University of Basrah
College of Marine Science
Quality Assurance & Academic
Performance Division
No.: 1066
Date: 18/9/2023

جامعة البصرة
كلية علوم البحار
شعبة ضمان الجودة والاداء
الجامعي
العدد: ١٠٦٦
التاريخ: ٢٠٢٣/٩/١٨

الى/جامعة البصرة / قسم ضمان الجودة والأداء الجامعي

م/ تأييد

تحية طيبة.....

نؤيد لكم وجود ملفات الوصف الأكاديمي على الموقع الألكتروني ومتضمنة الروابط الخاصة بالمقررات....

مع التقديـــــــــــر

جامعة البصرة
كلية علوم البحار
الموارد البشرية

أ. د. حامد طالب السعد
عميد كلية علوم البحار
9/18/2023

نسخة منه الى :
مكتب معاون العميد للشؤون العلمية
شعبة ضمان الجودة الجامعية
الموارد البشرية مع الأوليات
الصادرة

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Welth and marine resources**			**Module Delivery**	
Module Type	**Core**			☒**Theory** ☐ **Lecture** **Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	**NAMA 309**				
ECTS Credits	**4.00**				
SWL (hr/sem)	**100**				
Module Level	3		**Semester of Delivery**	2	
Administering Department	Natural Marine Sciences Dept		**College**	College of Marine Science	
Module Leader	Rajaa Abdul – Kadhem hanaf		**e-mail**	Raja.hanif@uobasrah.edu.iq	
Module Leader's Acad. Title	Asst.Professor		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Rajaa Abdul – Kadhem hanaf		**e-mail**	Raja.hanif@uobasrah.edu.iq	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date			**Version Number**		

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module		**Semester**	
Co-requisites module		**Semester**	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	• Preserving and sustainably using the oceans, seas and marine resources to achieve sustainable development • The oceans provide a reservoir of storage and absorb 30 percent of global carbon dioxide. • Marine phytoplankton give off 50 percent of the oxygen needed to survive. • The oceans regulate the climate and temperature, making the planet amenable to hosting various forms of life. • Oceans and seas remain essential to national and global economic well-being.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Important: Write at least 6 Learning Outcomes, better to be equal to the number of study weeks. 1. Learn about the importance of seas and oceans in all fields. 2. Knowledge and understanding of the chemical, physical and biological properties of compounds, water and organisms in the oceans and seas and their relationship to each other. 3. Understand the basic biochemical processes of living organisms and their ecosystems. 4. Applying scientific knowledge and rules in solving difficult environmental problems. 5. Understanding the foundations of marine environmental monitoring 6. Understanding climate changes and their impacts on the marine environment 7. Working collectively as part of a working group on research on marine environmental. 8. Efficient use of information and communication technology. 9. Ability to handle English well 10. Follow scientific methodologies in the analysis and formulation of ideas and results
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. <u>Part A – wealth and marine resources.</u> There are many natural wealth and resources in the seas and oceans, in addition to the mineral and oil resources that they contain. Perhaps the exploitation of such wealth represents the real entrance towards sophistication, progress and prosperity. The Arab countries are distinguished from the rest of the countries in that they are a huge energy store represented by the oil wealth, which still constitutes the backbone of industrial production. **Some key topics within marine chemistry include:** **1. The economic importance of seas and oceans**: It includes the climatic importance, which includes the source of rain on land, the ability to absorb carbon dioxide, and the formation of seas and oceans.As a source of oxygen

	gas is also important economic importance being The marine environment as a food source Important industries from the marine environment and the marine environment as a transportation route and as an energy source and a source for the production of oil and natural gas And as a source of mineral wealth and fresh water in addition to the universe The marine environment as a means of tourist and recreational attractions, as a source for the production of drugs and chemicals, as a repository for waste disposal, and as a shelter for overpopulation. Marine animal **2. Living marine resources and resources include:** Deep-dwellers, fish and Nectons zooplankton and resources which include Marine mammals and benthic animals Coral, coral reefs, pearl oysters, sponges, sea turtles, seabirds, marine plant resources and phytoplankton Macroalgae and seaweeds Coastal plants and mangrove trees (Shura) **3. wealth and fish resources:** Division of fisheries fish production world fish resources International cooperation in the field of fisheries The importance of fisheries Fisheries management Protecting fisheries Regulation of traps Fisheries development Obstacles to fisheries development. **4. Marine mineral wealth and resources:** clastic minerals Sand and gravel (minerals) building materials evaporative deposits tin gold and platinum Titanium Chromium and iron Monazite and zircon Gem minerals organic deposits Hydrocarbon deposits (oil and natural gas) Formation of oil and gas Locations of offshore oil gatherings Potential exploration sites in the seas and oceans Oil installation oil production sulfur coal other organic materials Spatial minerals glauconite mineral phosphorite Manganese crust hold hydrothermal deposits **5.** Pollutants and Contaminants: also investigate the presence and behavior of pollutants and contaminants in seawater, including heavy metals, pesticides, plastics, and hydrocarbons. Understanding their sources, transport, and impact on marine life helps in devising strategies for pollution prevention and remediation. By studying marine chemistry, scientists gain insights into the fundamental workings of oceans and how they are influenced by natural and anthropogenic factors. This knowledge is crucial for sustaining healthy marine environments and ensuring the well-being of marine ecosystems and the organisms that rely on them.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	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 types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	32	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	38	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**100**		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.				
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	60% (60)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	The importance of the marine environment
Week 2	Living marine wealth and resources (animal marine resources)
Week 3	Living marine wealth and resources (marine plant resources)
Week 4	wealth and fish resources
Week 5	Wealth and mineral resources
Week 6	Hydrocarbon deposits (oil and gas)
Week 7	Life in the Ocean – Primary Productivity and Respiration
Week 8	Spatial minerals
Week 9	Chemical marine resources
Week 10	Desalination methods
Week 11	Pharmaceutical materials of plant origin
Week 12	Pharmaceuticals of animal origin
Week 13	natural hydrocarbons
Week 14	Physical marine wealth and resources
Week 15	Pressures on marine wealth and resources The legal system for investing and protecting marine wealth and resources
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	Al-Saad, Hamid & Salman, Nader & A.Saeed, Mahyoob. (2006).كتاب-الثروات والموارد البحرية.	No
Recommended Texts		No
Websites	https://www.researchgate.net/publication/301747847_ktab-althrwat_walmward_albhryt	

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	General Biology	**Module Delivery**	
Module Type	**Core**	☒Theory ☒Lecture ☒Lab ☐Tutorial ☐Practical ☐Seminar	
Module Code	MSBI 104		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	U	**Semester of Delivery**	
Administering Department		**College**	Marine Science
Module Leader	Name	**e-mail**	E-mail
Module Leader's Acad. Title	Professor	**Module Leader's Qualification**	Ph.D.
Module Tutor		**e-mail**	E-mail
Peer Reviewer Name	Name	**e-mail**	E-mail
Scientific Committee Approval Date		**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

Module Objectives أهداف المادة الدراسية	The main objective in teaching the general biology course is to provide the student with knowledge in the field of life sciences and to define the concepts of animal and plant science, through which he learns about the basic and important scientific and practical concepts in the biological aspect, through the study of the physiology of the life organs in the organism's body as well as his scientific knowledge of various mechanics Assistance in perpetuating life, starting from the smallest functional unit, which is the cell, and with all the minute biological details, all the way to man, the finest living organism.
Module Learning	1. Learn the general terms in animals and plants 2. Identify cells, tissues, and important organs of living organisms

Outcomes مخرجات التعلم للمادة الدراسية	3. Know the classification of living organisms and their importance in different environments 4. Maximum use of cognitive information and harnessing it, etc
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل		**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل		**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل			

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)		
	Assignments	2	10% (10)		
	Projects / Lab.	14	10% (10)		
	Report	1	10% (10)		
Summative	Midterm Exam	2hr	10% (10)		

assessment	**Final Exam**	2hr	50% (50)		
		Total assessment	100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Definition of biology , branches historical study
Week 2	Biodiversity and classification system
Week 3	The cell part- 1
Week 4	The cell part -2 and its components
Week 5	Animal tissues and plant tissues
Week 6	Viruses
Week 7	Kingdom monera Bacteria
Week 8	Cyanobacteria
Week 9	Algae
Week 10	Fungi
Week 11	Kingdom plantae Bryophyta
Week 12	Pterdophyta
Week 13	Kingdom animalia classification
Week 14	Diversity in digestive structure
Week 15	Circulation system

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Exploration in basic biology	Yes
Recommended Texts	Biology ,Mcgraw- Hill USA General Zoology	Yes
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
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	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
	F – Fail	راسب	(0-44)	Considerable amount of work required

Ministry of Higher Educatio
n and Scientific Research
Republic of Iraq
University: University of Basrah
College: Marine Science
Department: Natural Marine Sciences

شعار الكلية

Year : 2021-2022

Semester : First

SYLLABUS: < *fundamental of ecology* >

INSTRUCTOR: IMAD JASSSIM AL-SHAWI	***Phone:*** *PHONE NO: 07827009356*
Hours: 3	**College of** ***Office:*** **University of Basrah/ *Marine Science***
Home Page:https://faculty.uobasrah.edu.iq/faculty/1613	***Email:****imad.mohammed*@uobasrah.edu.iq

COURSE OVERVIEW

The course aims to develop a complete conception for the student about the basics of ecology by introducing students to the types of terrestrial and aquatic ecosystems as well as the relationships between living organisms and the study of food networks and primary and secondary productivity.

GOALS AND OBJECTIVES

- Knowing and understanding the basics of ecology
- Explain the types of ecosystems
- The study of ecosystems
- Study primary and secondary productivity, food webs, and relationships between living organisms

TEXTBOOK AND READINGS

- **Fundimental of Ecology , Dr. Hamed Taleb Al-Saad**
- **Fundimental of Ecology , Dr. Bassem Al-Khafaji**

COURSE ASSESSMENTS

The course grade (40 points) will be based on the following elements:

	Points
Exams	**30**
Reading Checks	
Participation	**5**
Attendance	**5**
Total marks	**40**

COURSE DESCRIPTION AND ASSIGNMENT SCHEDULE

This NO. -credit hour course is 15 weeks long. You should invest NO. hours every week in this course.

