cain M, Wasserman S, Minorsky P, Jackson, R. (Eds) 9th Global Edition, 2011, Campbell Biology, Pearson Benjamin Cummings.	Yes
Recommended Texts	Butler, J. (2005) Forensic DNA Typing 2nd Ed. Elsevier (MA) ISBN: 9780121479527 Forensic Science – Jackson A.R. & Jackson J., Prentice Hall, ISBN: 130432512	No
Websites	https://www.aqa.org.uk/subjects/science/as-and-a-level/biology-7401-7402/subject-content	

Grading Scheme

مخطط الدرجات

Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria

Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	General Physics		Module Delivery
Module Type	Support		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	MBO 11003		
ECTS Credits	6		
SWL (hr/sem)	150		
Module Level	1	Semester of Delivery	1
Administering Department	Forensic	College	Science
Module Leader	Hamza Yasser Salman	e-mail	hamzayasser@baghdadcollege.edu.iq
Module Leader's Acad. Title	Assistant Lecturer	Module Leader's Qualification	Asst. Lect.
Module Tutor		e-mail	
Peer Reviewer Name	Prof. Abdul Majeed Ayadah Ibrahim	e-mail	N.A
Scientific Committee Approval Date	2025-12-1	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

<p>Module Aims أهداف المادة الدراسية</p>	<ol style="list-style-type: none"> 1. To have knowledge about General Physics basic principles like Mechanics of motion, liquid mechanics and electricity. 2. To get skills in solving mathematical problems that related to physics subjects. 3. To get practical skills in managing physics experiments in the lab. and record measurements and then calculate required quantities. 4. Analysis the physical information in syllabus and be able to make conclusions by joining between physical concepts. 5. To be able to apply his knowledge in physics in market.
<p>Module Learning Outcomes مخرجات التعلم للمادة الدراسية</p>	<ol style="list-style-type: none"> 1. Save in memory basic principles and laws of physics. 2. Produce scientific concepts by joining between physical principles. 3. Joining physical concepts to produce more complicated concepts. 4. The ability to make conclusions by analysis the physical information. 5. The ability to apply all his knowledge to solve problems in reality. 6. To be able to run the devices and apparatus in the lab. 7. Assemble devices and make an experiment to prove physical relation. 8. Discuss the results get from running experiment in the lab. 9. Make reports from theory to conclusion about any physical concept proved in the lab.
<p>Indicative Contents المحتويات الإرشادية</p>	<p>Indicative content includes the following.</p> <p>Measurement units, Motion in one dimension, path and displacement, velocity and acceleration. [9 hrs]</p> <p>Free fall motion, gravity, projectile path. [8 hrs]</p> <p>Vector Analysis, Unit vector, Vector addition and subtraction, resultant vector and its direction. [10 hrs]</p> <p>Motion in two dimensions, concept of negative acceleration, average and instantaneous velocity and acceleration. [9 hrs]</p>

	<p>Revision problem classes [5 hrs]</p> <p>Newton laws of motion, principle of continuity, equilibrium, action and reaction, force analysis diagraph. [12 hrs]</p> <p>Circuits and electricity, Current, Voltage, Resistance. [10 hrs]</p> <p>Fluid Mechanics, Pascal principle, Archimedes principle, Pressure, Bernoulli equation in fluid flow. [9 hrs]</p>
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Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	<p>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 and by considering type of simple experiments involving some sampling activities that are interesting to the students.</p>
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Student Workload (SWL)

الحمل الدراسي للطالب

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	72	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعياً	5.1
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	78	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعياً	5.5
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

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

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Physical unit systems and unit conversion
Week 2	Motion in one dimension: velocity and acceleration
Week 3	Free fall motion and gravity
Week 4	Vector analysis: vector addition and subtraction
Week 5	Unit vector and vector resultant calculation
Week 6	Motion in two dimension: velocity and acceleration calculations
Week 7	Mid-term Exam
Week 8	Newton first law of motion: object in equilibrium concept
Week 9	Newton second law of motion: acceleration and deceleration
Week 10	Newton third law of motion: action and reaction
Week 11	Electricity: current, voltage and resistance, Ohm's law
Week 12	Electric circuits: series and parallel circuits
Week 13	Fluid mechanics: pressure and Pascal Principle
Week 14	Archimedes principle
Week 15	Bernoulli equation in fluid flow
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Lab 1: Introduction to diagrams and report writing
Week 2	Lab 2: Surface tension
Week 3	Lab 3: Force equilibrium
Week 4	Lab 4: Static and dynamic friction
Week 5	Lab 5: Ohm's law
Week 6	Lab 6: Series and Parallel circuits
Week 7	Lab 7: Density of materials

