![Miami Dade College]

Course Syllabus

Course Information

Course Title: Introduction to Oceanography

Subject and Number: OCE 1001

Course Description: Using the scientific method, critical thinking skills, and data analysis, this course will examine the fundamental processes of the ocean system, composed of an atmosphere, hydrosphere, lithosphere, and biosphere, through time. The course will also explore interactions between these spheres, including critical analysis of scientific theories and emphasize oceanic connections with humanity. Student learning outcomes: students will use critical thinking to recognize the rigorous standards of scientific theories; students will analyze and synthesize oceanographic data to draw scientifically valid conclusions; students will recognize the different time scales associated with different ocean processes; students will describe interactions between humans and the ocean realm; and students will apply their understanding of oceanographic principles to various marine issues.

Class Number: LOREM IPSUM

Term and Year: LOREM IPSUM

Course Modality: MDC Modalities

Instructor Information

Name: LOREM IPSUM

Department and Campus: LOREM IPSUM

Office location: LOREM IPSUM

Office hours: *(communicate course office hours with students)*

Phone number: 123-456-7890

Email: LOREM IPSUM

Communication Policy: *(Faculty will establish protocols for communication with students)*

Required Textbook, Course Materials, and Technology

Required course materials: *(Textbook(s), library reserves, shark pack, and/or other required readings. Include ISBN Number and author(s))*

List optional/supplemental materials/OER: LOREM IPSUM

Technology & Technical Skill Requirements: *(Technology tools or equipment students need to complete this course are included)*

Grading Policy & Assessment Methods

List all activities, papers, quizzes, tests, etc. including grading scale used for final grade calculation. Relationships between the final grade and the learner's accumulated points or percentages/weights breakdown for each assessment or component of the course grade.

Include policy on late submissions.

For MDC Live and MDC Online courses, include policy regarding exams (e.g., ProctorU, Respondus Lockdown and Monitor, etc.)

If applicable, include guidelines for extra credit.

Incomplete Grades: View the college's procedures for Incomplete Grades

Miami Dade College Policies

Attendance Policy: *(Faculty include precise statements about illnesses/emergencies/ tardiness, missed assignments/make-up.)*

Students Rights and Responsibilities: *Policies addressing academic integrity and plagiarism, code of conduct, grade appeals, religious observations, services for students with special needs, student complaints, and other.*

For more information, visit the Student's Rights and Responsibilities page

Available Support Services & Resources

- Tutoring Labs and Technology – Learning Resources
- Virtual Tutoring through Learning Resources or Smarthinking Online Tutoring
- ACCESS: A Comprehensive Center for Exceptional Student Services
- Advisement
- Password and Login Technical Support
- Technical Support for MDC Live and MDC Online Courses
- SMART Plan

(Faculty select from the above if applicable and include additional course/campus specific resources)

Available Support Services & Resources

- Public Safety - Services
- Hurricane and Other Natural Disasters: In the event of a hurricane or other disaster, the class follows the schedule established by the College for campus-based courses. Please visit the MDC website or call the MDC Hotline (305-237-7500) for situation updates.

Course Description

OCE1001 | Introduction to Oceanography | 3 credits

Using the scientific method, critical thinking skills, and data analysis, this course will examine the fundamental processes of the ocean system, composed of an atmosphere, hydrosphere, lithosphere, and biosphere, through time. The course will also explore interactions between these spheres, including critical analysis of scientific theories and emphasize oceanic connections with humanity. Student learning outcomes: students will use critical thinking to recognize the rigorous standards of scientific theories; students will analyze and synthesize oceanographic data to draw scientifically valid conclusions; students will recognize the different time scales associated with different ocean processes; students will describe interactions between humans and the ocean realm; and students will apply their understanding of oceanographic principles to various marine issues.

Course Competencies

Competency 1:
The student will use critical thinking to recognize the rigorous standards of scientific theories by:
- Evaluating the evidence and arguments presented in scientific theories to determine their validity.
- Critiquing scientific theories by examining the logical consistency and coherence of their underlying principles.
- Comparing and contrasting different scientific theories to identify commonalities and differences in their approaches and conclusions.

Learning Outcomes

- Communication
- Critical Thinking
- Information Literacy

Competency 2:
The student will analyze and synthesize oceanographic data to draw scientifically valid conclusions by:
- Collecting and organizing oceanographic data from various sources to create a comprehensive dataset.
- Applying statistical analysis techniques to identify patterns and trends in oceanographic data.
- Interpret and integrate the findings from the data analysis to draw scientifically valid conclusions about ocean processes.

Competency 3:
The student will recognize the different me scales associated with different ocean processes by:
- Differencing between short-term and long-term ocean processes based on their characteristic I scales.
- Relating specific ocean processes to their corresponding me scales to understand their temporal dynamics.
- Classifying ocean processes into categories based on their me scales to facilitate analysis and study.

Competency 4:
The student will describe interactions between humans and the ocean realm by:
- Identify and describing the various ways in which humans interact with the ocean, including fishing, tourism, and pollution.

- Examining and evaluating the impacts of human activities on the ocean ecosystem and its resources.
- Analyzing and proposing strategies to mitigate negative interactions and promote sustainable practices in the ocean realm.

Competency 5:

The student will apply their understanding of oceanographic principles to various marine issues by:

- Analyzing and evaluating marine issues, such as coral bleaching or overfishing, using oceanographic principles as a framework.
- Proposing and justifying solutions or intervenors based on the application of oceanographic principles to address the identified marine issues.
- Communicating and advoking for the importance of applying oceanographic principles in addressing marine issues to a wider audience.

Learning Outcomes

- Social Responsibility