WK	DATE	TOPIC	READING	ASSIGNMENT
1		Definition of ecology and its origins	1	Participation and Attendance
2		The importance of ecology	1	Participation and Attendance
3		branches of ecology	2	Participation and Attendance
4		Climate change and its impact on the open environments	2	Participation and Attendance
5		Modern branches of ecology	1	Participation and Attendance
6		Fields of study of environmental sciences		
7		aquatic ecosystems	3	Participation and Attendance
8		aquatic ecosystems	3	Participation and Attendance
9		Biosphere	3	Participation and Attendance
10		non-living components	1	Participation and Attendance
11		live ingredients	1	Participation and Attendance
12		Conditions for the formation of the ecosystem		
13		Environmental relationships and biological interactions		
14		ecological balance	1	Participation and Attendance
15		basic environmental laws		Participation and Attendance
	Mid Exam			

Is it possible to develop the curriculum <within the teaching authority 20%> to include vocabulary that serves sustainability	
1- Yes, it is possible (point an appropriate aspect)	Focus on environmental conservation operations. Focus on the effects of environmental pollution. Training on raising awareness to persuade decision-makers and stakeholders to pay attention to coastal environment issues and focus on developing appropriate plans to reduce and address them.
2- Suggest aspect that serves sustainability	Adopting environmentally friendly programs to solve environmental problems

وزارة التعليم العالي والبحث العلمي – جمهورية العراق

الجامعة : جامعة البصرة

الكليــة : كلية علوم البحار

القسم : علوم البحار الطبيعية

شعار الكلية

العام الدراسي : 2022-2021

الفصل الدراسي : الأول

مفردات المنهج : أساسيات علم البيئة >

أسم التدريسي : أ.م.د.عماد جاسم الشاوي

رقم الموبايل : 07827009356

جهة الانتساب : جامعة البصرة-كلية علوم البحار	**عدد وحدات الدرس 3**
الايميل الرسمي:imad.mohammed@uobasrah.edu.iq	**رابط الصفحة الرسمية :**

نظرة عامة
يهدف المقرر الى وضع تصور كامل لدى الطالب عن أساسيات علم البيئة من خلال تعريف الطلبة على انوع النظم البيئية الارضية والمائية وكذلك العلاقات بين الكائنات الحية ودراسة الشبكات الغذائية والانتاجية الاولية والثانوية
الأهداف والغايات
✓ معرفة وفهم اسس علم البيئة
✓ توضيح انواع النظم البيئية
✓ دراسة النظم البيئية
✓ دراسة الانتاجية الاولية والثانوية والشبكات الغذائية والعلاقات بين الكائنات الحية

المصادر
• أساسيات علم البيئة تأليف أ.د.حامد طالب السعد
• أساسيات علم البيئة تأليف أد.باسم الخفاجي

التقييمات المعتمدة

تعتمد درجة المادة (40) موزعة على الجوانب التالية :

التفاصيل	الدرجة
الامتحانات	30
درجة الاستيعاب	
المشاركة	5
الحضور	5
الدرجة الكلية	40

وصف الدرس وجدول التخصيص

يتضمن الدر س (2) ساعة - عدد الساعات الأسبوعية معتمدة موزعة على 15 أسبوعًا .

الاسبوع	التأريخ	الموضوع	القراءة في المصدر	الامتحانات والتقييمات

1		تعريف علم البيئة ونشأته	1	الحضور والمشاركة
2		أهمية علم البيئة	1	الحضور والمشاركة
3		فروع علم البيئة	2	الحضور والمشاركة
4		التغيرات المناخية واثرها على المحيطات المفتوحة	2	الحضور والمشاركة
5		الفروع الحديثة لعلم البيئة		الحضور والمشاركة
6		مجالات دراسة العلوم البيئية	1	الحضور والمشاركة
7		النظم البيئية المائية	3	الحضور والمشاركة
8		النظم البيئية الأرضية	3	الحضور والمشاركة
9		المحيط الحيوي	3	الحضور والمشاركة
10		المكونات غير الحية	3	الحضور والمشاركة
11		المكونات الحية	1	الحضور والمشاركة
12		شروط تكون النظام البيئي	1	الحضور والمشاركة
13		العلاقات البيئية والتداخلات الحيوية		الحضور والمشاركة
14		التوازن البيئي	1	الحضور والمشاركة
15		قوانين البيئة الاساسية		الحضور والمشاركة
امتحان نهاية الفصل				

هل يمكن تطوير المنهج < ضمن صلاحية التدريسي 20% > على ان تتضمن مفردات تخدم الاستدامة	
1- نعم يمكن ضمن المحاور	التركيز على عمليات الحفاظ على البيئة . التركيز على اثار التلوث البيئي . التدريب على زيادة الوعي لاقناع أصحاب القرار وأصحاب المصلحة للاهتمام بقضايا البيئة الساحلية والتركيز على وضع الخطط المناسبة للحد منها ومعالجتها .
2- أقترح موضوع يخدم الاستدامة	اعتماد البرامج الصديقة للبيئة في حل المشاكل البيئية

Ministry of Higher Education and Scientific Research

Republic of Iraq

University: University Of Basrah

College: Marine Sciences College

Department: Natural Marine Sciences

Year : 2021-2022 Semester : First

SYLLABUS: < *first aid* >

INSTRUCTOR: AMAL AHMED MAHMOOD	***Phone:*** *07816168186*
Hours:	Office: Marine Sciences College
Home Page: **https://faculty.uobasrah.edu.iq**	***Email:*** **amal.mahmood@uobasrah.edu.iq**

COURSE OVERVIEW

A group of effective, quick, and simple techniques that are provided in order to avoid the deterioration of the patient's condition

GOALS AND OBJECTIVES

1- Preserving the life of the injured person from any danger that threatens it.

2- Pain relief.

3- Preventing complications.

4- Helping to heal.

TEXTBOOK AND READINGS

1- Simplified first aid/ Nigel Barraclough
2- First Aid Manual / World Health Organization

COURSE ASSESSMENTS

The course grade (**40** points) will be based on the following elements:

	Points
Exams	**25**
Reading Checks	**2**
Participation	**10**
Attendance	**3**
Assignments	**40**

COURSE DESCRIPTION AND ASSIGNMENT SCHEDULE

This NO. -credit hour course is 15 weeks long. You should invest NO. hours every week in this course.

WK	DATE	TOPIC	READING	ASSIGNMENT
1		First aid principles and practice		
2		The main methods of first aid		
3		Recognize in an emergency		
4		suffocation		
5		Wounds and bleeding		
6		circulatory disorders		
7		First semester exam		
8		Lost consciousness		
9		fractions		
10		burns		
11		poisoning		
12		foreign bodies		
13		Acting in major accidents		
14		+Bandages and headbands management and transportation		
15		Second semester exam		
	Mid Exam			

وزارة التعليم العالي والبحث العلمي – جمهورية العراق

الجامعة : جامعة البصرة

الكليــة : علوم البحار

القسم : علوم البحار الطبيعية

العام الدراسي : 2022-2021

الفصل الدراسي : الأول

مفردات المنهج : < أسعافات أولية >

أسم التدريسي : د.آمال أحمد محمود	**رقم الموبايل :07816168186**

جهة الانتساب : كلية علوم البحار	**عدد وحدات الدرس :2**
الايميل الرسمي :amal.mahmood@uobasrah.edu.iq	**رابط الصفحة الرسمية :** https://faculty.uobasrah.edu.iq

نظرة عامة
مجموعة من التقنيات الفعالة، السريعة، والبسيطة التي تقدم من أجل تجنب تدهور حالة المصاب
الأهداف والغايات
1-الحفاظ على حياة المصاب من أي خطر يهددها. 2-تخفيف الآلام. 3- منع المضاعفات. 4-المساعدة على الشفاء.

المصادر
1- الأسعاف الأولي المبسط/ Nigel Barraclough 2- دليل الأسعافات الأولية/ منظمة الصحة العالمية

التقييمات المعتمدة

تعتمد درجة المادة (40) موزعة على الجوانب التالية :

التفاصيل	الدرجة
الامتحانات	25
درجة الاستيعاب	2
المشاركة	10
الحضور	3
الدرجة الكلية	40

وصف الدرس وجدول التخصيص

يتضمن الدر س ( ) ساعة - عدد الساعات الأسبوعية معتمدة موزعة على 15 أسبوعًا .

الاسبوع	التأريخ	الموضوع	القراءة في المصدر	الامتحانات والتقييمات
1		مباديء الأسعافات الأولية وممارسته		
2		الطرق الرئيسية للأسعاف الأولي		
3		التعرف في حالة طارئة		
4		الأختناق		
5		الجروح والنزف		
6		أضطرابات الدورة الدموية		
7		أمتحان فصلي أول		
8		فقد الوعي		
9		الكسور		
10		الحروق		

11		التسمم		
12		الأجسام الغريبة		
13		التصرف في الحوادث الكبرى		
14		الضمادات والعصائب و التدبير والنقل		
15		أمتحان فصلي ثاني		
امتحان نهاية الفصل				

هل يمكن تطوير المنهج < ضمن صلاحية التدريسي 20% > على ان تتضمن مفردات تخدم الاستدامة	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	***Environmental sanitation***			**Module Delivery**	
Module Type				☒**Theory** ☒**Lecture** ☒**Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code					
ECTS Credits					
SWL (hr/sem)					
Module Level	U		**Semester of Delivery**	1	
Administering Department	Type Dept. Code		**College**	Type College Code	
Module Leader	Name		**e-mail**	E-mail	
Module Leader's Acad. Title			**Module Leader's Qualification**		
Module Tutor	Shaymaa AbduAmeer		**e-mail**	**shaymaa.abood@uobasrah.edu.iq**	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date			**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

Module Objectives أهداف المادة الدراسية	**المحافظة على الأوضاع الصحية في البيئة، من خلال إجراءات وطرق معالجة يتم اتباعها للسيطرة او الحد من العوامل البيئة ومسببات التلوث لتتناسب مع حياة الإنسان وجميع الكائنات الحية، وبالتالي لا يختل التوازن البيئي وتستمر الحياة من خلال بيئة صحية للحياة على الأرض.**
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	✓ تعريف الطلاب بمكونات البيئة وتأثير كل منها على النظام البيئي ✓ دراسة أهمية بقاء مكونات وعناصر النظام البيئي على حالها والمحافظة عليها بأعداد وكميات مناسبة على الرغم من نقصانها وتجددها المستمرين ✓ معرفة انواع التلوث واضرار كل منها على النظام البيئي ✓ معالجة التلوث او الحد منه
Indicative Contents المحتويات الإرشادية	1. التنمية المستدامة 2. تنقية المياه 3. تدوير المياه الزراعية 4. تطوير البيئة 5. تطوير الصحة 6. حفظ التنوع الحيوي 7. تطوير المساحات الخضراء 8. اليات التقليل من الاستهلاك و زيادة الانتاج

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	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 types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	7	**Structured SWL (h/sem)** الحمل الدراسي المنتظم للطالب خلال الفصل	109

Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	91	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
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 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	مقدمة عن الاصحاح البيئي
Week 2	التوازن البيئي
Week 3	تلوث التربة ومصادره
Week 4	معالجة تلوث التربة
Week 5	Exam

Week 6	تلوث الماء ومصادره
Week 7	معالجة تلوث الماء
Week 8	المعالجة الحيوية
Week 9	المعالجة النباتية
Week 10	تلوث الهواء ومصادره
Week 11	الاحتباس الحراري
Week 12	ثقب الاوزون
Week 13	Exam
Week 14	معالجة تلوث الهواء
Week 15	اعادة التدوير وترشيد الاستهلاك
Week 16	**Preparatory week before the final Exam**