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Applied Physics by Schaum 2013	No
Recommended Texts	Physics for scientists and engineers by Serway 2004.	No
Websites	https://www.coursera.org/browse/physical-science-and-engineering	

Grading Scheme

مخطط الدرجات

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

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	General Biology		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	FOR1104		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	1	Semester of Delivery	1
Administering Department	Type Dept. Code	College	Type College Code
Module Leader	Mohammed Abdulfatah A.Rahman	e-mail	dr.mohammed@baghdadcollege.edu.iq
Module Leader's Acad. Title	Professor	Module Leader's Qualification	Ph.D.
Module Tutor		e-mail	
Peer Reviewer Name	Raji Toama Nasir	e-mail	
Scientific Committee Approval Date	2025-12-1	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

<p>Module Aims أهداف المادة الدراسية</p>	<ol style="list-style-type: none">1. This module gives students an understanding of the science and techniques that underpin forensic biology.2. Topics covered will include identification of biological fluids, the analysis the human genome in forensic biology, blood stain pattern analysis and forensic anthropology.3. Material covered in lectures will be illustrated through lab work.4. Highlight in most theories that was deal with biology system for live.5. Our aim is to provide students with opportunities to develop academically, professionally and personally: to broaden their ambitions, extend their attitudes, challenge their assumptions, and assist towards unlocking their potential to succeed in their studies and future lives.
<p>Module Learning Outcomes مخرجات التعلم للمادة الدراسية</p>	<ol style="list-style-type: none">1. Explain the analytical, laboratory and legal requirements of producing DNA profiles.2. Summarize what is meant by a basic biology science.3. Perform interpretation of DNA profiling results, including calculation of likelihood ratios.4. Critically evaluate DNA profiling results citing significant research in the field.5. Show an understanding of the scientific basis and utilisation of techniques of bone anthropometry and pathology in the study of human tissue.6. Demonstrate the ability to critically evaluate body fluid evidence and blood stain patterns.
<p>Indicative Contents المحتويات الإرشادية</p>	<p>Indicative content includes the following.</p> <p>On completion of this module, students are expected to be able to:</p> <ol style="list-style-type: none">1 Demonstrate knowledge of the basic structures, functions and growth characteristics of cells.[13h]2 Demonstrate knowledge of the structure and function of the four principal tissue types.[13h]3 Demonstrate an understanding of Mendelian genetic inheritance. [15hrs] <p>Demonstrate understanding of the role of variation in speciation and evolution. [15 hrs]</p> <p>Evolution of the eukaryotic cell, membrane structure and membrane transport mechanisms, structure and function of the nucleus, ribosomes, endoplasmic</p>

	reticulum, Golgi Body, lysosomes, mitochondria and chloroplasts. [15 h] Mitosis and meiosis. Structure and function of epithelial, connective, nervous and muscle tissue. Mendel's Laws, inheritance, genotype, phenotype, dominance, sex determination, sex-linkage, variation, speciation and evolution.. [15 hrs]
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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	<p>To describe the learning activities of the students and the teaching methods of the staff. Effective module design should result in a varied range of active learning experiences for students, including learning activities which are 'research-like'.</p> <p>Activities should, of course, motivate and encourage deep learning (reflection on wider meanings, rather than superficial memorisation of information). They should also be varied and flexible enough to accommodate different learning styles and orientations, and allow for inclusivity of students from different backgrounds and with different kinds of learning abilities.</p> <p>Learning activities therefore need to include reference to independent, interdependent (peer- supported) and online activities, as well as participation in different kinds of taught class.</p>

