	Ministry of Higher Education and Scientific Research - Iraq Al-Mustaqbal University College Of Sciences Department of biology	

MODULE DESCRIPTOR FORM

نموذج وصف المادة الدراسية

Module Information
معلومات المادة الدراسية

Module Title	INVERTEBRATES	**Module Delivery**	
Module Type	CORE		**-Theory Lecture** **-Lab** **-PracticalSeminar**
Module Code	UOMU0601033		
ECTS Credits	6		
SWL (hr/sem)	150		
Module Level	1	**Semester of Delivery**	1
Administering Department	BIO	**College**	SCI
Module Leader	Prof. Dr.Khairy Abdullah Dawood	**e-mail**	Khairy Abdullah@uomus.edu.iq
Module Leader's Acad. Title	Professor	**Module Leader's Qualification**	Ph.D.
Module Tutor	Prof. Dr. Khairy Abdullah Dawood	**e-mail**	Khairy Abdullah@uomus.edu.iq
Peer Reviewer Name		**e-mail**	
Review Committee Approval		**Version Number**	

Relation With Other Modules
العلاقة مع المواد الدراسية الاخرى

Prerequisite module	None	**Semester**	

Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents
اهداف المادة الدراسية ومخرجات التعليم والمحتويات الارشادية

Module Aims اهداف المادة الدراسية	This study aims to: 1. Giving information to the student regarding the invertebrates 2. Classification of the phyla of invertebrates 3. Studying an association among organisms 4. Studying the advantages and disadvantages of invertebrates
Module Learning Outcomes مخرجات التعلم	1. Students were able to learn the latest information on invertebrates . 2. The student should know the most important terms related to the subject. 3. The student should understand the most important methods of classification of invertebrates 4. The student should know the important and distinctive characteristics of invertebrates . 5. How can they study invertebrates in future and classify it .
Indicative Contents المحتويات الارشادية	Indicative content includes the following. 1. Students must wear lab gowns, gloves and masks 2. Handle with care laboratory chemicals 3. Do not use the mobile device inside the laboratory 4. Do not eat food and drinks inside the laboratory 5. Ensure that tools and hands are sterilized before and after work 6. Security of laboratory necessary arranged .

Learning and Teaching Strategies
استراتيجيات التعليم والتعلم

Strategies	A. Theoretical lectures B. Practical laboratories C. Films and slideshows D. Scientific trips for field application

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم خلال الفصل	102	**Structured SWL (h/w)** الحمل الدراسي المنتظم اسبوعيا	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم خلال الفصل	98	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم اسبوعيا	7
Total SWL (h/sem) الحمل الدراسي الكلي	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	Lecture. 1: Introduction to invertebrates
Week 2	Lecture 2: Classification of phyla of invertebrates
Week 3	Lecture 3: An association among organisms
Week 4	Lecture 4: Advantages and disadvantages of invertebrates
Week 5	Lecture 5: Protozoa and Metazoa
Week 6	Exam
Week 7	Lecture 6: Radiata / Cnidaria and ctenophora
Week 8	Lecture 7: Bilateria / Protostmia / Acoelomates (Platyhelminthes and Rhynchocoela)
Week 9	Lecture 8: Pseudoocolomates (Acanthocephala , Entroprocta , Aschelminthes)

Week 10	Lecture 9: Coelmates / Arthropoda (Insects , Crustacia , Arachnida)
Week 11	Lecture 10: Mollusca and Annelida
Week 12	Lecture 11: Reuterostomia / Echinodermata , Hemichordata
Week 13	Lecture 12: Chordata / Mammals
Week 14	Lecture 13: Birds , Fishes , Reptiles , Amphybians
Week 15	Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Type of microscopes
Week 2	Lab 2: Security of Lab
Week 3	Lab 3: Preservation of organisms
Week 4	Lab 4: Staining
Week 5	Lab 5: Geimsa stain
Week 6	Exam
Week 7	Lab 6: Preparation of charts
Week 8	Lab 7: Sterilization of lab .
Week 9	Lab 8: chemical sterilization
Week 10	Lab 9: UV light
Week 11	Lab 10: Dissecting insects
Week 12	Lab 11: Measurement of invertebrates
Week 13	Lab 12: Seminar
Week 14	Lab 13: Reports
Week 15	Exam

Learning and Teaching Resources مصادر التعليم والتدريس		
	Text	**Available in the Library?**
Required Texts	Biology / Fifth Edition / by Neil Campbell , Jane Reece , Lawrence Mitchell .	Yes

Recommended Texts		
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 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	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.