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	**Available in the Library?**
Required Texts	Essentials of Ecology, Fifth Edition G. Tyler Miller, Jr. and Scott E. Spoolman © 2009 Brooks/Cole, Cengage Learning Anenberg, S., J.J. West, A.M. Fiore, D.A. Jaffe, M.J. Prather, D. Bergmann, C. Cuvelier, F.J. Dentener, B.N. Duncan, M. Gauss, P. Hess, J.E. Jonson, A. Lupu, I.A. MacKenzie, E. Marmer, R.J. Park, M. Sanderson, M. Schultz, D.T. Shindell, S. Szopa, M.G. Vivanco, O. Wild, and G. Zeng. 2009. Intercontinental impacts of ozone pollution on human mortality. Environmental Science & Technology (submitted). National Academies of Sciences, Engineering, and Medicine. 2010. Global Sources of Local Pollution: An Assessment of Long-Range Transport of Key Air Pollutants to and from the United States. Washington, DC: The National Academies	Yes

	Press. https://doi.org/10.17226/12743.	
Recommended Texts	اساسّات علم االبيئة تألّيف/ ا.د. حسّن السعدي ملوثات الهواء تألّف / ا.د. باسم الخفاجي (Recycling /Editor: Vigiwagher (5-84pp	Yes
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	**English Language**			**Module Delivery**	
Module Type				☒**Theory** ☒**Lecture** ☐**Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	**UBEN101**				
ECTS Credits					
SWL (hr/sem)					
Module Level	U(		**Semester of Delivery**	1/ department	
Administering Department	Natural Marine Science / Applied Marine Science		**College**	Marine Science	
Module Leader	Zainab Jaafar Auda		**e-mail**	E-mail	
Module Leader's Acad. Title	Assist. Lecturer		**Module Leader's Qualification**	MA	
Module Tutor	Zainab Jaafar Auda		**e-mail**	E-mail	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	01/06/2023		**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 Objectives أهداف المادة الدراسية	• Mastering the basics structures of the English sentence • Mastering the active- passive structure • Improving reading in English • Gaining knowledge of marine sciences vocabulary • Mastering a public speaking presentation • Learning how to write a paragraph
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	THE ENGLISH LANGUAGE COURSE IN THE COLLEGE OF MARINE SCIENCE IS INTENDED TO REVIEW SOME BASIC LANGUAGE GRAMMAR AND ENHANCE THE STUDENTS' STORAGE OF VOCABULARY IN THE FIELD OF MARINE SCIENCE. THE COURSE SYLLABUS IS DESIGNED TO MEET THE COURSE DEADLINE ALONG A PERIOD OF 15 WEEKS. THE MAIN CONTENT OF THE SYLLABUS IN BASED OF TEACHING ENGLISH FOR SPECIAL PURPOSES SINCE THE STUDENTS OF THE COLLEGE ARE SPECIALIZED IN A NON EFL SPECIALIZATION. THE COURSE FOCUSES ON A VARIETY OF MAIN MARINE TOPICS LIKE MARINE GEOLOGY, MARINE BIOLOGY, MARINE PHYSICS AND ENVIRONMENT IN A LINGUISTICS WAY WITH FOCUS ON READING SKILL, GRAMMAR, AND PUBLIC SPEAKING.
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا		**Structured SWL (h/sem)** الحمل الدراسي المنتظم للطالب خلال الفصل	
Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا		**Unstructured SWL (h/sem)** الحمل الدراسي غير المنتظم للطالب خلال الفصل	
		Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	attendance		10		
	Assignments				
	Participation in class				
	Monthly exams		30		
Summative assessment					
	Final Exam		60		
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	• Open discussion

Week 2	**Presentation Lecture (recorded)** • Subject • Verb • Definite Articles • Sentence Structure
Week 3	**Presentation Lecture (recorded)** • Subject- Verb Agreement **Conversation** • Introduce yourself
Week 4	**Course Book:** • The World's Oceans • The Blue Planet • Waterbodies
Week 5	**Conversation** • Waterbodies I visited
Week 6	• Group Presentation Lecture (How to give a group presentation)
Week 7	**Presentation Lecture (recorded)** • Basic English Sentence Structure **Course Book:** • Seas and Oceans • Why is Seawater Salty?
Week 8	**First monthly Exam (**Week2- Week7 syllabi)
Week 9	**Grammar point:** Active- Passive voices
Week 10	• Review of group presentation Lecture
Week 11	**Course Book:** • Deep Ocean Wildlife • Zones Of Life • Coral Reef **Conversation** • College Life (Likes And Dislikes)
Week 12	**Course Book:** • Ocean Destruction • Overfishing • Tearing Up The Ocean Floor • Warmer Oceans • The Trouble With Tourism • Commercial Exploration
Week 13	• **First monthly Exam (**Week9- Week 12 syllabi)
Week 14	**Conversation point:** How to eliminate pollution
Week 15	Final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	No lab
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	• Marine English: An ESP Course to the Students of Marine Science • Youtube videos set by course lecturer for selected topics of the course	Yes
Recommended Texts		
Websites	www.youtube.com/thezainjauda	

Grading Scheme

مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
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(0 – 49)	**F –** Fail	راسب	(0-44)	Considerable amount of work required

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Ministry of Higher Education and Scientific Research

Republic of Iraq

University: University Of Basrah

College: ??????

Department : ??????

Year : 2021-2022

Semester : First

SYLLABUS: < *Course NAME* >

INSTRUCTOR: LECTURER NAME	***Phone:*** *PHONE NO.*
Hours: 2	***Office:*** ??????
Home Page:	***Email:*** ??????

COURSE OVERVIEW

??????

GOALS AND OBJECTIVES

- ??????
- ??????
-

TEXTBOOK AND READINGS

[1]
[2]
[3]

COURSE ASSESSMENTS

The course grade (?????? points) will be based on the following elements:

	Points
Exams	??????
Reading Checks	??????
Participation	??????

Attendance	??????
Assignments	??????

COURSE DESCRIPTION AND ASSIGNMENT SCHEDULE

This NO. -credit hour course is 15 weeks long. You should invest NO. hours every week in this course.

WK	DATE	TOPIC	READING	ASSIGNMENT
1				
2				
3				
4				
				Assignment 1
5				
6				
7				
8				Assignment 2
9				
10				
11				
12				Assignment 3
13				
14				
15	***Mid Exam***			

Is it possible to develop the curriculum <within the teaching authority 20%> to include vocabulary that serves sustainability	
1- Yes, it is possible (point an appropriate aspect)	**1**- Fighting poverty 2- No hunger 3- Developing life-long learning and education 4- Green chemistry 5- Sustainable development 6- Water purification 7- Water recycling for agriculture 8- Creativity and production -9- Sustainable energy (wind Sun and organic energy) -10- Environmental development- 11- pollution measurement -12- child care

	program-13- public health development program-14- measuring the efficiency of health institutions-15- gender equality-16- non-extremism-17- drug efficiency 18- Food efficiency for infants, children, adults and the elderly -19- Efficiency of the overall environment -20- Waste recycling-21- Heavy water disposal mechanisms-22- Literacy program-23- Mechanisms for preserving biodiversity-24- Mechanisms for spreading peace and justice in society- 25- Developing life in the seas and oceans-26- Studying the level of university education and the mechanisms for its development-27- Mechanisms for developing the local industry in Iraq-28- Mechanisms for developing infrastructure in Iraq-29-Reducing racial discrimination in all its forms-30-The basics of sustainable cities- 31- Mechanisms to reduce consumption and increase production- 32- Mechanisms to provide job opportunities for all-33-Study aspects of developing green areas-34- Study climatic phenomena in the country-35- Mechanisms for obtaining good health and well-being.
2- Suggest aspect that serves sustainability	

وزارة التعليم العالي والبحث العلمي – جمهورية العراق

الجامعة : جامعة البصرة

الكليــة : علوم البحار

القسم : علوم البحار الطبيعي

العام الدراسي**2022-2021 :**

الفصل الدراسي : الأول

مفردات المنهج : < الهائمات < B401

أسم التدريسي : أ. م.د. موسى جاسم محمد	رقم الموبايل :07801454751
جهة الانتساب : جامعة البصرة	عدد وحدات الدرس : ثلاثة وحدات
الايميل الرسمي :**mossa59jassem@gmail.com**	رابط الصفحة الرسمية :

نظرة عامة

الهائمات مجموعة من الكائنات الحية ذاتية النغذية وتدعى بالهائمات النباتية وتعتبر من النتاجات الاولية في البيئة المائية يتراوح احجامها بين مايكرون والسنتمتر. في حين تضم الهائمات الحيوانية مجموعة من الابتدائيات والقشريات والنواعم.

الأهداف والغايات

- دراسة الهائمات واقسامها وعوامل نموها واهميتها واهميتها في السلسلة الغذائية.
- فهم وادراك المصطلحات العلمية الواردة في المقرر
- معرفة التصنيف الاساسي للهائمات.
- دور ونشاط الهائمات وتحوراتها للمعيشة البلانكتوني>

المصادر

[1] Tomas, C.R.(1971) Identifying Marine Phytoplanktonic.

[2] Bony, A.D. (1989) Phytoplanktonic.

[3] John, G.R. (1980) plankton productivity in the ocean.

التقييمات المعتمدة

تعتمد درجة المادة (قيمة الدرجة) موزعة على الجوانب التالية :

التفاصيل	الدرجة
الامتحانات الفصلي / النظري/ 20 العملي/ 10	
درجة الاستيعاب	
المشاركة 5	
الحضور 5	
الدرجة الكلية 100	

وصف الدرس وجدول التخصيص

يتضمن الدرس (2) ساعة - عدد الساعات الأسبوعية معتمدة موزعة على 15 أسبوعًا .

