

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	土壤与地下水污染防治的美国经验 The U.S. experience of soil and groundwater pollution prevention
2.	授课院系 Originating Department	环境科学与工程学院 School of Environmental Science and Engineering
3.	课程编号 Course Code	ESE210
4.	课程学分 Credit Value	2
5.	课程类别 Course Type	专业选修课/ Major Elective Courses
6.	授课学期 Semester	夏季 Summer
7.	授课语言 Teaching Language	英语 English
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)	郑春苗，环境科学与工程学院，zhengcm@sustech.edu.cn Chunmiao Zheng, School of Environmental Science and Engineering
9.	实验员/助教、所属学系、联系方式 Tutor/TA(s), Contact	王晓丽，环境科学与工程学院，wangxl@sustech.edu.cn, 88010821 Xiaoli Wang, School of Environmental Science and Engineering
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	32	0	32	0	64
12. 先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	无 N/A				
13. 后续课程、其它学习规划 Courses for which this course is a pre-requisite	无 N/A				
14. 其它要求修读本课程的学系 Cross-listing Dept.	无 N/A				

教学大纲及教学日历 SYLLABUS

15. 教学目标 Course Objectives

学生在教师的带领下，赴美国进行土壤与地下水污染防治方面的知识学习和现场考察。

The purpose of this course is to let the students know the knowledge of soil and groundwater pollution control in USA

16. 预达学习成果 Learning Outcomes

掌握土壤与地下水污染防治的相关理论与政策、了解美国在土壤与地下水污染防治工程方面的相关实践与工程案例

After the course students will be familiar with the theory and policy on soil and groundwater pollution control, and some practices and engineering cases of soil and groundwater pollution control.

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.)



序号 NO.	内容 Content	学时安排 Hours				学时汇总 Sub- total
		理论 Theoretic Teaching	实验 Experiment	实践 Exercise	上机操作 Computer Operation	
1	超级基金：地下水污染修复基金缘起及发展 Superfund Site: Keystone corridor ground water contamination	3				3
2	地下水流模型 Groundwater Flow Models as a Tool to Solve Problems	2				2
3	利用卫星遥感图像分析土地利用变化 Analysis of Land Use Change with Satellite Imagery	3				3
4	趋势分析方法 Trend Analysis for MNA Guidance	3				3
5	湖泊对于海中小岛上淡水的影响分析 Understanding the impacts of lakes on freshwater availability of small islands	3				2
6	美国宇航局气候变化研究及遥感应用 Climate Change Research at NASA and Remote Sensing Applications	3				3
7	密西西比河流域天然气泄露对于地下水的影响调查 Groundwater Investigations Following a Natural Gas Leak Mississippi	3				4
8	受污染地下水的修复评估及实施 Implementation and Assessment of Remedial Measures for Restoring Contaminated Groundwater to Beneficial Use	3				3
9	居民楼使用可回收混凝土骨料作为地基的影响分析 Consequences of Recycled Concrete Aggregate as a Subbase for a Residential Building	3		6		9
10	编程、撰写脚本与描点绘图 Programming, Scripting & Plotting	3				3
11	Oronoco Outfall 煤气焦油残留研究 Manufactured Gas Tar Residuals Oronoco Outfall	3		8		11
12	地质观测基础 Fundamental of Geologic Observations			8		8
13	亚历山大港污染场地考察 Contaminated Sediments and Field Trip to Alexandria			10		10
Total		32		32		64

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

Groundwater and Surface Water: A single resource

Sustainability of Groundwater Resources

潜行的宝藏

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
出勤 Attendance		30%		
课堂表现 Class Performance				
小测验 Quiz				
课程项目 Projects				
平时作业 Assignments				
期中考试 Mid-Term Test				
期末考试 Final Exam		70%		
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