



وكالة الجامعة للشؤون التعليمية
البرامج الدراسية والتطوير

(5)

مختصر توصيف

الأحياء البحرية

(Course Syllabus)

:(Course Information) *

| | |
|---|--|
| الأحياء البحرية | : |
| BIOL-318 | : |
| لا فقاريات BIOL-112 فقاريات BIOL-114 | : |
| - | : |
| | : |
| 3 | : |
| Module Title: | Marine Biology |
| Module ID: | BIOL-318 |
| Prerequisite (Co-requisite) : | Invertebrates, BIOL-112 Vertebrates, BIOL-114 |
| Co-requisite : | - |
| Course Level: | 6 th |
| Credit Hours: | 3 |

Module Description

:

Life on the Earth without ocean is impossible. The oceans are of great ecological significance to have direct effect on global environment and human life; and of significant economic importance as the biggest storehouse of mineral, food and energy resources. Marine environment is the largest aquatic system on the earth. This supports 50% of the primary production of the earth, 85% of the global fish catch and more than 50% of the world's populations to live in the coastal areas. Understanding of the marine biology and its ecology is of great importance for graduate students interested in marine biological aspects.

Module Aims

أهداف المقرر :

| | | |
|---|---|---|
| 1 | Importance of marine biology- Uniqueness of marine environment - Uniqueness of marine organisms - Marine Environment: Divisions - Marine organisms: Major groups | 1 |
| 2 | Marine Environmental Biology: Physical factors that influence marine organisms - Temperature, Light , Salinity, Pressure, Oceanic currents , Tides, Waves , Substratum, Climate change Chemical factors that influence marine organisms - Oxygen, Carbon dioxides and carbonates, Hydrogen sulphide, Hydrogen ion concentration (pH), Inorganic salts, Dissolved-organic matter | 2 |
| 3 | Ocean biology - Pelagic ocean, Benthic ocean and Hydrothermal vents and cold seep communities | 3 |

| | | |
|---|--|---|
| 4 | Coastal biology -Pelagic coast,. Benthic coast, Continental shelf or sub-tidal environment of coast | 4 |
| 5 | Coral reef biology, mangrove biology, estuarine biology, Threats, conservation and management | 5 |

Learning

مخرجات التعليم:

Outcomes:

| | | |
|---|--|---|
| 1 | Broad overview of the world's seas and oceans focusing primarily on living organisms | 1 |
| 2 | Recognize and understand basic terms and concepts of marine biology | 2 |
| 3 | Relate the physical and chemical factors influence on marine organisms | 3 |
| 4 | Identification of marine organisms and marine ecosystems | 4 |
| 5 | Conservation and Management of Marine organisms and ecosystems | 5 |

Course :

Contents:

| ساعات التدريس (Hours) | الأسابيع (Weeks) | (Subjects) |
|--------------------------|---------------------|--|
| 3 | 1 | Exploring the seas and oceans |
| 3 | 1 | Physical properties of ocean |
| 3 | 1 | Chemical properties of Ocean |
| 6 | 2 | Marine Environments |
| 3 | 1 | Interdependence in the Ocean |
| 6 | 2 | Plankton and plankton communities |
| 6 | 2 | Marine plants |
| 9 | 3 | Marine Invertebrate animals |
| 6 | 2 | Marine Vertebrate animals |
| 3 | 1 | Conservation of marine and coastal environment |

Textbook and :

References:

| ISBN | Publishing Year | Publisher | اسم المؤلف (رئيسي) Author's Name | Textbook title |
|------|-----------------|----------------------|--|--|
| | 2014 | Scientific Publisher | Kathiresan Kandasamy | Ocean and Coastal Ecology |
| | Publishing Year | Publisher | اسم المؤلف (رئيسي) Author's Name | Reference |
| | 2005 | Pearson | James W. Nybakkan and Mark D. Bertness | Marine Biology: An Ecological Approach (6 th Edition) |
| | | | | |
| | | | | |