الاسبوع	التأريخ	الموضوع	القراءة في المصدر	الامتحانات والتقييمات
1		مقدمة : التعريف بالهائمات وتقسيماتها البيئية وفوائدها واضرارها		
2		القسم الاول : الدراسة التصنيفية للهائمات اولا : تصنيف الهائمات النباتية صفاتها العامة , اهميتها البيئية والاقتصادية , تصنيفها		
3		ثانيا : تصنيف الهائمات الحيوانية (الجزء الاول) صفاتها العامة , اهميتها البيئية والاقتصادية , تصنيفها		
4		تكملة تصنيف الهائمات الحيوانية		
5		الدراسة البيئية / تاثير العوامل الفيزيائية		الأمتحان 1
6		تاثير العوامل الكيميائية		
7		نمط توزيع الهائمات الحيوانية وتواجدها		
8		التغيرات الفصلية في توزيع الهائمات		
9		التغير المكاني والهجرة في الهائمات		الامتحان 2
10		التغذية في الهائمات انواعها وطرقها		
11		التكاثر في الهائمات		
12		العلاقة بين الهائمات النباتية والحيوانية		
13		تكيفات الهائمات للحماية من المفترسات / تكيفات الطفو والعوامل المؤثرة عليه		الامتحان 3
14		الانتاجية الاولية للهائمات النباتية / العوامل المؤثرة وطرق قياسها		
15		الانتاجية الثانوية للهائمات الحيوانية		
امتحان نهاية الفصل				

هل يمكن تطوير المنهج < ضمن صلاحية التدريسي 20% > على ان تتضمن مفردات تخدم الاستدامة	
1- نعم يمكن ضمن المحاور	معرفة الهائمات وتصنيفها وتقسيمها والعوامل المؤثرة على نموها كالطفو والهجرةالعمودية والافقية والتعاقب الفصلي والمكاني والموسمي, طرق التعيين النوعي والكمي للهائمات التفاعلات بين الهائمات والاحياء الاخرى. أثر الملوثات على الهائمات من حيث الاهمية البيئية والصحية وطرق الاستزراع , واستخدامها والاستفادة منهافي تغذية الهائمات الحيوانية. دراسة الاهمية الاقتصادية للهائمات وامكانية استخراج مواد طبية او علاجية او استخدامها كدليل لتلوث

	المياه وامكانية استخدامها في السيطرة البيولوجية على بعض الملوثات.
2- أقترح موضوع يخدم الاستدامة	1- تركيز على الهائمات النادرة واستزراعها بغية الحفاظ على اعدادها والاستفادة منها. 2- القيام برحلات بحرية للمياه الساحلية العراقية والخليج العربي لمعرفة الطالب بتصنيف الهائمات والمشاهدة العملية.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information

معلومات المادة الدراسية

Module Title	**Marine taxonomy**	**Module Delivery**	
Module Type	**Core**	☒**Theory** ☒**Lecture** ☒**Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	NAMA 213		
ECTS Credits	**6**		
SWL (hr/sem)	**150**		
Module Level	UG	**Semester of Delivery**	2
Administering Department		**College**	Marine Science
Module Leader	Dr. Abdulhssein H. GHazi	**e-mail**	E-mail
Module Leader's Acad. Title	Professor	**Module Leader's Qualification**	Ph.D.
Module Tutor		**e-mail**	E-mail
Peer Reviewer Name	Name	**e-mail**	E-mail
Scientific Committee Approval Date	17/6/2023	**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 Objectives أهداف المادة الدراسية	.The student recognizes the classification of different marine life

Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- The ability to deal with different marine organisms, especially toxic ones. 2- Focus on commercial and economic types. 3- Determine the biodiversity of any area. 4- Identify the main people in the Iraqi environment
Indicative Contents المحتويات الإرشادية	Indicative content includes the following.
Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1- Adoption of lectures through modern books. 2- Conducting seminars for students. 3- Conducting weekly tests 4- Field visits to see the models in the field. 5- Laboratory study

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	62	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	88	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	2
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	**Quizzes**	2	10% (10)		

assessment	**Assignments**	2	10% (10)		
	Projects / Lab.	14	10% (10)		
	Report	1	10% (10)		
Summative assessment	**Midterm Exam**	2hr	10% (10)		
	Final Exam	2hr	50% (50)		
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	General Introduction
Week 2	Taxonomy of Phylum Protozoa
Week 3	Taxonomy of Phylum Porifera
Week 4	Taxonomy of Phylum Cnidaria
Week 5	Taxonomy of Phylum Platyhelminthes
Week 6	Taxonomy of Phylum Aschelminths
Week 7	Taxonomy of Phylum Annelida
Week 8	Taxonomy of Phylum Mollusca
Week 9	Taxonomy of Phylum Arthropoda
Week 10	Taxonomy of Phylum Crustacean
Week 11	Taxonomy of Phylum Echinodermata
Week 12	Taxonomy of Phylum Worms
Week 13	Taxonomy of Phylum Zooplankton
Week 14	Taxonomy of cephalopod

Week 15	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	of Phylum Protozoa Key use and models for classification
Week 2	Phylum Porifera Key use and models for classification
Week 3	Phylum Cnidaria Key use and models for classification
Week 4	Key use and models for classification Phylum Platyhelminthes
Week 5	Key use and models for classification Phylum Aschelminths
Week 6	Key use and models for classification Phylum Annelida
Week 7	Key use and models for classification Phylum Mollusca
Week 8	Phylum Arthropoda Key use and models for classification
Week 9	Phylum Crustacean Key use and models for classification
Week 10	Phylum Echinodermata Key use and models for classification
Wee; 11	Key use and models for classification Phylum Worms
Week 12	Key use and models for classificationPhylum Zooplankton

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Marine Taxonomy	Yes
Recommended Texts	Fundamentals of taxonomy	Yes
		Yes

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
	F – Fail	راسب	(0-44)	Considerable amount of work required

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Welth and marine resources**			**Module Delivery**	
Module Type	**Core**			☒**Theory** ☐ **Lecture** **Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	**NAMA 309**				
ECTS Credits	**4.00**				
SWL (hr/sem)	**100**				
Module Level	3		**Semester of Delivery**	2	
Administering Department	Natural Marine Sciences Dept		**College**	College of Marine Science	
Module Leader	Rajaa Abdul – Kadhem hanaf		**e-mail**	Raja.hanif@uobasrah.edu.iq	
Module Leader's Acad. Title	Asst.Professor		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Rajaa Abdul – Kadhem hanaf		**e-mail**	Raja.hanif@uobasrah.edu.iq	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date			**Version Number**		

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module		**Semester**	
Co-requisites module		**Semester**	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	• Preserving and sustainably using the oceans, seas and marine resources to achieve sustainable development • The oceans provide a reservoir of storage and absorb 30 percent of global carbon dioxide. • Marine phytoplankton give off 50 percent of the oxygen needed to survive. • The oceans regulate the climate and temperature, making the planet amenable to hosting various forms of life. • Oceans and seas remain essential to national and global economic well-being.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Important: Write at least 6 Learning Outcomes, better to be equal to the number of study weeks. 11. Learn about the importance of seas and oceans in all fields. 12. Knowledge and understanding of the chemical, physical and biological properties of compounds, water and organisms in the oceans and seas and their relationship to each other. 13. Understand the basic biochemical processes of living organisms and their ecosystems. 14. Applying scientific knowledge and rules in solving difficult environmental problems. 15. Understanding the foundations of marine environmental monitoring 16. Understanding climate changes and their impacts on the marine environment 17. Working collectively as part of a working group on research on marine environmental. 18. Efficient use of information and communication technology. 19. Ability to handle English well 20. Follow scientific methodologies in the analysis and formulation of ideas and results
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. <u>Part A – wealth and marine resources.</u> There are many natural wealth and resources in the seas and oceans, in addition to the mineral and oil resources that they contain. Perhaps the

exploitation of such wealth represents the real entrance towards sophistication, progress and prosperity. The Arab countries are distinguished from the rest of the countries in that they are a huge energy store represented by the oil wealth, which still constitutes the backbone of industrial production.

Some key topics within marine chemistry include:

1. The economic importance of seas and oceans: It includes the climatic importance, which includes the source of rain on land, the ability to absorb carbon dioxide, and the formation of seas and oceans.As a source of oxygen gas is also important economic importance being The marine environment as a food source Important industries from the marine environment and the marine environment as a transportation route and as an energy source and a source for the production of oil and natural gas And as a source of mineral wealth and fresh water in addition to the universe The marine environment as a means of tourist and recreational attractions, as a source for the production of drugs and chemicals, as a repository for waste disposal, and as a shelter for overpopulation.

Marine animal **2. Living marine resources and resources include:** Deep-dwellers, fish and Nectons zooplankton and resources which include Marine mammals and benthic animals Coral, coral reefs, pearl oysters, sponges, sea turtles, seabirds, marine plant resources and phytoplankton Macroalgae and seaweeds Coastal plants and mangrove trees (Shura)

3. wealth and fish resources: Division of fisheries fish production world fish resources International cooperation in the field of fisheries The importance of fisheries Fisheries management Protecting fisheries Regulation of traps Fisheries development Obstacles to fisheries development.

4. Marine mineral wealth and resources: clastic minerals Sand and gravel (minerals) building materials evaporative deposits tin gold and platinum

Titanium Chromium and iron Monazite and zircon Gem minerals organic deposits Hydrocarbon deposits (oil and natural gas) Formation of oil and gas Locations of offshore oil gatherings Potential exploration sites in the seas and oceans Oil installation oil production sulfur coal other organic materials Spatial minerals glauconite mineral phosphorite Manganese crust hold hydrothermal deposits

5. Pollutants and Contaminants: also investigate the presence and behavior of pollutants and contaminants in seawater, including heavy metals, pesticides, plastics, and hydrocarbons. Understanding their sources, transport, and impact on marine life helps in devising strategies for pollution prevention and remediation. By studying marine chemistry, scientists gain insights into the fundamental workings of oceans and how they are influenced by natural and anthropogenic factors. This knowledge is crucial for sustaining healthy marine environments and ensuring the well-being of marine ecosystems and the organisms that rely on them.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	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 types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	32	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	38	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**100**		

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

	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	60% (60)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	The importance of the marine environment
Week 2	Living marine wealth and resources (animal marine resources)
Week 3	Living marine wealth and resources (marine plant resources)
Week 4	wealth and fish resources
Week 5	Wealth and mineral resources
Week 6	Hydrocarbon deposits (oil and gas)
Week 7	Life in the Ocean – Primary Productivity and Respiration
Week 8	Spatial minerals
Week 9	Chemical marine resources
Week 10	Desalination methods
Week 11	Pharmaceutical materials of plant origin
Week 12	Pharmaceuticals of animal origin
Week 13	natural hydrocarbons
Week 14	Physical marine wealth and resources
Week 15	Pressures on marine wealth and resources The legal system for investing and protecting marine wealth and resources

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	Al-Saad, Hamid & Salman, Nader & A.Saeed, Mahyoob. (2006).كتاب-الثروات والموارد البحرية.	No
Recommended Texts		No
Websites	https://www.researchgate.net/publication/301747847_ktab-althrwat_walmward_albhryt	

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	**Animal Physiology**			**Module Delivery**	
Module Type	**Core**			☒Theory ☒Lecture ☒Lab ☐Tutorial ☐Practical ☐Seminar	
Module Code	NAMA 304				
ECTS Credits	**6**				
SWL (hr/sem)	**150**				
Module Level	UG		**Semester of Delivery**	2	
Administering Department			**College**	Marine Science	
Module Leader	Name		**e-mail**	E-mail	
Module Leader's Acad. Title	Professor		**Module Leader's Qualification**	Ph.D.	
Module Tutor			**e-mail**	E-mail	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	17/6/2023		**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 Objectives أهداف المادة الدراسية	1- Physiology is the study of the functions of all parts of the body. 2- How to organize these functions, and the extent of the functional connection between each member of the body and other organs, 3- The factors that affect the performance of the body organs, and the extent to which the functional performance of the various body organs adapts. 4- The variables that the body is exposed to, and the extent of the effect of this adaptation on the response to the different conditions to which it is exposed. 5- The body 6- Identify the physiological state of aquatic organisms. 7- It is also known as the science of functions, and it is the science that investigates the activities of living matter, whether at the level of organisms.

	The whole neighborhood or a member of it or at the level of the cell or part of it.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	The student will have an idea about the functions of the organs in the various living organisms and what are the means that enhance the survival of the organisms
Indicative Contents المحتويات الإرشادية	Indicative content includes the following.