Student Workload (SWL) الحمل الدراسي للطلاب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	86	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	89	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	6.5
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب 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	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	Projects / Lab.	1	10% (10)	Continuous	
	Report	1	10% (10)	13	LO # 5, 8 and 10
Summative assessment	Midterm Exam	2 hr	10% (10)	7	LO # 1-7
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Course introduction; What is biology?
Week 2	The nature of life
Week 3	Atomic structure and chemistry of water
Week 4	Carbohydrates, proteins, and lipids
Week 5	Nucleic acids
Week 6	Exam Mid-term Exam
Week 7	Cells, Part I
Week 8	Cells, Part 2
Week 9	Energy & metabolism, Part I
Week 10	Energy & metabolism, Part 2
Week 11	Cellular respiration, Part I
Week 12	Cellular respiration, Part 2
Week 13	Photosynthesis
Week 14	DNA & its role in heredit
Week 15	EXAM
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Lab 1: Introduction to Measurement

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Lab 1: Introduction to Measurement

Week 2	Lab 2: Course intro; Life and the scientific theory
Week 3	Lab 3: Enzyme function I
Week 4	Lab 4: Enzyme function 2
Week 5	Lab 5: Microscope & cell structure
Week 6	Lab 6: Cell behavior
Week 7	Lab 7: Respiration
Week 8	Lab 8 : Photosynthesis
Week 9	Lab 9 : Restriction digest of plasmids
Week 10	Lab 10: Gene transformation
Week 11	Lab 11: Mitosis, meiosis, and gametogenesis
Week 12	Lab 12: Mendelian crosses
Week 13	Lab 13: Outcomes of evolution
Week 14	Lab 14: Blood Typing
Week 15	Exam

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	FReece J, Urry L, Cain M, Wasserman S, Minorsky P, Jackson, R. (Eds) 9th Global Edition, 2011, Campbell Biology, Pearson Benjamin Cummings.	Yes
Recommended Texts	Butler, J. (2005) Forensic DNA Typing 2nd Ed. Elsevier (MA) ISBN: 9780121479527 Forensic Science – Jackson A.R. & Jackson J., Prentice Hall, ISBN: 130432512	No
Websites	https://www.aqa.org.uk/subjects/science/as-and-a-level/biology-7401-7402/subject-content	

Grading Scheme

مخطط الدرجات

Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria

Fail Group	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
(0 – 49)	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Mathematics		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	Kus1101		
ECTS Credits	5		
SWL (hr/sem)	125		
Module Level		Semester of Delivery	1
Administering Department	RS	College	RG
Module Leader	Hamza Yasser Salman		e-mail hamzayasser@baghdadcollege.edu.iq
Module Leader's Acad. Title	Assistant Lecturer	Module Leader's Qualification	Asst. Lect.
Module Tutor		e-mail	
Peer Reviewer Name	Prof. Dr.Kawthar Abboud Neamah	e-mail	cs@baghdadcollege.edu.iq
Scientific Committee Approval Date	2025-12-1	Version Number	

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

<p>Module Aims أهداف المادة الدراسية</p>	<ol style="list-style-type: none"> 1. Identify the properties of mathematical functions and their opposites. 2. Familiarity with the properties of polynomials, exponential and logarithmic functions, trigonometric functions and their opposites. 3. Recognize the concept of differential functions and its relationship to speed and the rate of their change with time (acceleration). 4. Identify the integration of the functions and methods of Integration. 5. Knowledge of applications of integral in geometry.
<p>Module Learning Outcomes مخرجات التعلم للمادة الدراسية</p>	<ol style="list-style-type: none"> 1. Recognize properties of functions and their inverses; 2. Recall and use properties of polynomials, rational functions, exponential, logarithmic, trigonometric and inverse-trigonometric functions; 3. Apply the differentiation procedures to solve related rates and extreme value problems; 4. To understand the term integration. 5. To distinguish between definite and indefinite integration. 6. To describe the area and volume by means of integration.
<p>Indicative Contents المحتويات الإرشادية</p>	<ol style="list-style-type: none"> 1-To know the methods of differentiation of functions accurately and its applications. 2- To know the relationship between the function term and its differential. 3- To extract the area and volume through integration. 4 - To know the differentiation and integration of functions. 4- To use integration methods to find complex integrals.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	<ul style="list-style-type: none"> • Following up the scientific development of mathematics by reviewing modern curricula. • Follow-up and development of academic courses and compare them with other universities. • Using the latest teaching aids to motivate the student to learn and understand.

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	50		
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	75		
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	125		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5,10	LO#1,2,10 and 11
	Assignments	2	10% (10)	2,12	LO#3,4,6 and 7
	Projects / Lab.				

