



Ministry of Higher Education and  
Scientific Research - Iraq  
Al-Mustaql University  
College of Science  
Forensic Science Department



## MODULE DESCRIPTOR FORM

### نموذج وصف المادة الدراسية

<b>Module Information</b> معلومات المادة الدراسية			
<b>Module Title</b>	التحليل العدلي		
<b>Module Type</b>	SUPPLEMENT		
<b>Module Code</b>	UOMU0308036		
<b>ECTS Credits</b>	5		
<b>SWL (hr/sem)</b>	125		
<b>Module Level</b>		<b>Semester of Delivery</b>	1
<b>Administering Department</b>		College	Science
<b>Module Leader</b>	MSc. Reyam Thair Ahmed	<b>e-mail</b>	<a href="mailto:reyam.thair.thair@uomus.edu.iq">reyam.thair.thair@uomus.edu.iq</a>
<b>Module Leader's Acad. Title</b>		<b>Module Leader's Qualification</b>	
<b>Module Tutor</b>		<b>e-mail</b>	
<b>Peer Reviewer Name</b>		<b>e-mail</b>	
<b>Review Committee Approval</b>		<b>Version Number</b>	1

<b>Relation With Other Modules</b> العلاقة مع المواد الدراسية الأخرى			
<b>Prerequisite module</b>	None		<b>Semester</b>
<b>Co-requisites module</b>	None		<b>Semester</b>

## Module Aims, Learning Outcomes and Indicative Contents

### أهداف المادة الدراسية ونتائج التعلم والمحويات الإرشادية

<b>Module Aims</b> أهداف المادة الدراسية	Learning the complex integration, the improper integrals, finding the poles of function, use the infinite series to represent the analytic functions and study the conformal mapping.
<b>Module Learning Outcomes</b> مخرجات التعلم للمادة الدراسية	This module is concerned with complex functions, that is functions which are both defined for and assume complex values. Their theory follows a quite different development from that of real functions, is remarkable in its directness and elegance, and leads to many useful applications. Topics covered will include: Complex numbers. Domains and simple connectivity. Cauchy-Riemann equations. Integration and Cauchy's theorem. Singularities and residues. Applications.
<b>Indicative Contents</b> المحتويات الإرشادية	It is to help the student discover his abilities and academic potential, help him design a plan that is unique to him, meet his requirements for editing requirements, and help him overcome any difficulties that could determine his successful path.
<b>Learning and Teaching Strategies</b> استراتيجيات التعلم والتعليم	
<b>Strategies</b>	the strategies used by a faculty member to develop student learning. It can be defined as a set of general rules and broad lines that concern the means of achieving the desired goals of teaching. It refers to the methods and plans followed by the faculty member to reach learning goals.

## Student Workload (SWL)

### الحمل الدراسي للطالب

<b>Structured SWL (h/sem)</b> الحمل الدراسي المنظم للطالب خلال الفصل	79	<b>Structured SWL (h/w)</b> الحمل الدراسي المنظم للطالب أسبوعيا	7
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنظم للطالب خلال الفصل	46	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنظم للطالب أسبوعيا	6.5
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطالب خلال الفصل	125		

## Module Evaluation

تقييم الماده 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	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
<b>Total assessment</b>		100% (100 Marks)			

## Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

Material Covered	
<b>Week 1</b>	Basic concepts
<b>Week 2</b>	Limit in complex functions
<b>Week 3</b>	Continuity, differential in complex functions
<b>Week 4</b>	Cauchy integral equations
<b>Week 5</b>	Cauchy integral equations in polar form
<b>Week 6</b>	Analytic functions
<b>Week 7</b>	Analytic equations in polar form
<b>Week 8</b>	Log functions and Exponential functions
<b>Week 9</b>	Triangle functions
<b>Week 10</b>	harmonic functions
<b>Week 11</b>	Integral
<b>Week 11</b>	Infinite integral
<b>Week 12</b>	Linear integral
<b>Week 13</b>	Resedu theorem
<b>Week 14</b>	Sequences
<b>Week 15</b>	Series

## Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
<b>Required Texts</b>	Complex variables and applications Ruel v. Churchill	Yes
<b>Recommended Texts</b>		No
<b>Websites</b>		

**APPENDIX:**

<b>GRADING SCHEME</b> <b>مخطط الدرجات</b>				
<b>Group</b>	<b>Grade</b>	النطير	<b>Marks (%)</b>	<b>Definition</b>
<b>Success Group (50 - 100)</b>	<b>A - Excellent</b>	اميلاز	90 - 100	Outstanding Performance
	<b>B - Very Good</b>	جيد جدا	80 - 89	Above average with some errors
	<b>C - Good</b>	جيد	70 - 79	Sound work with notable errors
	<b>D - Satisfactory</b>	متوسط	60 - 69	Fair but with major shortcomings
	<b>E - Sufficient</b>	مقبول	50 - 59	Work meets minimum criteria
<b>Fail Group (0 - 49)</b>	<b>FX – Fail</b>	مقبول بقرار	(45-49)	More work required but credit awarded
	<b>F – Fail</b>	راسب	(0-44)	Considerable amount of work required
<b>Note:</b>				
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.				

ملاحظة: هذا النموذج تم وضعه وتقديمه من قبل مديرية ضمان الجودة في وزارة التعليم العالي والبحث العلمي