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	6- Adoption of lectures through modern books. 7- Conducting seminars for students. 8- Conducting weekly tests 9- Field visits to see the models in the field. 10- Laboratory study

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	77	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	73	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	2
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	**Quizzes**	2	10% (10)		

assessment	**Assignments**	2	10% (10)		
	Projects / Lab.	14	10% (10)		
	Report	1	10% (10)		
Summative assessment	**Midterm Exam**	2hr	10% (10)		
	Final Exam	2hr	50% (50)		
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction on animal physiology
Week 2	The Cell
Week 3	The water balance
Week 4	Thermal adaptation
Week 5	Osmoregulation in animal
Week 6	Respiration in animals
Week 7	Digestive in animals
Week 8	Homeostasis
Week 9	The enzymes
Week 10	Hormones
Week 11	The nervous system
Week 12	Musculature
Week 13	Excretory system
Week 14	Metabolism

Week 15	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Cellular experiments
Week 2	Thermal experiments
Week 3	Osmoregulation experiment
Week 4	Respiration experiment
Week 5	Hormones experiment
Week 6	Metabolism experiment
Week 7	Digestive enzymes in the stomach
Week 8	Blood in the animals

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	ANIMAL PHYSIOLOGY Adaptation and environment	Yes
Recommended Texts	Essential for animal physiology for S.C. Rastogi	Yes
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
	F – Fail	راسب	(0-44)	Considerable amount of work required

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Marine Fisheries**			**Module Delivery**	
Module Type	**Core**			☒**Theory** ☒**Lecture** ☒**Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	**UoB12345**				
ECTS Credits	**8**				
SWL (hr/sem)	**200**				
Module Level	U(		**Semester of Delivery**	1	
Administering Department	Type Dept. Code		**College**	Type College Code	
Module Leader	Name		**e-mail**	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	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	01/06/2023		**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 Objectives أهداف المادة الدراسية	Familiarity with knowledge of the rules and foundations for dividing fisheries, their types and sources, factors affecting them, mechanisms for regulating and managing fisheries, and problems that may affect those handling their management, and familiarity with the methods of fishing and marine life to ensure the highest rates of catch while preserving fish stocks. It also improves the student's ability to self-study, analyze and develop communication with scientists and specialists in the same scientific field.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1-Introducing the importance of studying fisheries science 2- Introducing students to the departments and classifications of fisheries and international fishing areas 3 - Knowledge of the types and sources of marine resources and the factors affecting fisheries, and the problems that threaten them 4- Defining the sources of local wealth as well as fishing laws 5- Understanding and knowledge of the importance of marine fishing methods and equipment 6- Introducing students to its departments and types 7- Knowing how to use the means of hunting and methods of using them 8- Introducing the equipment that will develop and improve fishing operations
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	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 types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	109	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	91	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
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 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Historical view of fishing gear and marine fisheries

Week 2	Entangling fishing
Week 3	Fishing by enticement or attraction
Week 4	Stalking fishing
Week 5	Fishing nets and ships
Week 6	Determine the location and depth of fish populations
Week 7	fish attraction
Week 8	**Mid-te**
Week 9	Types of fisheries and Iraqi fisheries
Week 10	global fishing grounds
Week 11	Detection of potential areas for fish populations (affecting environmental factors)
Week 12	fish migration
Week 13	fishing laws and problems affecting fisheries
Week 14	Sources of fisheries
Week 15	The economics of fisheries management
Week 16	Ecological model of fisheries management

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	Fisheries: History, Science, and Management	No
Recommended Texts	The State of World Fisheries and Aquaculture	No
Websites	https://www.fao.org/3/y3427e/y3427e03.htm	

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	Introduction to Marine Science			**Module Delivery**	
Module Type	Core			☒Theory ☒Lecture ☒Lab ☐Tutorial ☐Practical ☐Seminar	
Module Code	MSMS 105				
ECTS Credits	4				
SWL (hr/sem)	100				
Module Level		U	**Semester of Delivery**		
Administering Department	Type Dept. Code		**College**	Marine Science	
Module Leader			**e-mail**	E-mail	
Module Leader's Acad. Title	Assisst. Professor		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Amaal A. Mahmood		**e-mail**	**amal.mahmood@uobasrah.edu.iq**	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date			**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	
Module Objectives أهداف المادة الدراسية	1. Develop a complete perception for the student about the seas, the physical and chemical characteristics of its waters, its environmental divisions, and the types of organisms present in it 2. Enable the student to develop scientific knowledge through marine visits 3. Providing a solid and fortified foundation for a successful and beneficial career for graduates 4. Improve the student's self-study ability 5. Enabling the student with basic skills in analyzing results and ways of communicating with scientists and specialists in the same scientific field
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Understanding and knowledge of the physical and chemical characteristics and nature of living organisms and their types 2. Learn about the importance of sea water and its impact on climatic conditions 3. Learn about marine resources and the possibility of benefiting from the energy of waves and ocean currents 4. Understanding tides
Indicative Contents المحتويات الإرشادية	9. Lectures, explanation and direct recitation 10. Scientific trips to water bodies, if possible 11. Conducting scientific discussions, presentations and posters

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل		**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل		**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل			

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes				
	Assignments				
	Projects / Lab.				
	Report				
Summative assessment	Midterm Exam				
	Final Exam				
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	General introduction to marine science and discovery
Week 2	Distribution of sea and ocean water
Week 3	The different sciences of marine sciences
Week 4	Physical properties of sea and ocean water (Part 1)
Week 5	Physical properties of sea and ocean water (Part 2)
Week 6	Chemical properties of sea and ocean water (Part 1)
Week 7	Chemical properties of sea and ocean water (Part 2)
Week 8	Marine geology
Week 9	Sea and ocean water temperature and distribution

Week 10	Currents, waves and tides
Week 11	Ecoregions in the seas and oceans
Week 12	Biology of the seas and oceans
Week 13	The vital importance of seas and oceans
Week 14	Sea threat factors
Week 15	**Preparatory week before the final Exam**
Week 16	

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	**Available in the Library?**
Required Texts		
Recommended Texts	Introduction to marine sciences Sea sciences	yes
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	**Seamanship الفن البحري**			**Module Delivery**	
Module Type	**S**			☒Theory ☒Lecture ☒Lab ☐Tutorial ☐Practical ☐Seminar	
Module Code	MSMA				
ECTS Credits	**3.00**				
SWL (hr/sem)	75				
Module Level	U(		**Semester of Delivery**	1	
Administering Department	Natural Marine Sciences		**College**	College of Marine Science	
Module Leader	Rajaa Abdul – Kadhem hanaf		**e-mail**	Raja.hanif@uobasrah.edu.iq	
Module Leader's Acad. Title	Assistant Professor		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Rajaa Abdul – Kadhem hanaf		**e-mail**	E-mail	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	01/06/2023		**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 Objectives أهداف المادة الدراسية	Students gain knowledge and an introductory understanding of: • Traditional and modern ship construction, design and vessel nomenclature • Basic vessel physics, hydrodynamics, aerodynamics and performance • Maritime history and changes in vessel design • Required safety gear and vessel equipment and their application • Vessel piloting and seamanship skills under power and sail • Navigation theory and at-sea chart and electronic navigation
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	*On successful completion of this module the learner will be able to:* .1 Select and tie the appropriate nautical knots and rigging 2. Describe mooring and anchoring procedures 3. Describe the procedures involved in port operations 4. Explain the guidelines relating to safe working practices onboard ship 5. Describe routine deck maintenance aboard ship 6. Describe a seafarer's personal safety and social responsibilities onboard ship
Indicative Contents المحتويات الإرشادية	Theoretical foundations and methods of driving ships in river and sea navigation using modern marine tools and instruments, as well as radio equipment; Methods of accounting for the movement of ships and controlling their movement along the chosen route in different navigational conditions to ensure the safety of navigation. Hazard protection systems, navigation aids, as well as maps, sailing directions and other navigational aids, and provides recommendations for their use. Methods for taking into account the direction and speed of tidal currents, choosing the most advantageous course along a given route, its evolution and other issues needed to train navigators are highlighted.

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم	
Strategies	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 types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	47	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	28	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**75**		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.				
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	60% (60)	16	All

Total assessment	100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction of seamanship
Week 2	Type of ships
Week 3	Screw Propeller
Week 4	ship hook
Week 5	exam
Week 6	Guidelines related to the private environmental and health aspect Ports, harbors and marine stations
Week 7	Handling of hazardous materials and oil
Week 8	Maritime collision
Week 9	Components of modern ships
Week 10	sea tide
Week 11	exam
Week 12	Basics of marine navigation
Week 13	safety equipments
Week 14	A trip to the Arabian Gulf Naval Academy
Week 15	**cordage**
Week 16	**Preparatory week before the final Exam**

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Seamanship	no
Recommended Texts	فن الملاحة البحرية	No
Websites	https://www.noor-book.com/%D9%83%D8%AA%D8%A7%D8%A8-%D8%A7%D9%84%D9%85%D9%84%D8%A7%D8%AD%D9%87-%D9%88%D8%B9%D9%84%D9%88%D9%85-%D8%A7%D9%84%D8%A8%D8%AD%D8%A7%D8%B1-%D8%B9%D9%86%D8%AF-%D8%A7%D9%84%D8%B9%D8%B1%D8%A8-pdf	

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	Seamanship الفن البحري			**Module Delivery**	
Module Type	S			☒Theory ☒Lecture ☒Lab ☐Tutorial ☐Practical ☐Seminar	
Module Code	MSMA				
ECTS Credits	3.00				
SWL (hr/sem)	75				
Module Level	UG		**Semester of Delivery**	1	
Administering Department	Natural Marine Sciences		**College**	College of Marine Science	
Module Leader	Rajaa Abdul – Kadhem hanaf		**e-mail**	Raja.hanif@uobasrah.edu.iq	
Module Leader's Acad. Title	Assistant Professor		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Rajaa Abdul – Kadhem hanaf		**e-mail**	E-mail	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	01/06/2023		**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 Objectives أهداف المادة الدراسية	Students gain knowledge and an introductory understanding of: • Traditional and modern ship construction, design and vessel nomenclature • Basic vessel physics, hydrodynamics, aerodynamics and performance • Maritime history and changes in vessel design • Required safety gear and vessel equipment and their application • Vessel piloting and seamanship skills under power and sail • Navigation theory and at-sea chart and electronic navigation
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	*On successful completion of this module the learner will be able to:* .1 Select and tie the appropriate nautical knots and rigging 2. Describe mooring and anchoring procedures 3. Describe the procedures involved in port operations 4. Explain the guidelines relating to safe working practices onboard ship 5. Describe routine deck maintenance aboard ship 6. Describe a seafarer's personal safety and social responsibilities onboard ship
Indicative Contents المحتويات الإرشادية	Theoretical foundations and methods of driving ships in river and sea navigation using modern marine tools and instruments, as well as radio equipment; Methods of accounting for the movement of ships and controlling their movement along the chosen route in different navigational conditions to ensure the safety of navigation. Hazard protection systems, navigation aids, as well as maps, sailing directions and other navigational aids, and provides recommendations for their use. Methods for taking into account the direction and speed of tidal currents, choosing the most advantageous course along a given route, its evolution and other issues needed to train navigators are highlighted.

