

	<p>Ministry of Higher Education and Scientific Research - Iraq Al-Mustaql University College Of Sciences Department of Artificial Intelligence</p>	
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MODULE DESCRIPTOR FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Analytical Chemistry		Module Delivery
Module Type	BASIC		<ul style="list-style-type: none"> -Theory Lecture -Lab -Practical Seminar
Module Code	UOMU0341012		
ECTS Credits	6		
SWL (hr/sem)	150		
Module Level	1	Semester of Delivery	1
Administering Department		College	
Module Leader	Haider Mutlaq Musa		e-mail
Module Leader's Acad. Title		Lecture	Module Leader's Qualification
Module Tutor	None		e-mail
Peer Reviewer Name			e-mail
Review Committee Approval			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 والمحفوظات الإرشادية

Module Aims أهداف المادة الدراسية	1- Expanding the list of chemical reagents, chemical reactions, and methods for analyzing inorganic materials 2- Developing methods for analyzing organic materials 3- Finding ways to analyze organic and elemental compounds, especially organic silicon compounds 4- Conducting research in the field of analyzing very pure materials used in the atomic industry, wireless electronic devices, and laser devices. 5- Use organic reagents to analyze inorganic materials 6- Finding the theory of complexes and its practical applications 7- Developing the analytical chemistry of anhydrous solutions, which now occupies its place as a major process in various branches of science, industry and modern technology.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- Preparing and qualifying specialists to meet the requirements of the labor market 2- Encouraging and developing scientific research in the field of analytical chemistry in order to keep pace with development and provide the student with the latest theoretical and practical information for this specialty. 3- Preparing the student appropriately for postgraduate studies and scientific research in his specialty
Indicative Contents المحتويات الإرشادية	1-Theoretical presentation 2-The seminar 3-Posters 4- Laboratory 5-Preparing reports and studies
Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1- Student groups 2- Workshops 3- Method of giving lectures 4- E-learning on campus 5- Experiential learning 6- Education application

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	7
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	1	10% (10)	5	LO # 1 and 3
	Practical Seminar(Lab).	2	15% (15)	Continuous	LO # 2 , 4 and 5
Summative assessment	Midterm Exam	1 hr	15% (15)	14	LO # 1 to 5
	Final Exam	3hr	60% (60)	16	All
Total assessment		100% (100 Marks)			

Delivery Plan (Weekly Syllabus)	
المنهاج الأسبو عي النظري	
	Material Covered
Week 1	A brief overview of the development of analytical chemistry
Week 2	Classification of analytical chemistry
Week 3	Chemical equilibria
Week 4	Ionic strength
Week 5	Methods of preparing solutions
Week 6	Standard solution
Week 7	Exam
Week 8	Types of calibrations and volumetric analysis
Week 9	Evidence
Week 10	Theories of explaining the work of evidence
Week 11	Volumetric analysis
Week 12	Weight analysis
Week 13	Quantitative analysis

Week 14	Classification of chemical analysis methods
Week 15	Final Exam

Delivery Plan (Weekly Lab. Syllabus) المنهج الاسبو عي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	
Week 9	
Week 10	
Week 11	
Week 12	
Week 13	

Learning and Teaching Resources مصادر التعلم والتدریس		
	Text	Available in the Library?
Required Texts		Yes
Recommended Texts		No
Websites		

APPENDIX:

GRADING SCHEME

مخطط الدرجات

Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جداً	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	مقبول بقرار	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note:

NB 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.