

	<p>Ministry of Higher Education and Scientific Research - Iraq University of AL-Mustaqbal College of Sciences Department of Biology</p>	
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## MODULE DESCRIPTOR FORM

وصف المادة الدراسية

Module Information					
معلومات المادة الدراسية					
Module Title	PLANT GROUPS (ALGAE)			Module Delivery	
Module Type	CORE			Theory Lecture Lab Tutorial Practical Seminar	
Module Code	UOMU0601035				
ECTS Credits	4				
SWL (hr/sem)	200				
Module Level	1	Semester of Delivery			
Administering Department	Type Dept. Code	College	Type College Code		
Module Leader	M.S.C .Zainab Nadom Aziz		e-mail	zainab.nadhum.aziz@uomus.edu.iq	
Module Leader's Acad. Title		Module Leader's Qualification	M.S.C		
Module Tutor	None		e-mail	None	
Peer Reviewer Name		e-mail			
Review Committee Approval	17/9/2024		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			
اهداف المادة الدراسية ونتائج التعليم			
Module Aims اهداف المادة الدراسية	<ol style="list-style-type: none"><li>1. Familiarize students with the scientific terminology of algae</li><li>2. Study of the classification of algae</li><li>3. Studying the relationship of Phycology with other sciences</li><li>4. Study the importance of algae to humans</li><li>5. A study of the importance of food security and an alternative source of fuel</li><li>6. Studying the importance of algae in environmental pollution</li></ol>		
Module Learning Outcomes مخرجات تعلم المادة الدراسية	<ol style="list-style-type: none"><li>1. Creating a conscious generation capable of distinguishing between higher and lowering plants.</li><li>2. Creating a conscious and empowered generation capable of working and innovating in the various sectors of the country.</li><li>3. Creating a conscious, empowered generation capable of working and being creative in solving environmental problems and interacting with them.</li><li>4. Creating a generation that is aware and able to interact with the dangers of environmental pollution, food shortages, global warming and other global problems of concern to humanity.</li><li>5. Creating a conscious generation capable of distinguishing between Algae and others.</li></ol>		
Indicative Contents المحتويات الارشادية	<ol style="list-style-type: none"><li>1. Knowledge and distinction of scientific terms related to Phycology.</li><li>2. Introducing the economic importance of Algae.</li><li>3. Introducing the importance of Algaeas environmental markers.</li><li>4. Introducing the medicinal importance of the Algae.</li><li>5. The importance of the Algae in solving the problems of food shortage in the world.</li><li>6. The importance of algae as alternative sources of energy production</li><li>7. The correct use of scientific devices and equipment in the Algae laboratory.</li></ol>		
Learning and Teaching Strategies			
استراتيجيات التعليم والتعلم			
Strategies			

	One of the most important strategies that help the student to understand Phycology is linking Phycology with other sciences such as ecology, biotechnology and medical sciences, as well as making scientific field trips and collecting plant samples directly from the environment in which you live, as well as contributing to social and cultural activities such as Campaigns to remove pollution from rivers and cities.
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Student Workload (SWL) الحمل الدراسي للطالب			
<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطالب خلال الفصل	102	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطالب	7
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطالب خلال الفصل	98	<b>Unstructured SWL (h/w)</b> الحمل الدراسي الغير منتظم للطالب	6.5
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي خلال الفصل	200		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
<b>Formative assessment</b>	<b>Quizzes</b>	2	10% (10)	5, 10	LO #1, 2, 10 and 11
	<b>Assignments</b>	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	<b>Projects / Lab.</b>	1	10% (10)	Continuous	
	<b>Report</b>	1	10% (10)	13	LO # 5, 8 and 10
<b>Summative assessment</b>	<b>Midterm Exam</b>	2 hr	10% (10)	7	LO # 1-7
	<b>Final Exam</b>	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>	Introduction to plant groups
<b>Week 2</b>	Cyanobacteria (Blue-green algae) Part I
<b>Week 3</b>	Cyanobacteria (Blue-green algae) Part II
<b>Week 4</b>	Chlorophyta (Green algae)
<b>Week 5</b>	Euglenophyta
<b>Week 6</b>	Bacillariophyta (Diatoms)
<b>Week 7</b>	Exam
<b>Week 8</b>	Xanthophyta (Yellow-green Algae)
<b>Week 9</b>	Dinoflagellate
<b>Week 10</b>	Charophyta
<b>Week 11</b>	Pheophyta (Brown algae)
<b>Week 12</b>	Radophyta (Red algae)
<b>Week 13</b>	Pheophyta (Brown algae)
<b>Week 14</b>	Colourless algae
<b>Week 15</b>	Economic importance of algae
<b>Week 16</b>	Exam

## Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
<b>Week 1</b>	Laboratory safety and security guidelines
<b>Week 2</b>	Instructions for the use of scientific equipment
<b>Week 3</b>	Types of microscopes and the correct ways to use them
<b>Week 4</b>	Classification of Cyanobacteria (Blue-green algae) Part I
<b>Week 5</b>	Classification of Cyanobacteria (Blue-green algae) Part II
<b>Week 6</b>	Classification of Chlorophyta (Green algae) Part I
<b>Week 7</b>	Classification of Chlorophyta (Green algae) Part II
<b>Week 8</b>	Classification of Euglenophyta
<b>Week 9</b>	Classification of Bacillariophyta (Diatoms)

<b>Week10</b>	Classification of Xanthophyta (Yellow-green Algae)
<b>Week11</b>	Classification of Dinoflagellate
<b>Week12</b>	Classification of Pheophyta (Brown algae)
<b>Week13</b>	Classification of Charophyta
<b>Week14</b>	Classification of Pheophyta (Brown algae)
<b>Week 15</b>	Classification of Rhodophyta (Red algae)
<b>Week 16</b>	Exam

<b>Learning and Teaching Resources</b> مصادر التدريس		
	<b>Text</b>	<b>Available in the Library?</b>
<b>Required Texts</b>	<ul style="list-style-type: none"> <li>Charles D. Amsler PLANTS, ALGAE, AND FUNGI: Algal Chemical Ecology,</li> <li>Laura Barsanti and Paolo Gualtieri Algae Anatomy, Biochemistry, and Biotechnology</li> </ul>	Yes
<b>Recommended Texts</b>		No
<b>Websites</b>		

#### APPENDIX:

<b>GRADING SCHEME</b> مخطط الدرجات				
<b>Group</b>	<b>Grade</b>	<b>التقدير</b>	<b>Marks (%)</b>	<b>Definition</b>
<b>Success Group (50 - 100)</b>	<b>A - Excellent</b>	امتياز	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

**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.