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم	
Strategies	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 types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	47	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	28	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**75**		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.				
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	60% (60)	16	All

Total assessment	100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction of seamanship
Week 2	Type of ships
Week 3	Screw Propeller
Week 4	ship hook
Week 5	exam
Week 6	Guidelines related to the private environmental and health aspect Ports, harbors and marine stations
Week 7	Handling of hazardous materials and oil
Week 8	Maritime collision
Week 9	Components of modern ships
Week 10	sea tide
Week 11	exam
Week 12	Basics of marine navigation
Week 13	safety equipments
Week 14	A trip to the Arabian Gulf Naval Academy
Week 15	**cordage**
Week 16	**Preparatory week before the final Exam**

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Seamanship	no
Recommended Texts	فن الملاحة البحرية	No
Websites	https://www.noor-book.com/%D9%83%D8%AA%D8%A7%D8%A8-%D8%A7%D9%84%D9%85%D9%84%D8%A7%D8%AD%D9%87-%D9%88%D8%B9%D9%84%D9%88%D9%85-%D8%A7%D9%84%D8%A8%D8%AD%D8%A7%D8%B1-%D8%B9%D9%86%D8%AF-%D8%A7%D9%84%D8%B9%D8%B1%D8%A8-pdf	

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	**Tide** المد والجزر			**Module Delivery**	
Module Type	**C**			☒**Theory** ☐ **Lecture** **Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	**NAMA 419**				
ECTS Credits	**4.00**				
SWL (hr/sem)	**75**				
Module Level	4		**Semester of Delivery**	2	
Administering Department	Natural Marine Sciences Dept		**College**	College of Marine Science	
Module Leader	Rajaa Abdul – Kadhem hanaf		**e-mail**	Raja.hanif@uobasrah.edu.iq	
Module Leader's Acad. Title	Asst.Professor		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Rajaa Abdul – Kadhem hanaf		**e-mail**	Raja.hanif@uobasrah.edu.iq	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date			**Version Number**		

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module		**Semester**	
Co-requisites module		**Semester**	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	• The tides are among the renewable energies that help in generating electric power • It helps in delivering nutrients and transporting them to marine organisms • Remove pollutants on the beaches to take them to the seabed • Contribute to the presence of fish stocks, especially small fish • It is a source of attraction for large fish through the presence of small fish that attract large fish
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Important: Write at least 6 Learning Outcomes, better to be equal to the number of study weeks. 21. Learn about the importance of tide in all fields. Knowing the importance of the tidal phenomenon in purifying the waters of seas and oceans from impurities, and purifying rivers from sediment. 22. Learn how to help ships enter ports in difficult places. Know how to generate electrical energy. 23. Knowledge and understanding of the chemical, physical and biological properties of compounds, water and organisms in the oceans and seas and their relationship to each other. 24. Understand the basic physical processes of tide in the ecosystems. 25. Applying scientific knowledge and rules in solving difficult environmental problems. 26. Understanding the foundations of marine environmental monitoring 27. Understanding climate changes and their impacts on the marine environment 28. Working collectively as part of a working group on research on marine environmental. 29. Efficient use of information and communication technology. 30. Ability to handle English well 31. Follow scientific methodologies in the analysis and formulation of ideas and results
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. <u>Part A – What are the tide.</u> The phenomenon of tides means a decrease and rise in the water level under the sea surface. Much research has been conducted on the possibility of benefiting from the tidal energy that results from the phenomenon of tides in

generating electricity, and countries have already operated some of them to generate electricity.The rise in the water level above the surface of the earth (the tide) has a clear effect on the speed of the earth's rotation and its velocity, due to the relative increase in the period of rotation of the fruit around the sun.

As a result of the gradual increase in the moon's distance from the earth

Some key topics within marine chemistry include:

1. The phenomenon of tides occurs due to the force of attraction of the sun and the moon to sea water, and the tide is defined as the advance of sea water to the shore, while the tides are defined as the receding of sea water from the shore, and the two phenomena occur within a precise succession, as each tide in one area is followed by tides after 6 hours, and for this reason it is The total number is two islands per day in one region.

2. The tides are one of the natural phenomena that occur with the influence of the moon and the gravitational attraction, and often the coastal areas adjacent to the sea and oceans, which are in the form of waves of water that cover the coasts, and a more precise definition is that it is a gradual rise in the water level on the surface of water bodies. Low water level

3. The phenomenon of tides is a natural phenomenon that occurs in two phases, the tidal phase, which is the phase in which a temporary increase or rise of sea water or sewage occurs, so you find sea water advancing towards the shore As for the root phenomenon, it is a phenomenon that causes a temporary delay or retreat of sea or ocean water This phenomenon occurs as a result of the gravitational force between the sun and the moon, the rotation of the Earth, and the emergence of the effect of centrifugal force

4. The importance of the tidal phenomenon: Cleansing the waters of seas and oceans from impurities. Cleansing rivers of sediment. Helping ships enter ports in difficult places. Electric power generation. Moving windmills. Works to attract fish. Fishermen use it to check their times at sea. It is considered one of the important phenomena in the process of swimming for individuals. It works to create a balance in nature, especially the polar regions, as this phenomenon works to mix cold water with warm water.

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	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 types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	32	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	43	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**75**		

Module Evaluation

تقييم المادة الدراسية

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

assessment	**Final Exam**	3hr	60% (60)	16	All
		Total assessment	100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	The importance of tide
Week 2	Causes of tides
Week 3	The difference between tides
Week 4	Tidal energy
Week 5	Wave energy
Week 6	Currents energy
Week 7	Heating energy
Week 8	How do tides occur?
Week 9	Tidal installations
Week 10	Tidal factors
Week 11	Tidal properties
Week 12	Types of tides
Week 13	Divisions of the intertidal zone
Week 14	Tidal benefits
Week 15	The environmental effects of tides
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	المؤلف كتاب المد والجزر. Robert Louis Balfour Stevenson (13 November 1850 – 3 December 1894) was a Scottish novelist, poet, essayist, and travel writer. His most famous works are Treasure Island, Kidnapped, and Strange Case of Dr Jekyll and Mr Hyde.	no
Recommended Texts		no
Websites	noor-book.com/l4edkb	

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
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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	**Fresh water and estuarine environment**			**Module Delivery**	
Module Type	**C**			☒**Theory** ☐ **Lecture** **Lab** ☐**Tutorial** ☐**Practical** ☐**Seminar**	
Module Code	**MSFE 311**				
ECTS Credits	**5.00**				
SWL (hr/sem)	**125**				
Module Level	3		**Semester of Delivery**	2	
Administering Department	Natural Marine Sciences Dept		**College**	College of Marine Science	
Module Leader	Rajaa Abdul – Kadhem hanaf		**e-mail**	Raja.hanif@uobasrah.edu.iq	
Module Leader's Acad. Title	Asst.Professor		**Module Leader's Qualification**	Ph.D.	
Module Tutor	Rajaa Abdul – Kadhem hanaf		**e-mail**	Raja.hanif@uobasrah.edu.iq	
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date			**Version Number**		

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	general aquatic environment	**Semester**	
Co-requisites module	marine environment	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	• Studying the science of fresh and estuary waters and environmental factors affecting living organisms in the watery ocean • - Explain the effects of the environment on the living organism and its interaction with it and its activity according to changes in environmental factors • Identify the components of the aquatic ecosystem and the importance of the aquatic environment and its uses. • Studying the physical, chemical and biological properties of water. • Identify the types of moving and static water environments • A study of the types of estuaries and the factors affecting their physical and chemical characteristics
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Important: Write at least 6 Learning Outcomes, better to be equal to the number of study weeks. 32. Acquire the skills of studying freshwater science and classifying environments based on water movement. 33. Identifying the cause of the estuarine environment, especially the Shatt al-Arab estuary, and the living communities prevailing in it. 34. The ability to study biological communities in moving and static aquatic environments. 35. Knowledge and understanding of the chemical, physical and biological properties of compounds, water and organisms in the oceans and seas and lake and river and their relationship to each other. 36. Knowledge of the abiotic factors affecting the characteristics of rivers, lakes, ponds and estuaries. 37. Applying scientific knowledge and rules in solving difficult environmental problems. 38. Understanding climate changes and their impacts on the environment 39. Working collectively as part of a working group on research on different environmental. 40. Efficient use of information and communication technology. 41. Ability to handle English well 42. Follow scientific methodologies in the analysis and formulation of ideas and results
Indicative Contents	Indicative content includes the following. <u>Part A – What are freshwater and estuaries environment.</u>

المحتويات الإرشادية	

Freshwater ecosystems are a subset of Earth's aquatic ecosystems. They include lakes, ponds, rivers, streams, springs, bogs, and wetlands.[1] They can be contrasted with marine ecosystems, which have a larger salt content. Freshwater habitats can be classified by different factors, including temperature, light penetration, nutrients, and vegetation. There are three basic types of freshwater ecosystems: Lentic (slow moving water, including pools, ponds, and lakes), lotic (faster moving water, for example streams and rivers) and wetlands (areas where the soil is saturated or inundated for at least part of the time).

An estuary is a partially enclosed, coastal water body where freshwater from rivers and streams mixes with salt water from the ocean. Estuaries, and their surrounding lands, are places of transition from land to sea. Although influenced by the tides, they are protected from the full force of ocean waves, winds and storms by land forms such as barrier islands or peninsulas.

Some key topics within marine chemistry include:

1.Freshwater habitats are divided into lentic systems (which are the stillwaters including ponds, lakes, swamps and mires) and lotic systems, which are running water; and groundwater which flows in rocks and aquifers.

2.Fresh water creates a hypotonic environment for aquatic organisms.

Most aquatic organisms have a limited ability to regulate their osmotic balance and therefore can only live within a narrow range of salinity.

3. Scientifically, freshwater habitats are divided into lentic systems, which are the stillwaters including ponds, lakes, swamps and mires; lotic systems, which are running water; and groundwater which flows in rocks and aquifers. There is, in addition, a zone which bridges between groundwater and lotic systems – the hyporheic zone – which underlies many larger rivers and can contain substantially more water than is seen in the open channel. It may also be in direct contact with the underlying underground water.

4. Estuarine environments are among the most productive on earth, creating more organic matter each year than comparably-sized areas of forest, grassland or agricultural land. The sheltered waters of estuaries also support unique communities of plants and animals specially adapted for life at the margin of the sea.

