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**	**环境影响评价** Environmental Impact Assessment
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**	ESE405
4.	**课程学分 Credit Value**	3
5.	**课程类别 Course Type**	专业选修课 Professional selective courses
6.	**授课学期 Semester**	秋季 Fall
7.	**授课语言 Teaching Language**	中文 Chinese
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）**	史江红 教授，环境科学与工程学院，shijh@sustech.edu.cn Prof.Shi Jianghong, School of Environmental Science and Engineering,
9.	**实验员/助教、所属学系、联系方式 Tutor/TA(s), Contact**	待公布 To be announced
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	42	6			48

Credit Hours					

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	无/NA
14.	其它要求修读本课程的学系 Cross-listing Dept.	无/NA

教学大纲及教学日历 SYLLABUS

15. 教学目标 Course Objectives

在总体内容安排上，以常规环境要素的环境影响评价为主线进行介绍，同时介绍环境影响评价的最新进展，使学生既掌握了环境影响评价的基本内容，又对环境影响评价的前沿领域有所了解。在具体内容上，将介绍以下内容：环境影响评价概况、水环境影响评价、大气环境影响评价、声环境影响评价、生态环境影响评价、区域环境影响评价、规划环境影响评价、社会经济环境影响评价、“三线一单”生态环境管控体系等。在具体内容中，结合案例分析，以加深学生对环境影响评价实际的理解。

In the overall content arrangement, the introduction is based on the EIA of conventional environmental elements, and the latest progress of EIA is introduced, so that students not only master the basic content of EIA, but also have some understanding of the frontier areas. In terms of specific content, the following will be introduced: overview, water EIA atmospheric EIA, acoustic EIA, ecological EIA, regional EIA, planning EIA, socio-economic EIA", and Three lines and one list" ecological environment management and control system. Case analysis will introduced during the course to deepen students' practical understanding of EIA.

16. 预达学习成果 Learning Outcomes

通过本课程的学习，使学生能够初步具备编制环评报告表，协助编制报告书的能力，为今后从事环境影响评价技术咨询服务与环境管理等工作储备基本知识和技能。

Through the course, students will be able to initially prepare the EIA report form and assist in the preparation of the report, and reserve the basic knowledge and skills for future EIA technical consulting services and environmental management.

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.)

（一）环境影响评价的概念 The concept of EIA

主要内容：环境、环境影响、环境影响评价的概念，环境影响评价的提出与发展

Main content: the concept of environment, environmental impact, and EIA; The proposal and development of EIA

（二）环境影响评价程序 The Procedure of EIA

主要内容：环境影响评价的管理程序及工作程序

Main content: Management and working procedures for EIA

（三）环境影响评价方法与技术概述 Overview of EIA methods and technologies

主要内容：1 污染源调查与工程分析；2 环境影响因素识别与评价因子筛选；3 环境影响预测方法；4 环境影响评价方法；5 公众参与

Main contents: 1 Pollution source survey and engineering analysis; 2 Environmental impact factor identification and evaluation factor screening; 3 Environmental impact prediction methods; 4 EIA methods; 5 Public participation

（四）地表水环境影响评价 EIA of Surface Water

主要内容：1 地表水体的污染和自净；2 河流和河口水质模型；3 湖泊（水库）水质模型；4 水质模型的标定；5 地表水环境评价等级的确定；6 地表水环境现状调查和评价； 7 开发行动对地表水影响的识别；8 地表水环境影响预测和评价

Main contents: 1 pollution and self-purification of surface water bodies; 2 river and estuary water quality models; 3 lake (reservoir) water quality models; 4 calibration of water quality models; 5 determination of surface water environmental assessment levels; 6 investigation and evaluation of surface water environment status 7 Identification of the impact of development actions on surface water; 8 Prediction and evaluation of surface water environmental impact

其它教学环节：实例分析 1.

Other teaching contents: case analysis 1.

（五）地下水环境影响评价 Groundwater EIA

主要内容：1 基础知识；2 地下水模型及其标定；3 地下水环境评价等级与评价范围；4 地下水环境现状调查和评价；5 开发行动对地下水影响的识别；6 地下水环境影响预测和评价

Main contents: 1 basic knowledge; 2 groundwater model and calibration; 3 groundwater environment assessment levels and evaluation scope; 4 groundwater environment status survey and evaluation; 5 identification of groundwater impacts from development actions; 6 groundwater environment prediction and evaluation

Other teaching contents: case analysis 2.

（六）大气环境影响评价 Atmospheric EIA

主要内容：1、基础知识；2 大气环境评价等级与评价范围；3 大气污染源调查与现状评价；4 大气环境影响预测和评价；5 环境保护对策

Main contents: 1. Basic knowledge; 2. Atmospheric environment assessment level and evaluation scope; 3. Atmospheric pollution source investigation and current status assessment; 4. Atmospheric environmental impact prediction and evaluation;

其它教学环节：实例分析 3.

