

课程详述

COURSE SPECIFICATION

以下课程信息可能根据实际授课需要或在课程检讨之后产生变动。如对课程有任何疑问，请联系授课教师。

The course information as follows may be subject to change, either during the session because of unforeseen circumstances, or following review of the course at the end of the session. Queries about the course should be directed to the course instructor.

1.	课程名称 Course Title	海滨地貌原理 Introduction to Coastal Morphology
2.	授课院系 Originating Department	海洋科学与工程系 Department of Ocean Science and Engineering
3.	课程编号 Course Code	OCE105
4.	课程学分 Credit Value	3
5.	课程类别 Course Type	专业基础课 Major Required Courses
6.	授课学期 Semester	秋季 Fall
7.	授课语言 Teaching Language	英语 English only
8.	授课教师、所属学系、联系方式 (如属团队授课, 请列明其他授课教师) Instructor(s), Affiliation & Contact (For team teaching, please list all instructors)	徐景平, 海洋科学与工程系, 15376791963, xujp@sustech.edu.cn Jingping Xu/Department of Ocean Science and Engineering
9.	实验员/助教、所属学系、联系方式 Tutor/TA(s), Contact	无 NA
10.	选课人数限额(可不填) Maximum Enrolment (Optional)	

11. 授课方式 Delivery Method	讲授 Lectures	习题/辅导/讨论 Tutorials	实验/实习 Lab/Practical	其它(请具体注明) Other (Please specify)	总学时 Total
学时数 Credit Hours	44		8		52
12. 先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	无 NA				
13. 后续课程、其它学习规划 Courses for which this course is a pre-requisite					
14. 其它要求修读本课程的学系 Cross-listing Dept.					

教学大纲及教学日历 SYLLABUS

15. 教学目标 Course Objectives

这是一门针对大一、大二新生的入门课程，向学生介绍影响海滩和海岸的海洋，大气和动态的地质地貌。它涵盖波浪、海流、风、雨、沉积物、生态以及其它与海滩和沿海过程相关的基础内容。该课程将有至少一次到附近海岸带和河口的实地考察内容。通过本课程的学习，学生对人类活动对海岸带的影响，如海滩侵蚀、海平面上升及湿地蚀退及其后果有更深刻的认识，提高学生爱护环境的意识。本课程适用于尚未接触过地球科学的学生。

Introductory-level physical science course that introduces the students to ocean, air, and landform dynamics that affect beaches and coasts. It covers basic topics in beach and coastal processes associated with waves and currents, wind and rain, sediments and rocks, and ecology. The course will have at least one field trips to local coastal and estuarine site. Emphasis will be placed on impacts on ecosystem and human health, the economics of coastal industry, and the anthropogenic consequences of pollution and engineering practices. It is intended for students with little or no previous experience in earth sciences.

16. 预达学习成果 Learning Outcomes

完成本课程后，学生能够基本掌握以下知识：

1. 认识常见的海滩和海岸带类型，理解其成因；
2. 掌握主要人类活动对海岸带尤其是海滩的影响；
3. 对我国海滩和海岸带现状有初步的认识。

Students will learn to understand the natural processes like hurricanes, landslides and sea-level changes that form beaches, coastal landforms, and coastal habitats. We also aim to raise students' awareness of climate change and environmental protection.

17. 课程内容及教学日历（如授课语言以英文为主，则课程内容介绍可以用英文；如团队教学或模块教学，教学日历须注明主讲人）

Course Contents (in Parts/Chapters/Sections/Weeks. Please notify name of instructor for course section(s), if this is a team teaching or module course.)

Lecture01. Coastline Variability and Functions in the Global Environment 海岸线在全球环境中的作用 (2 hours)

- Lecture02. The Earth's Mobile Crust 地壳是动的 (2 hours)
- Lecture03. Sediments and Rocks: Materials of Coastal Environments 沉积物来源 (2 hours)
- Lecture04. Sea-Level Change and Coastal Environments 海平面变化 (2 hours)
- Lecture05. Weather Systems, Extratropical Storms, and Hurricanes 天气与气候 (2 hours)
- Lecture06. Waves and the Coast 波浪作用 (2 hours)
- Lecture07. Tides of the Ocean 潮汐作用 (2 hours)
- Lecture08. River Deltas: The Source of Most of our Coastal Sediments 三角洲 (2 hours)
- Lecture09. Estuaries 河口湾 (2 hours)
- Lecture10. Coastal Lagoons 泻湖 (2 hours)
- Lecture11. Tidal Flats 潮滩 (2 hours)
- Lecture12. Coastal Wetlands 滨海湿地 (2 hours)
- Lecture13. Beach and Nearshore Environment 海滩环境 (3 hours)
- Lecture14. Coastal Dunes 海岸沙丘 (2 hours)
- Lecture15. Barrier Systems 障蔽岛(2 hours)
- Lecture16. Tidal Inlets 潮汐通道 (3 hours)
- Lecture17. Glaciated Coasts 冰川海岸 (3 hours)
- Lecture18. Rocky Coasts 基岩海岸 (3 hours)
- Lecture19. The Coastline of China 中国海岸线 (4 hours)
- Lecture20. Field Trip, The Coastline of Dapeng Peninsula 大鹏半岛海岸线 (8 hours)

18. 教材及其它参考资料 **Textbook and Supplementary Readings**

1. Beaches and Coasts, R. Davis, D. FitzGerald, Wiley-Blackwell, P.419, 2004. ISBN: 0632043083
2. Introduction to California's Beaches and Coast, Gary Griggs, University of California Press, P.328, 2010, ISBN: 0520262905

课程评估 **ASSESSMENT**

19. 评估形式 Type of Assessment	评估时间 Time	占考试总成绩百分比 % of final score	违纪处罚 Penalty	备注 Notes
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出勤 Attendance				
课堂表现 Class Performance				
小测验 Quiz				
课程项目 Projects				
平时作业 Assignments		40		
期中考试 Mid-Term Test		20		
期末考试 Final Exam		40		
期末报告 Final Presentation				
其它（可根据需要 改写以上评估方式） Others (The above may be modified as necessary)				

20. 记分方式 GRADING SYSTEM

- A. 十三级等级制 Letter Grading
 B. 二级记分制（通过/不通过） Pass/Fail Grading

课程审批 REVIEW AND APPROVAL

21. 本课程设置已经过以下责任人/委员会审议通过
This Course has been approved by the following person or committee of authority

海洋科学与工程系本科教学委员会
Department of Ocean Science and Engineering Undergraduate Committee