5. Many different habitat types are found in and around estuaries, including shallow open waters, freshwater and saltwater marshes, swamps, sandy beaches, mud and sand flats, rocky shores, oyster reefs, mangrove forests, river deltas, tidal pools and seagrass beds.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	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 types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	62	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	63	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
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 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	2	10% (10)		

	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	)50% (50	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction to fresh water and estuaries
Week 2	Freshwater environment and division
Week 3	Still water (lakes and ponds)
Week 4	Environmental factors in lakes and ponds
Week 5	thermal stratification
Week 6	running water (rivers)
Week 7	The difference between rivers and lakes
Week 8	environmental factors in rivers
Week 9	types of rivers
Week 10	types of lakes
Week 11	estuaries
Week 12	estuarine environmental factors
Week 13	Types of estuaries
Week 14	organism inhabiting estuaries
Week 15	The environmental effects on estuaries
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	physical factors in lakes
Week 2	Chemical factors in lakes
Week 3	biological factors in lakes
Week 4	physical factors in rivers
Week 5	chemical factors in rivers
Week 6	biological factors in rivers
Week 7	Environmental factors in estuaries

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	1- كتاب البيئة المائية للمؤلف ا.د. حسين السعدي كتاب علم المياه العذبة للمؤلفة ا.م.د. فريال الحميم	no
Recommended Texts		no
Websites	https://www.researchgate.net/publication/313030078_lm_byyt_almyah_aldhbt_walmsbat	

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	**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	Surveying			**Module Delivery**	
Module Type	Core			☒Theory ☒Lecture ☒Lab ☐Tutorial ☐Practical ☐Seminar	
Module Code	MSSU204				
ECTS Credits	6				
SWL (hr/sem)	150				
Module Level	3U		**Semester of Delivery**	1	
Administering Department	Type Dept. Code		**College**	Type College Code	
Module Leader	Name		**e-mail**	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	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	01/06/2023		**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 Objectives أهداف المادة الدراسية	1. Knowledge of local and global measurement systems 2. Teaching the preparation of topographic maps 3. Contour maps and cross-sections 4. Hydrographic survey 5. Positioning system 6. The Marathi objectives of the course. 7. Methods of measuring land and sea areas 8. Teaching the student the methods of measuring distances 9. Teaching measurement of height and low points of the Earth's surface 10. Identification and operation of ground control points 11. Positioning system
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Important: Write at least 6 Learning Outcomes, better to be equal to the number of study weeks. 1. Introduction to the topic. 2. Methods of measuring distances. 3. Explanation of the LeVeL device and its use. 4. Explanation of the Level device and its use. 5. Methods of using Level and interpretation of results. 6. Methods of using LVL and interpretation of results. 7. Methods for calculating volumes. 8. Methods for calculating volumes. 9. GPS location determination. 10. GPS location determination 11. Hydrographic survey
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. Part A – Methods of measuring distances There are several methods of measuring distances, and the choice of method depends on the specific requirements and the distance being measured. Here are some common methods: **1.** Euclidean Distance: It is the straight-line distance between two points in Euclidean space. It is calculated using the Pythagorean theorem. **2.** Manhattan Distance: Also known as taxicab distance or city block distance, it is the sum of the absolute differences of coordinates between two points. **3.** Minkowski Distance: It is a generalization of the Euclidean and Manhattan distances. The formula includes a parameter "p" that determines the type of distance, with p=1 representing the Manhattan distance and p=2 representing the Euclidean distance. **4.** Haversine Formula: It is used to calculate the distance between two points on the surface of a sphere, such as the Earth. This formula takes into account the curvature of the Earth and is commonly used for geographical distance calculations. **5.** Geodesic Distance: Similar to the Haversine formula, the geodesic distance takes into account the curvature of the Earth. It is calculated based on the shape of the Earth's surface instead of assuming a perfect sphere. **6.** Network Distance: This method measures the distance between two points based on the road network or transportation routes. It considers factors like road conditions, traffic, and available paths for travel. These are just a few examples of the methods used to measure distances. The appropriate method to use depends on the specific context and requirements of the measurement.. [15 hrs] Part B calculating volumes.

	There are several methods for calculating volumes, depending on the shape of the object: **1.** Regular Geometric Shapes: - Cube or Rectangular Prism: V = length x width x height - Cylinder: V = $\pi r^2 h$, where r is the radius of the base and h is the height - Cone: V = $(1/3)\pi r^2 h$, where r is the radius of the base and h is the height - Sphere: V = $(4/3)\pi r^3$, where r is the radius **2.** Irregular Geometric Shapes: - Displacement Method: Submerge the object in a liquid and measure the volume of liquid displaced. - Cavalieri's Principle: If two objects have the same cross-sectional area at every height, their volumes are equal. - Integration: For mathematically defined curves or surfaces, integration can be used to calculate the volume. **3.** 3D Modeling Software: - Many 3D modeling software packages have built-in volume calculation tools. They can calculate volumes for complex shapes created using digital modeling techniques. These are just a few methods for calculating volumes, and the appropriate method depends on the specific shape and available data.. [15 hrs] A hydrographic survey is the scientific measurement and description of the physical features of bodies of water, including oceans, rivers, lakes, and other water bodies. It involves the collection of data regarding the depth, shape, and configuration of the underwater terrain, as well as the identification of submerged objects, such as rocks, wrecks, and vegetation. Hydrographic surveys are essential for various purposes, such as navigational safety, mapping, coastal engineering, resource exploration, and environmental management.. [25 hrs] Revision problem classes [6 hrs] 1. Part C - GPS location determination A positioning system is a technology or a system that determines the location, coordinates, or position of an object or a person within a given space. It typically utilizes various signals, sensors, or techniques to provide accurate and real-time positioning information. This information can be used for navigation, tracking, mapping, surveying, and a wide range of applications in various fields such as transportation, logistics, geolocation services, and outdoor activities... [37hrs]

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	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 types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	109	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	41	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
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**	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	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 Introduction to the topic

Week 2	Methods of measuring distances
Week 3	Methods of measuring distances
Week 4	Explanation of the LeVeL device and its use.
Week 5	Explanation of the LeVeL device and its use.
Week 6	Methods of using Level and interpretation of results
Week 7	Methods of using Level and interpretation of results
Week 8	Methods for calculating volumes
Week 9	Methods for calculating volumes
Week 10	GPS location determination
Week 11	GPS location determination
Week 12	GPS location determination
Week 13	Hydrographic survey
Week 14	Hydrographic survey
Week 15	Hydrographic survey
Week 16	

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Methods of measuring distances
Week 2	Methods of measuring distances
Week 3	Explanation of the LeVeL device and its use
Week 4	Explanation of the LeVeL device and its use
Week 5	Topographic Maps
Week 6	Contour lines and maps

Week 7	Scales

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	The basics of historical geology Abdel Jalil Howaidi and Mohamed Ahmed Heikal 2004 Republic of Egypt	NO.
Recommended Texts	Michel Atta, the basics of geology	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.

نموذج وصف المقرر

وصف المقرر

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.؛

1. المؤسسة التعليمية	جامعة البصرة / كلية علوم البحار
2. القسم العلمي / المركز	قسم علوم البحار الطبيعية
3. اسم / رمز المقرر	رياضيات 105
4. أشكال الحضور المتاحة	الكتروني + حضوري
5. الفصل / السنة	الفصل الأول / السنة الدراسية 2021-2022
6. عدد الساعات الدراسية (الكلي)	30 ساعة
7. تاريخ إعداد هذا الوصف	2021/9/18
8. أهداف المقرر:	
تعليم الطالب المبادئ الأساسية للرياضيات	
تدريب الطالب على كيفية حل المعادلات الرياضية	
تعريف الطالب اساسيات التكامل والتفاضل لغرض حل المسائل الرياضية	
توضيح أهمية الرياضيات في حياتنا اليومية	

10. مخرجات المقرر وطرائق التعليم والتعلم والتقييم

أ- الأهداف المعرفية

أ1- العمل على مواكبة العصر، وتفسير تطورات العصر من الناحية العلمية ومن الناحية التكنولوجية.

أ2- ربط الرياضيات بمجالات العلوم الأخرى كالفيزياء.

أ3- العمل على توضيح فكرة البرهان الرياضي وكيفية البرهنة، حيث تحتاج الكثير من التجارب والنظريات إلى برهان للتأكد من مدى صحتها.

ب - الأهداف المهاراتية الخاصة بالمقرر.

أ1- معرفة الطرق الأساسية لحل المعادلات الرياضية

أ2- معرفة كيفية حل المسائل الرياضية في بعض المواد كالفيزياء

أ3- معرفة كيفية قياس المسافات والمساحات الكبيرة بطريقة غير مباشرة.

طرائق التعليم والتعلم

1- الشرح النظري المباشر
2- التطبيق من خلال حل الأمثلة التوضيحية.
3- إعطاء الطلبة واجبات لمعرفة مدى فهم الطالب للمادة.

طرائق التقييم

1- تقييم الطالب من خلال الامتحانات النظرية والعملية
2- تقييم مشاركة الطالب في المحاضرات
3- تقييم حضور الطالب في المحاضرات

ج- الأهداف الوجدانية والقيمية

1- تساعد الرياضيات في فهم التفكير المنطقي والاهتمام بالتفاصيل.
2- تعزيز قدرات الطالب على التفكير تحت الضغط وزيادة قدرته على التحمل العقلي.
3- تعطي المفاهيم الرياضية الحل الحقيقي للمشاكل الافتراضية.

د - المهارات العامة والتأهيلية المنقولة (المهارات الأخرى المتعلقة بقابلية التوظيف والتطور الشخصي).

1- تنمية مهارات الملاحظة الحساسة والقياس الدقيق والتنظيم الواضح لدى الطلاب.
2- تقوية حوافز الطلاب في الاختبار والبحث والاستكشاف واستقصاء الحقائق.
3- إكساب الطالب المهارات العملية والعلمية.

11. بنية المقرر

الأسبوع	الساعات	مخرجات التعلم المطلوبة	اسم الوحدة / أو الموضوع	طريقة التعليم	طريقة التقييم
1	3 ساعة نظري	تعلم كيفية إيجاد معادلة الخط المستقيم في الاحداثيات الديكارتية	الاحداثيات الديكارتية ومعادلة الخط المستقيم	شرح نظري وحل امثلة توضيحية	الحضور والمشاركة
2	3 ساعة نظري	تعلم كيفية رسم الدوال	رسم الدوال	شرح نظري وحل امثلة توضيحية	الحضور والمشاركة
3	3 ساعة نظري	تعلم كيفية حل الغايات لدوال مختلفة	الغايات	شرح نظري وحل امثلة توضيحية	الحضور والمشاركة
4	3 ساعة نظري	تعلم كيفية حل غايات الدوال المثلثية	الغايات في الدوال المثلثية	شرح نظري وحل امثلة توضيحية	الحضور والمشاركة
5	3 ساعة نظري	تعلم كيفية اشتقاق الدوال	التفاصل	شرح نظري وحل امثلة توضيحية	الحضور والمشاركة + امتحان
6	3 ساعة نظري	تعلم كيفية اشتقاق الدوال المثلثية	التفاضل في الدوال المثلثية	شرح نظري وحل امثلة توضيحية	الحضور والمشاركة
7	3 ساعة نظري	تعلم كيفية إيجاد التكاملات للدوال	التكامل	شرح نظري المثلثية وحل امثلة توضيحية	الحضور والمشاركة
8	3 ساعة نظري	تعلم كيفية إيجاد التكاملات للدوال المثلثية	التكامل في الدوال المثلثية	شرح نظري وحل امثلة توضيحية	الحضور والمشاركة
9	3 ساعة نظري	فهم اللوغارتمات وحل المسائل الخاصة بها	اللوغارتم	شرح نظري وحل امثلة توضيحية	الحضور والمشاركة + امتحان
10	3 ساعة نظري	فهم الدوال الاسية وحل المسائل الخاصة بها	الدوال الاسية	شرح نظري وحل امثلة توضيحية	الحضور والمشاركة

12. البنية التحتية

13.

