TED UNIVERSITY

CE 436

Integrated Coastal Zone Management

SPRING 2022

Course Information

Required or Elective	☐Required ☑☐Elective	**Date Prepared**	February 2022
Semester	Spring 2022	**Class Hours, Lab. Hours and Classrooms**	Section 1: Tue. 11:00-11:50 (F312) Thurs. 09:00-10:50 (F306)
Course Credit Hours/ ECTS credits	(3+0+0) 3 / 6	**Pre-requisite/ Co-requisite**	CE 331
Level of Course	Senior	**Language of Instruction**	☑ English ☐ Turkish
Instructor(s) and office hours	Assoc. Prof. Dr. Aslı Numanoğlu Genç (asli.genc@tedu.edu.tr) (Office D301) (Office hours: By appointment)		
Teaching Assistant(s)	-		
Student Assistant(s)	-		
Textbook	Lecture Notes Required reading Recommended reading		
Recommended books	Bird, E., "Coastal Geomorphology: An Introduction", 2nd Edition, Wiley, 2008. Park, D. (Ed.), "Waves, Tides and Shallow-Water Processes", The Open University, Butterworth-Heinemann, 2008. Garrison, T. and Ellis, R., "Oceanography: An Invitation to Marine Science", Cengage Learning, 2016. Clark, J. (Ed.) "Coastal Zone Management Handbook", Lewis Publishers, 1996. Ahlhorn, F. "Integrated Coastal Zone Management: Status, Challenges and Prospects", Springer, 2018.		
Course Web Pages	Please register to Moodle page http://moodle.tedu.edu.tr and regularly follow this link to have access to course materials.		

Course Description

Definition of Coastal Zone; Physical and Ecological Properties of Coastal Zone; Coastal Landforms; Coastal Processes; The Global Ocean and the Climate System; Coastal Structures; Pressures on the Coast; Coastal Pollution; Sea Level Rise; Integrated Coastal Zone Management (ICZM); ICZM Practice in Turkey.

Course Objective

The objective of this course is to introduce the existing pressures on coastal areas, and the strategies developed within the framework of Integrated Coastal Zone Management (ICZM).

Course Learning Outcomes

Upon successful completion of this course, a student specifically will be able to:

1. Identify the physical and ecological properties of the coastal zones. **[B1]**
2. Explain the coastal processes involved within the coastal zone. **[B2]**
3. Show the relation of coastal areas with the global ocean and the climate system. **[B3]**
4. Analyze the anthropogenic impact on the marine coastal areas, and the environmental issues threatening the coastal system. **[B4]**
5. Assess the importance of ICZM with special emphasis on Turkey's coastal areas. **[B5]**
6. Discuss the importance of coastal engineer's responsibility with regard to coastal areas and her/his role in ICZM. **[B5]**

Course Assignments

A. ***Chapter Quizzes (20%):*** There will be two quizzes each having equal weight. The quizzes will be from the assigned reading and short videos.
B. ***Mid-Term Exam (25%):*** There will be one midterm exam during the semester.
C. ***Project Report and Presentation (25%):*** Each student is required work on one aspect of coastal zone management, and prepare a short report on it. The students are also required to make a short presentation of their project work.
D. ***Final Exam (30%):*** There will be a comprehensive final during the final exam weeks. Exact date of the final will be announced by the University towards the end of the semester.

Course Assessments & Learning Outcomes Matrix

Assessment Methods	Course Learning Outcomes
Chapter Quizzes	#1, #2
Midterm Exam	#2, #3, #4
Project Report and Presentation	all
Final Exam	#1, #2, #3, #4, #5

Relationship to Program Outcomes

This course contributes to fulfillment of the following program outcomes:

Identify, formulate, and solve engineering problems **[PO6].**

Engage in life-long learning to face the future challenges and to achieve an enduring professional development **[PO10].**

Employ state-of-the-art engineering techniques and computing tools necessary for creative engineering solutions **[PO11].**

Course Outline

Week	Topic
1-2	**1. THE COAST** 1.1. Definition of coastal zone 1.2. Coastal landforms 1.3. Coastal landform environments; cliffs; beaches; coastal dunes, Deltas and estuaries;Lagoons; Salt marshes and reefs 1.4. Human impacts on coastal landforms **QUIZ 1**
3-4	**2. COASTAL PROCESSES** 2.1. Waves and tides 2.2. Currents 2.3. Effects of coastal processes on the coastal areas
5	**3. COASTAL STRUCTURES** 3.1. Coastal defence structures 3.2. Berthing structures **MID-TERM EXAM**
6	**4. COASTAL POLLUTION** 4.1 Running water and groundwater 4.2 Indicators of coastal pollution 4.3 Marine litter
7-8-9	**5. THE GLOBAL OCEAN AND CLIMATE** 5.1- Ocean floor; ocean water and ocean life 5.2- The climate system 5.3- Human impact on global climate 5.4- Global warming 5.5- Sea level rise **QUIZ 2**
10-11	**6. INTEGRATED COASTAL ZONE MANAGEMENT** 6.1. Definition and History 6.2. Capacity building and tools 6.3. Case studies
12	**7. INTEGRATED COASTAL ZONE MANAGEMENT IN TURKEY** 7.1 Protected coastal areas of Turkey 7.2 ICZM Plans in Turkey
13-14	**8. PROJECT PRESENTATIONS**

Course Policies and Some Remarks

General

1. The course outline and schedule are tentative, and it will be adapted to the pace of the class.

Attendance

It is expected that a student **must have attended at least 70% of the lectures**.

Late Assignment Submission

For each day after the announced deadline, 20% of the total earned mark will be deducted. More than two days of late submissions will not be accepted.

Make Up Exams

If you have a legitimate reason for missing an exam, then you must arrange to make up the exam In case of an illness or emergency you need to supply a documentation that supports your claim. Also please read the document given in the link: http://www.tedu.edu.tr/tr/main/yonetmelikler-ve-yonergeler

Plagiarism

All of the following are considered plagiarism:

- "Turning in someone else's work as your own
- Copying words or ideas from someone else without giving credit
- Copying so many words or ideas from a source that it makes up the majority of your work, whether you give credit or not" (www.plagiarism.org)

Plagiarism is a very serious offense and will be penalized accordingly by the university disciplinary committee. The best way to avoid accidentally plagiarizing is to work on your own before you ask for the help of other resources. Collaboration on non-collected homework and in studying is strongly encouraged; however, the work you hand in must be solely your own. For more information on TEDU policy on intellectual integrity see the link: http://student.tedu.edu.tr/sites/default/files/content_files/2015-2016ogrencielkitabi.pdf

Cheating

Cheating has a very broad description which can be summarized as "acting dishonestly". Some of the things that can be considered as cheating are the following: copying answers on exams, homework and lab works, using prohibited material on exams, lying to gain any type of advantage in class, providing false, modified or forged data in a report, plagiarizing, modifying graded material to be re-graded, causing harm to colleagues by distributing false information about an exam, homework or lab. For more information on TEDU policy on intellectual integrity, please see the following link: http://student.tedu.edu.tr/sites/default/files/content_files/2015-2016ogrencielkitabi.pdf

Disability Support

If you have a disabling condition which may interfere with your ability to successfully complete this module, please contact Dr. Onur Özmen (email: onur.ozmen@tedu.edu.tr). For more information please see Handbook for Registered Students.