

## 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 <b>Course Title</b>	食品污染的来源、健康影响和管理 <b>Sources, Health Impacts and Management of Food Contaminants</b>
2.	授课院系 <b>Originating Department</b>	环境科学与工程学院 School of Environmental Science and Engineering
3.	课程编号 <b>Course Code</b>	ESES006
4.	课程学分 <b>Credit Value</b>	1
5.	课程类别 <b>Course Type</b>	专业选修课 Major Elective Courses
6.	授课学期 <b>Semester</b>	夏季 Summer
7.	授课语言 <b>Teaching Language</b>	英文 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） <b>Instructor(s), Affiliation &amp; Contact (For team teaching, please list all instructors)</b>	Ming-Hung Wong, Distinguished Visiting Professor, minghwong@eduhk.hk
9.	实验员/助教、所属学系、联系方式 <b>Tutor/TA(s), Contact</b>	待公布 To be announced
10.	选课人数限额(可不填) <b>Maximum Enrolment (Optional)</b>	

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	16	0	0	0	16

12. 先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	N/A
13. 后续课程、其它学习规划 Courses for which this course is a pre-requisite	N/A
14. 其它要求修读本课程的学系 Cross-listing Dept.	N/A

### 教学大纲及教学日历 SYLLABUS

#### 15. 教学目标 Course Objectives

This course attempts to discuss linkages between the natural and disturbed chemical composition of the earth's surface due to human activities. The sources, fates and effects, including environmental and human health effects of some major persistent toxic substances (PTS) commonly found in food are reviewed. Different relevant case studies are cited for in-depth discussion. These included some hazardous inorganic elements: arsenic, mercury and fluoride, and persistent organic pollutants (POPs): organ chlorine pesticides, PCB, Dioxins, phthalates and bisphenol A. In addition, the sources and health impacts of indoor air pollutants, and PTS generated due to open burning of electronic-waste are also included. Finally, chemicals management issues are briefly reviewed, in particular the policies currently available in controlling PTS, with a focus on food contaminants.

#### 16. 预达学习成果 Learning Outcomes

The course is an extension of the course Environmental and Health.

#### 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.)**

NO.	Content	Class hour
1	Environmental geochemistry in natural ecosystems and disturbed ecosystems	1
2	Degradation of natural resources substances (Heavy metals, persistent organic pollutants (POPs), and emerging chemicals of concern	1
3	Exposure pathways and health risk assessments	1
4	Arsenic – paddy rice grown under waterlogged conditions	1
5	Mercury – bioaccumulation and bio magnification in food chains	1
6	Fluoride – tea grown in acidic soils, and poor quality tea	1
7	Organochlorine pesticides and PCB – worldwide ban on production and usage	1
8	Dioxin – unintended byproducts during combustion	1
9	Phthalates and bisphenol A – food contamination	1
10	Indoor air pollutants –household dusts	1
11	Open burning of electronic waste – body loadings of workers/residents	1
12	Basel Convention	1
13	Rotterdam Convention	1
14	Stockholm Convention	1
15	Minamata Convention	1
16	Regulations concerning electronic products	1
Total		16

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

N/A

课程评估 ASSESSMENT

19. 评估形式 Type Assessment	评估时间 of 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				
平时作业 Assignments		30%		
期中考试 Mid-Term Test				
期末考试 Final Exam				
期末报告 Final Presentation		20%		
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