	Report	1	10% (10)	13	LO#5,8, and 10
Summative assessment	Midterm Exam	2 hr	10% (10)	7	LO,#1-7
	Final Exam	2hr	60% (60)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Functions, Inverse Functions.
Week 2	Trigonometric Functions, Inverse Trigonometric Functions.
Week 3	Exponential and Logarithmic Functions.
Week 4	Limits and Continuity
Week 5	The Derivative, The Chain Rule.
Week 6	Implicit Differentiation, L'Hopitals Rule.
Week 7	The Derivative in graphing and applications, Relative Extrema.
Week 8	Rolle's Theorem; Mean –Value Theorem
Week 9	The indefinite integral, Areas under a curve
Week 10	The fundamental theorem of integral calculus, Area between two curves
Week 11	The integral of trigonometric functions, the integral of inverse trigonometric
Week 12	The integral of the functions $\log_u(x)$, $\ln u(x)$, $e^{u(x)}$ and $a^{u(x)}$
Week 13	Methods of integration , powers of trigonometric functions
Week 14	Integration by parts
Week 15	Volumes
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	

Week 5	
Week 6	
Week 7	

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Thomas & Finney "Calculus and Analytic Geometry" (2005), 11 th edition, Addison Wesley.	yes
Recommended Texts	Howard Anton, IrI Bivens & Stephen Davis "Calculus"(2009),9 th edition,John Wiley & Sons,NC.	yes
Websites	Various lectures and lecture notes on the internet.	

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	Basic Computer Science		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input checked="" type="checkbox"/> Practical <input checked="" type="checkbox"/> Seminar
Module Code	FOR12011		
ECTS Credits	4		
SWL (hr/sem)	100		
Module Level	First	Semester of Delivery	1
Administering Department	FOR	College	Science
Module Leader	Mohammed Hameed Abdulhassen	e-mail	m.hameed.hassen97@baghdadcollege.edu.iq
Module Leader's Acad. Title	Assistant Lecturer	Module Leader's Qualification	M.SC.
Module Tutor		e-mail	
	Prof. Dr.Kawthar		

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<p>Module Aims</p> <p>أهداف المادة الدراسية</p>	<p>The computer course includes, on the theoretical side, the basics of computers, as well as a brief historical summary of the development and generations of computers. It also covers different computer types. There is a detailed explanation of computer components (hardware and software), along with an introduction to number systems (decimal and binary) from the student's perspective. Furthermore, the course provides a manual for operating MATLAB, presenting its code capabilities required for general programming.</p> <p>On the practical side, students are taught ready-made basic programs that include Microsoft Office and the Windows operating system. The course includes practical hours, with the main goal being the student's mastery in using the calculator as an essential tool.</p>
<p>Module Learning Outcomes</p> <p>مخرجات التعلم للمادة الدراسية</p>	<p>The learning outcomes of studying medical image analysis include:</p> <ol style="list-style-type: none">1. Defining computer components (hardware and software) to the students.2. Explaining input and output devices to the students.3. Enabling students to recognize different types of memory.4. Teaching students about number systems and how to convert between decimal and binary.5. Providing the student with cognitive skills from the basic concepts of programming language and enables them to the skills to run the MATLAB program and dealing with the MATLAB windows and all the types of Statements.6. Enables students to understand and run all Statements (Loop, Control, Branch), reading and writing data file.7. Providing the student with cognitive skills to deal with operations with Arrays or Matrices.

