

نموذج توصيف مقرر
Course Description Form

Name of College\Faculty :

Sciences

اسم الكلية:

Name of Department:

Biological Sciences – Animal Biology Program

اسم القسم العلمي:

Course Name	Introduction to Marine Sciences مقدمة في علوم البحار	اسم المقرر
Course No.	0493 - 204	رقم المقرر
No. of Credits	3	عدد الوحدات
Theoretical Hours	2	عدد الساعات النظرية
Practical Hours	3	عدد الساعات المحلّية
Course topics		مواضيع المقرر

Theoretical

1. **Introduction:** the importance of studying the oceans; history of ocean exploration; geography of major oceans and seas.
2. **Geological oceanography/ marine geology:** brief description of the origin of earth, the formation of ocean basin, and the tectonic forces that constantly shape the earth's surface.
3. **Chemical oceanography/ marine chemistry:** basic chemistry focusing on the properties of seawater and its chemical composition.
4. **Physical oceanography/ marine physics:** Circulation of wind and ocean water, discussion of waves and tides.
5. **Biological oceanography/ marine biology:** The Organisms of the Sea, effect of The Human Element on seas and oceans.

Practical

1. Oceanographic instruments and usage method.
2. Marine Geology: methods of sediment identification.
3. Physical Oceanography: Waves exercises and problem solving.
4. Marine Chemistry: measurement of Salinity, DO, pH, temperature, conductivity, turbidity in situ and in lab.
5. Marine Botany: identification of Marine plants.
6. Marine Biology Botany: Phytoplankton features and identification.
7. Marine Zoology: Zooplankton features and identification.
8. Marine Zoology: Invertebrates - Arthropods & Molluscs external and internal features.
9. Marine Zoology: Invertebrates - Echinoderms and other minor invertebrates external and internal features.
10. Marine Zoology: Nektons morphology, physiology and identification.
11. Marine Zoology: Benthos morphology and identification.

Text book: (Name, Author , Year , Publisher)	عنوان الكتاب : (الاسم ، المؤلف ، سنة الطبع ، دار النشر)
Essentials of Oceanography (Latest Ed), by Harold V. Thurman and Alan P. Trujillo.	
References: (Name , Author , Year . Publisher)	عنوان المرجع : (الاسم ، المؤلف ، سنة الطبع ، دار النشر)
Invitation to Oceanography by Paul R. Pinet	

Prerequisites				متطلبات المقرر	
Biology (I) 0490-101					
Grading	Exams	40	%		الاختبارات
	Quizzes	5	%		امتحانات قصيرة
	H.W.	5	%		واجبات
	Project (field study)	10	%		مشاريع (دراسة ميدانية)
	Final	40	%		الاختبار النهائي
	100 %				آلية رصد المقرر

Course objectives					
No.	Course Objectives (Learning Outcomes)	Example(s) of relevant (Topics and activities)	Recommended Level to satisfy the objectives		
			High	Medium	Low
1	Identify the Importance of oceans and seas to the human population as providers of resources.	History of the sea: ocean exploration; Sub-disciplines of marine sciences; Geography of the oceans: principal oceans, their description and marginal seas, navigation via longitude & latitude.		✓	
2	Describe the Physical, chemical and geological properties (abiotic) of marine environments.	Provinces of the ocean floor and their features, continental drift hypothesis, Pangaea; plate tectonics, classification of marine sediments; chemical composition of seawater; Ocean circulations, Ekmans spiral, thermohaline circulations, upwelling & down welling, tidal forces and patterns.	✓		
3	Classify the living components of biological communities of marine ecosystems.	Classification of marine organisms according to mode of locomotion and zonation along the marine environment.	✓		
4	Demonstrate knowledge of Kuwait's marine environment and the local prime commercial fisheries within its territorial waters.	Marine Environment of Arabian Gulf and Kuwait: Physical & chemical parameters; provinces and shore distribution, water circulation; dominating tides; biological diversity.	✓		
5	Recognize the impacts of humans on sea life and encouraging marine conservation.	Pollution, overfishing, climate change, and habitat destruction; conservation and sustainable practices, policy changes, and individual actions.		✓	
Fields					



Skills	
Coordinator (Name and Rank) :	Amani S. Alzaidan (Assistant Prof.)
Signature and stamp :	د. أماني سالم الزيدان Dr. Amani S. Al-Zaidan كلية العلوم - قسم العلوم البيولوجية Department of Biological Sciences
Date:	08 \ 11 \ 2025