1- الكتب المقررة المطلوبة	محاضرات من اعداد أستاذ المادة

2- المراجع الرئيسية (المصادر)	كتاب calculus Thomas
ا- الكتب والمراجع التي يوصى بها (المجلات العلمية , التقارير ,....)	
ب - المراجع الالكترونية, مواقع الانترنيت	

14. خطة تطوير المقرر الدراسي

Ministry of Higher Education and Scientific Research
Republic of Iraq
University: University Of Basrah
of Marine Science College: College

Department : Natural Marine Science

شعار الكلية

Year : 2021-2022

Semester : First

SYLLABUS: < geology >

INSTRUCTOR: DR.WESAL HUSSIN	Phone: +964 780 103 7540
Hours: 4	of Marine Science Office: College
Home Page:	Email: wesal.hassin@uobasrah.edu.iq.

COURSE OVERVIEW

It is a branch of Earth science that studies the solid structure of the Earth, the rocks that make up it, and the processes that occur on it over time. Geoscience can also refer to the study of the solid Earth features of any terrestrial planet (such as Mars or the Moon). Geology describes the structure of the Earth's surface, and the processes that shaped that structure. Geology also provides the tools to determine the relative and absolute ages of the rocks at a particular site, as well as to describe the history of those rocks. By combining these tools, stratigraphers can chronicle the geological history of each land and determine its age. And stratigraphy provides the essential evidence for plate tectonics, the evolutionary history of the Earth, and the Earth's past climates.

GOALS AND OBJECTIVES

Study of the external processes represented in the physical and chemical weathering responsible for the formation of rocks and mineral deposits, as well as the internal processes represented in the volcanic activity of the earth and responsible for the formation of igneous rocks

Take a general idea of the most important disciplines of earth sciences, for example, mineralogy, igneous, metamorphic and sedimentary rocks, soil science, stratigraphy, hydrology and others.

Identify the physical properties of minerals and how to describe igneous, metamorphic and sedimentary rock samples.

Building general information about natural phenomena around us

Learn about the rocks and minerals in the local environment and how they are formed

Learn about the environmental and natural phenomena caused by beaches, winds and groundwater

1. Building general information about the natural phenomena around us

2. Identify the rocks and minerals in the local environment and how they are formed

TEXTBOOK AND READINGS

Beginner's Guide to Geology Reviewed in the United Kingdom on February 5, 2011

COURSE ASSESSMENTS

The course grade (**100** points) will be based on the following elements:

	Points
Exams	**70%**
Reading Checks	**15%**
Participation	**10%**
Attendance	**5%**
Assignments	**100**

COURSE DESCRIPTION AND ASSIGNMENT SCHEDULE

This NO. -credit hour course is 15 weeks long. You should invest NO. hours every week in this course.

WK	DATE	TOPIC	READING	ASSIGNMENT
1	21/10/2021	General introduction to clarify the general content and course objectives .. Course relationship to the courses the student has studied or will study later, calendar and distribution of exam scores. General introduction to clarify general geology.		
2	28/10/2021	The Earth and the universe theories activity is installation of the lithosphere and the Earth's crust		
3	4/11/2021	The rocks nature and minerals		
4	11/11/2021	Geological composition of ancient and magnetism		
	18/11/2021			Assignment 1
5	25/11/2021	Environments		
6	2/12/2021	Water distribution		
7	9/12/2021	sedimentary basins Classification&		
8	16/12/2021			Assignment 2
9	23/12/2021	Consequences of erosion, sedimentation		

		and weathering		
10	30/12/2021	Determination of age of stratified and rocks sedimentation		
11	6/1/2022	Historical geology		
12	13/1/2022			Assignment 3
13	20/1/2022	Distribution of fossils		
14	27/1/2022	General review		
15	***Mid Exam***			

Is it possible to develop the curriculum <within the teaching authority 20%> to include vocabulary that serves sustainability	
1- Yes, it is possible (point an appropriate aspect)	1- Developing life-long learning and education 2- Sustainable development 3- Sustainable energy (wind Sun and organic energy) -5- Environmental development- 6- Efficiency of the overall environment -7- 8- Heavy water disposal mechanisms 9- Mechanisms for preserving biodiversity10- Developing life in the seas and oceans-11- The basics of sustainable cities- 12- Mechanisms to reduce consumption and increase production13- Study climatic phenomena in the country-35- Mechanisms for obtaining good health and well-being.
2- Suggest aspect that serves sustainability	

شعار الكلية

وزارة التعليم العالي والبحث العلمي – جمهورية العراق
الجامعة : جامعة البصرة
الكليــة : علوم البحار
القسم : علوم البحار التطبيقية

العام الدراسي : 2022-2021

الفصل الدراسي : الأول

مفردات المنهج : < مقرر علم المعادن الطينية >

أسم التدريسي : أ.د.وصال فخري حسن	**رقم الموبايل :**
جهة الانتساب : جامعة البصرة / كلية علوم البحار	**عدد وحدات الدرس : 4**
الايميل الرسمي : wesal.hassan@uobasrah.edu.iq	**رابط الصفحة الرسمية :**

نظرة عامة

هو فرع من فروع علوم الأرض المختص بدراسة بنية الأرض الصلبة، والصخور التي تتكون منها، والعمليات التي تحدث عليها مع مرور الزمن. ومن الممكن أن يشير علم الجيولوجيا الأرض أيضًا إلى دراسة ميزات الأرض الصلبة لأي كوكب أرضي (مثل المريخ أو القمر). يصف علم الجيولوجيا بنية ما تحت سطح الأرض، والعمليات التي شكلت تلك البنية. كما يوفر علم الجيولوجيا الأدوات اللازمة لتحديد الأعمار النسبية والمطلقة للصخور الموجودة في موقع معين، وكذلك لوصف تاريخ تلك الصخور. ومن خلال الجمع بين هذه الأدوات، يستطيع علماء علم طبقات الأرض تأريخ التاريخ الجيولوجي لكل لأرض، وتحديد عمرها. ويوفر علم طبقات الأرض الدليل الأساسي للصفائح التكتونية، والتاريخ التطوري للأرض، والمناخات الماضية للأرض.

الأهداف والغايات

دراسة العمليات الخارجية والمتمثلة في التجوية الفيزيائية والكيميائية المسئولة عن تكون الصخور و الرواسب المعدنية وكذلك العمليات الداخلية والمتمثلة في النشاط البركاني للارض و المسئول عن تكون الصخور الناري
أخذ فكرة عامة عن أهم تخصصات علوم الأرض على سبيل المثال علم المعادن , علم الصخور النارية و االمتحولة و الرسوبية, علم التربة, عام الطبقات , علم المياة وغيرها
التعرف على الصفات الفيزيائية للمعادن وكيفية وصف عينات الصخور النارية والمتحولة و الرسوبية.
بناء معلومات عامة عن الظواهر الطبيعية من حولنا
التعرف على الصخور والمعادن المتواجدة في البيئه المحلية وكيفية تكونها
تعرف على المظاهر البيئية والطبيعية الناجمة عن الشواطئ والرياح والمياه الجوفية
بناء معلومات عامة عن الظواهر الطبيعية من حولنا
التعرف على الصخور والمعادن المتواجدة في البيئه المحلية وكيفية تكونها
تعرف على المظاهر البيئية والطبيعية الناجمة عن الشواطئ والرياح والمياه الجوفية
1 .بناء معلومات عامة عن الظواهر الطبيعية من حولنا
2 .التعرف على الصخور والمعادن المتواجدة في البيئه المحلية وكيفية تكونها

المصادر

Beginner's Guide to Geology Reviewed in the United Kingdom on February 5, 2011

التقييمات المعتمدة

تعتمد درجة المادة (قيمة الدرجة) موزعة على الجوانب التالية :

التفاصيل	الدرجة
الامتحانات	70%
درجة الاستيعاب	15%
المشاركة	10%
الحضور	5%
الدرجة الكلية	100

وصف الدرس وجدول التخصيص

يتضمن الدر س (3) ساعة - عدد الساعات الأسبوعية معتمدة موزعة على 15 أسبوعًا .

الاسبوع	التأريخ	الموضوع	القراءة في المصدر	الامتحانات والتقييمات
1	21/10/2021	مقدمة عامة لتوضيح المحتوى العام وأهداف المقرر .. علاقة المقرر بالمقررات التي درسها الطالب أو سيدرسها لاحقاً ، التقويم وتوزيع درجات الإمتحانات. مقدمة عامة لتوضيح علم الجيولوجيا العامة . محاضرة عن تعريف علبم الجيولوجيا		
2	28/10/2021	الكرة الارضية والكون نظريات النشوء تركيب الغلاف الصخري وكونات القشرة الارضية		
3	4/11/2021	دور الصخور في الطبيعة والمعادن		
4	11/11/2021	التركيب الجيولوجي الخركات الاصلية الزلازل و المغناطيسية القديمة		
5	18/11/2021			الأمتحان 1
6	25/11/2021	البيئات		
7	2/12/2021	المياه وتوزيعها		
8	9/12/2021	تصنيف الاحواض الترسيبية عوامل ونتائج التعرية والترسيب والتجوية		
9	16/12/2021			الامتحان 2
10	23/12/2021	تحديد اعمار الصخور الطبقات سحنات الترسيب المتحجرات الطبقات الزمنية		
11	30/12/2021	**جيولوجيا تاريخية**		
12	6/1/2022	**توزيع المتحجرات**		
13	13/1/2022			الامتحان 3
14	20/1/2022	مراجعة عامة		
15	27/1/2022			
امتحان نهاية الفصل				

هل يمكن تطوير المنهج < ضمن صلاحية التدريسي 20% > على ان تتضمن مفردات تخدم الاستدامة	
3- نعم يمكن ضمن المحاور	1- تطوير التعلم والتعليم مدى الحياة- 2- التنمية المستدامة-3- تنقية المياه4- الطاقة المستدامة(الرياح والشمس والطاقة العضوية) -5- تطوير البيئة-6-كفاءة البيئة الجامعة -7- تدوير المخلفات -8- اليات التخلص من المياه الثقيلة9- اليات حفظ التنوع الحيوي 10-تطوير الحياة في البحار والمحيطات11- اساسيات المدن المستدامة-12-اليات التقليل من الاستهلاك وزيادة الانتاج13- دراسة ظواهر المناخية في البلد
4- أقترح موضوع يخدم الاستدامة	