Other teaching contents: case analysis 3.

（七）土壤环境影响评价 Soil EIA

主要内容：1 土壤特征和影响土壤环境质量的主要因素；2 土壤环境影响识别；3 土壤环境影响评价等级划分与评价范围；4 土壤环境现状的调查与评价；土壤环境影响预测与评价

Main contents: 1 soil characteristics and main factors affecting soil environmental quality; 2 identification of soil environmental impacts; 3 classification and evaluation scope of soil environmental impact assessments; 4 investigation and evaluation of soil environmental status; prediction and evaluation of soil environmental impacts

（八）声环境影响评价 Noise EIA

主要内容：1 噪声和噪声评价量；2 声环境评价等级与评价范围；3 声环境现状调查和评价；4 声影响预测与评价；5 环境保护对策

Main contents: 1 Noise and noise evaluation amount; 2 Noise environment evaluation level and evaluation scope; 3 Noise environment status survey and evaluation; 4 Noise impact prediction and evaluation; 5 Environmental protection countermeasures

其它教学环节：实例分析 4.

Other teaching contents: case analysis 4

（九）区域环境影响评价 Regional EIA

主要内容：背景资料；区域环境影响评价进展；区域环境影响评价概念与特点；区域环境影响评价的工作程序；区域开发环境制约因素分析；区域开发活动环境影响评价技术

Main contents: background information; progress of regional EIA; concepts and characteristics of regional EIA; working procedures of regional EIA analysis of environmental constraints in regional development; EIA techniques for regional development activities

（十）生态环境影响评价 Ecological EIA

主要内容：生态环境影响识别与评价等级；生态环境调查与现状评价；生态环境影响评价；生态环境保护措施

Main contents: Identification and evaluation level of ecological environment impact; Ecological environment investigation and status evaluation; Ecological EIA; Ecological environmental protection measures.

（十一）社会经济环境影响评价 Socio-economic EIA

主要内容：社会经济环境影响评价的内容与方法

Main content: Contents and methods of socio-economic environmental impact assessment

（十二）环境影响评价前沿 Frontiers in EIA

主要内容：环境危害评价；环境风险评价；累积环境影响评价；规划环境影响评价；战略环境影响评价, 三线一单生态环境管控体系构建，以及中外环境影响评价制度比较研究。

Main contents: environmental hazard assessment; environmental risk assessment; cumulative EIA; planned EIA; strategic EIA，"Three lines and one list" ecological environment management and control system. A comparative study of environmental impact assessment systems between China and foreign countries.

其它教学环节：实例分析 5 深圳市“三线一单”项目编制情况介绍

Other teaching contents: Case analysis 5.

No.	Content	Hours
1	环境影响评价的概念 The concept of EIA	2
2	环境影响评价程序 The Procedure of EIA	2
3	环境影响评价方法与技术概述 Overview of EIA methods and technologies	2
4	地表水环境影响评价 EIA of Surface Water	4

5	地下水环境影响评价 Groundwater EIA	4
6	大气环境影响评价 Atmospheric EIA	4
7	土壤环境影响评价 Soil EIA	4
8	环境噪声影响评价 Noise EIA	2
9	区域环境影响评价 Regional EIA	4
10	生态环境影响评价 Ecological EIA	4
11	社会经济环境影响评价 Socio-economic EIA	2
12	讨论答疑、学生展示、课程汇报	6
12	环境影响评价前沿 Frontiers in Environmental Impact Assessment	8
Total		48

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

教材：

环境影响评价，高等教育出版社，2017，汪成文（清华大学环境学院教授）

Environmental impact assessment, higher education press, 2017, Wang Chengwen (Professor, School of environment, Tsinghua University)

参考教材：

1、陆书玉.环境影响评价[M], 高等教育出版社. 2001.

Lu Shuyu. Environmental Impact Assessment [M]. Higher Education Press, 2001. (In Chinese)

2、沈珍瑶. 环境影响评价实用教程[M], 北京师范大学出版社. 2007.

Shen Zhenyao. Practical tutorial on environmental impact assessment [M]. Beijing Normal University Press,2007 (In Chinese)

3、汪劲. 中外环境影响评价制度比较研究[M], 北京大学出版社，2006.

Wang Jin. A comparative study of environmental impact assessment systems between China and foreign countries [M], Peking University Press, 2006

4、 2016 年 7 月，环境保护部印发《“十三五”环境影响评价改革实施方案》

In July 2016, the Ministry of environmental protection issued “The 13th five year plan for the implementation of environmental impact assessment reform”.

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		10		
课堂表现 Class Performance		20		
小测验 Quiz				
课程项目 Projects		30		
平时作业				

Assignments				
期中考试 Mid-Term Test				
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