	<p>the System Unit, Central Processing Unit (CPU), Memory .[10 hrs]</p> <p><u>Part C</u></p> <p>Hardware, Cache Memory, Primary, Memory (Main Memory) ,Random Access Memory, Read Only Memory, Secondary Memory, Memory Units, Storage Devices. [10 hrs]</p> <p><u>Part D</u></p> <p>Numbers Systems, Decimal Number System, Binary Number System, Convert Decimal to Binary System, Numbers Systems, Convert Binary to Decimal System. [8 hrs]</p> <p><u>Part E</u></p> <p>Defining Internet and Intranet, Types of Computer Network, Computer network. [5 hrs]</p> <p><u>Part F</u></p> <p>MATLAB Windows: Window layout, Command Windows, History Window, Workspace Window, Editor Window, Figure Window, General MATLAB Code: Types of Statements, Rules for Statement Editing, Arithmetic Statement. Constant Value, Variables, Numerical. Variable, Logical Variable, Character Variable. [6 hrs]</p> <p><u>Part G</u></p> <p>Arrays and Matrices: Index Concept Numerical Arrays and Matrices, Operations on one , Arrays or Matrices, N-Dimension Matrices, Logical Arrays, character and String Variables, Operators, Expression, Loop Statement, Control Statement, Branch Statement, reading and writing data file. [7 hrs]</p> <p><u>Part H</u></p> <p>Plotting: Plotting Elementary Function- XY- plotting functions, Generating Sub-Plots, Create Line Plot from Matrix, Specify Line Style, Specify Line Style and Color, Specify Line Width, and Color, Add Title and Axis Labels. [6 hrs]</p>
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Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	<p>In order to enable students to learn computer skills effectively and programming using MATLAB, here are some strategies that can be employed:</p> <ol style="list-style-type: none"> 1. Provide hands-on activities: Incorporate hands-on activities, projects, and exercises to engage students actively in the learning process. Practical application of concepts helps students understand how computers work and reinforces their understanding. 2. By using visual aids and interactive resources: Utilize visual aids, diagrams, charts, and interactive resources like educational software, simulations, and coding platforms to make abstract concepts more tangible and engaging.
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Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	60	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعياً	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	40	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعياً	2.7
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	100		

Module Evaluation تقييم المادة الدراسية				
	Time/Nu	Weight (Marks)	Week Due	Relevant Learning

		mber			Outcome
Formative assessment	Quizzes	2	5% (5)	6, 13	LO # 2,3,4,5,11 and 12
	Assignments	2	10% (10)	9, 15	LO # 6,7,8, 13 and 14
	Projects / Lab.	1	20% (20)		
	Report	1	5% (5)	11, 16	LO # 1,9,10 and 15
Summative assessment	Midterm Exam	2hr	10% (10)	9	LO # 1-8
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to Computer, Definition of Computer, Computer History, Generations of Computers,
Week 2	Categories of Computer.
Week 3	Computer Components, Software
Week 4	Computer Components, Hardware, Input Devices, Output Devices.
Week 5	Components of the System Unit, Central Processing Unit (CPU), Memory
Week 6	Hardware, Cache Memory, Primary, Memory (Main Memory) ,Random Access Memory, Read Only Memory, Secondary Memory, Memory Units, Storage Devices
Week 7	Numbers Systems, Decimal Number System, Binary Number System,
Week 8	Numbers Systems, Convert Decimal to Binary System, Numbers Systems, Convert Binary to Decimal System, Examples

	Add Title and Axis Labels.
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Windows 10: An introduction to windows 10, The start menu, Notification pane and action center, Cortana, Microsoft edge, Use multiple desktops, Tablet mode, The settings App.
Week 2	Lab 2: Microsoft word 2016: An introduction to Microsoft Word 2016, Starting Word, The Home Ribbon, The Insert Ribbon, Adding Tables, Headers and Footers, Inserting Headers & Footers, Editing Headers & Footers.
Week 3	Lab 3: Page Numbering: The Design Ribbon (Page Borders, Page Color, Watermarks, Page Numbering: The Page Layout Ribbon, Page Setup, The References Ribbon, The Mailings Ribbon, The Format Ribbon, File Backstage, Saving Documents, Saving as a Different Format, Opening Saved Documents, Printing Documents.
Week 4	Lab 4: Microsoft Excel 2016: An introduction to Microsoft Excel 2016, Starting Excel, The Home Ribbon, The Insert Ribbon, The Page Layout Ribbon, The Formulas Ribbon, The Data Ribbon, The Review Ribbon, The View Ribbon, File Backstage, Introduction to a Spreadsheet, Entering Data.
Week 5	Lab 5: Simple Text Formatting, Text Orientation, Resizing Rows and Columns, inserting Rows & Columns, Cut, Copy & Paste, Sorting Data, Formatting Spreadsheet, Cell Alignment, Text Format, Cell Borders, Using Formulas, Using Functions, Count, Count IF, Auto Sum, Average, Max & Min, IF Function, Adding Charts, Change Chart Type.
Week 6	Lab 6: MATLAB Windows, example of Constant Value, Variables, Numerical. Variable, Logical Variable, Character Variable, Examples of Arrays and Matrices
Week 7	Lab 7: Examples of Expression, Loop Statement, Control Statement, Branch Statement, reading and writing data file, Examples of Plotting.

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	1- Ata Elahi, "Computer Systems, Digital Design, Fundamentals of Computer, Architecture and Assembly Language", Springer International Publishing AG 2018. 2- Peter Norton "Introduction to Computers", sixth Edition, 2008, ISBN-13:978-0-07-059374-9. 3- B. Hemanta, Computer Fundamental, Stratford College London, pp.1-20. 4- R Mansfield, "Mastering VBA for Microsoft Office",	Yes

	2019, 944 Pages. 5- Matlab: Numerical Computing, Tutorials point,2014.	
Recommended Texts	1- Steven Freund, Gary B. Shelly, Thomas J. Cashman, Misty Vermaat, Introduction to Computers, Eighth Edition, 2012, ISBN10 143908131X, ISBN13 9781439081310	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	Freedoms and Human rights		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	MPH12012		
ECTS Credits	3		
SWL (hr/sem)	75		
Module Level	1	Semester of Delivery	
Administering Department	MPHY	College	SCI
Module Leader	Marwa Jassim Abbood	e-mail	marwajaj94@baghdadcollege.edu.iq
Module Leader's Acad. Title	Assistant Lecturer	Module Leader's Qualification	Asst. Lect.
Module Tutor		e-mail	
Peer Reviewer Name	Asst. Lect. Huda Salman Jaloob	e-mail	
Scientific Committee Approval Date	1-12-2025	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	تهدف المادة إلى بيان أهمية الحقوق الأصلية للصفة بالإنسان، التي تتفق مع فطرته، والتي يقبلها العقل المجرد، والتي لا تختلف باختلاف الزمان والمكان، وهذه هي حقوق الإنسان.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	تسهم المادة العلمي (لحقوق الإنسان) إلى تثقيف الطالب من الناحية القانونية؛ ليكون مطلع على ماهية الحقوق الإنسانية، وأصلها التاريخي، وتعريف ماله من حقوق وما عليه من التزامات، من خلال معرفة حقه وحدود ذلك الحق، وحقوق الآخرين، وما سعت إليه الدول والمنظمات الدولية والإقليمية في تعزيز مفاهيم تلك الحقوق، والزام الدول للنص عليها في التشريعات الداخلية، والضمانات التي تكفل تطبيق تلك الحقوق العالمية.
Indicative Contents المحتويات الإرشادية	إن المحتويات الإرشادية لمادة حقوق الإنسان تتلخص بتهذيب سلوك الطالب، [20hr] وتعريفه إن تعامله مع غيره من بني البشر. يقوم على مبدأ: ((إن الناس صنفان؛ إما أخوك في الدين، أو نظير لك في الخلق))-[20 hr]

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	نعمل في هذا الجانب إلى ما يلي: 1- يعرف الطالب إبتداءً بمضمون موجز عن المفردات التي سيتم تناولها خلال المحاضرة، ثم نوجه له بعض الأسئلة التي تحرك ذهنه، وتشد إنتباهه؛ لضمان حسن الاستماع. 2- يتم التعمق بشرح المفردات العلمية في حدود تناسب متوسط المستويات العلمية لضمان عدم تجاوز الفروق الفردية عند عموم الطلبة. 3- يتم ترك مساحة للنقاش الحر في إطار الموضوع المخصص للمحاضرة. 4- الحرص على جانب التغذية الراجعة للمعلومات قبل نهاية المحاضرة. 5- التواصل الإلكترونيًا مع الطلبة لنشر المحاضرات المسجلة، والمكتوبة من خلال الموقع الرسمي للجامعة.
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Student Workload (SWL)

الحمل الدراسي للطلاب

Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	33	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعياً	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	42	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعياً	2.8

Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	75
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Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5, 10	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	Projects / tutorial.	1	10% (10)	Continuous	
	Report	1	10% (10)	13	LO # 5, 8 and 10
Summative assessment	Midterm Exam	1 hr	10% (10)	7	LO # 1-7
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	تعريف وطبيعة الديمقراطية و حقوق الإنسان
Week 2	التطور التاريخي للديمقراطية وحقوق الإنسان
Week 3	مميزات الديمقراطية و حقوق الإنسان عن غيرها من الحقوق
Week 4	حقوق الإنسان والديمقراطية في الديانات السماوية
Week 5	حقوق الإنسان و الديمقراطية في المواثيق الدولية
Week 6	حقوق الإنسان في التشريعات الداخلية
Week 7	حقوق الإنسان الشخصية
Week 8	حقوق الإنسان الاجتماعية
Week 9	حقوق الإنسان الثقافية
Week 10	حقوق الانسان الاقتصادية
Week 11	ضمانات الديمقراطية حقوق الإنسان الدولية
Week 12	ضمانات حقوق الإنسان الإقليمية
Week 13	ضمانات الديمقراطية حقوق الإنسان الداخلية (الوطنية)
Week 14	الجزاء المترتبة على المساس بالديمقراطية و حقوق الإنسان

Week 15	امتحان
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Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	كتاب/ حقوق الانسان (تطورها، مضامينها، حمايتها) د. رياض عزيز هادي.	Yes
Recommended Texts	كتاب/ حقوق الانسان د. حميد حنون.	No
Websites	https://www.noor-book.com/ https://www.un.org/ar/about-us/universal-declaration-of-human-rights https://ar.wikipedia.org/wiki/	

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
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<p>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.</p>				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Fundamental of Forensic Science		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	FOR1106		
ECTS Credits	4		
SWL (hr/sem)	100		
Module Level	1	Semester of Delivery	1
Administering Department	FORN	College	SC
Module Leader	Marwa Jassim Abbood	e-mail	marwajai94@baghdadcollege.edu.iq
Module Leader's Acad. Title	Assistant Lecturer	Module Leader's Qualification	Asst. Lect.
Module Tutor		e-mail	
Peer Reviewer Name	Dr. Taghreed Mahdi Khalaf	e-mail	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Aims أهداف المادة الدراسية	<p>1-Forensic Science is basically the application of science to law.</p> <p>2-Forensic science is used to investigate criminal cases involving a victim, such as assault, robbery, kidnapping; rape, murder and civil cases such as forgeries, fraud, or negligence.</p>
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	<p>On successfully completing the module students will be able to:</p> <ol style="list-style-type: none">1. Show understanding of the role of physical forensic methods in forensic practice.2. Demonstrate knowledge of the primary evidence types, their transfer and persistence.3. Demonstrate understanding of emerging developments in forensic science.4. Consider a broad range of forensic techniques to determine the examination strategy, sequencing, and probative value.5. Demonstrate understanding of quality standards in respect of scene examination.
	<p>A synopsis of the curriculum [15h]</p> <p>This module will develop students' appreciation of a range of physical techniques applied to the collection of bulk and trace evidence materials in forensic science. Students will look more deeply into aspects of physical evidence and will deal with the practical issues of item examination, legal process and general procedure associated with the collection and submission of a range of forensically-relevant materials.</p> <p>Inclusive module design [15h]</p>

	<p>Internationalisation [14h]</p> <p>Forensic science is an inherently international subject with physical laws discovered and techniques developed and refined by scientists across the globe. It is facilitated by well-defined conventions in terminology and mathematical modelling which allow complex concepts to be communicated across language barriers. This module introduces students to the work of these pioneers, as well as the fundamentals behind it and so enables them to interact with this community. Where possible, the reading list has been chosen, in part, to demonstrate the diversity of backgrounds of forensic scientists working in the field.</p>
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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	<p>Type something like: The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering type of simple experiments involving some sampling activities that are interesting to the students.</p>

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	56	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعياً	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	44	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعياً	3.1
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	100		

Module Evaluation تقييم المادة الدراسية				
	Time/Nu	Weight (Marks)	Week Due	Relevant Learning

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

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	<i>The concept and importance of forensic science</i>
Week 2	<i>Historical development of forensic evidence</i>
Week 3	<i>Types of criminal evidence</i>
Week 4	<i>Forensic evidence and material traces</i>
Week 5	<i>The importance of the genetic fingerprint in achieving personality</i>
Week 6	<i>Fingerprints and the use of nanotechnology in detection</i>
Week 7	<i>Forensic forensic medicine</i>
Week 8	<i>Forensic chemistry</i>

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Forensic Science: A very short introduction by Jim Fraser	no
Recommended Texts	Blood, Powder, and Residue (A rare behind-the-scenes look at the work of forensic scientists) by Beth A. Bechky	No
Websites	https://www.nap.edu/read/21772/chapter/7	

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