

Data Sheet of International Master's Courses CAUP, Tongji
同济大学建筑与城市规划学院研究生国际课程(英语)登记表

Course Code 课程编号	2010241	Department 所在系(√) Other Teachers 合作教师	A	P	L	D	院登记号 CAUP Code	
					√			
Instructor (Title) 主讲教师(职称)	Prof. Dr. Zhang Deshun		Dr. Chen Jing					
	张德顺 教授		陈静博士					
课程中文名	植物景观规划原理与方法							
Course Name (E)	Planning Principles and Methods of Landscape Plants (Principles and Methods of Landscape Planning with Plant)							
Form of Teaching 教学形式 (√)	Lectures 讲课	Design Studio 设计课	Seminar 研讨课	Internship 实践课	Others 其他			
	√			√				
Total Hours 总学时数	36	Hours per Week 周课时	2	Weeks 教学周数	16 周			
Semester 春季或秋季学期	Spring 春季	Tongji Credits 同济 学分数	2					
Brief Course Description 课程简述 (中英文)								

《植物景观规划原理及方法》是景观规划的重要理论基础之一。植物是景观设计的主体要素，在场地、空间、环境中，植物是最能改变场所，塑造空间场地，也是最易受环境影响的生物因素。在学习园林植物学、种植设计、园林生态学、园林规划设计、风景名胜区规划及景观规划设计等前期铺垫性课程基础上，系统介绍植物景观规划的原理和方法，将国内外景观植物发展的趋势、应用技术、及其国际前沿应对策略，与实践应用结合更具体化。

在进一步加深理解园林植物学知识、生态学原理在植物景观规划中的指导作用，认识环境因素、气候条件如何影响植物的自然分布，植物如何通过对环境的适应，从而改造环境，特别是环境对植物遗传特性、形态特征、地理分布的多重影响。同时，结合规划设计知识，初步掌握植物景观的资源调查、评价及规划的基本方法和程序。

通过课程学习后，基本掌握世界风景园林植物分布和应用规律，各种植物的生态习性和生物学特性，能结合生态学、地理学、艺术美学、规划设计等知识，科学进行植物景观规划设计。

“Planning principles and methods of landscape plants” is one of the important theoretical bases for landscape planning. Compared with other environmental factors, plants are the main elements of landscape design. Within places, spaces, and environments, plant is the best biological factor to change the places and create spaces. It is the most environmentally sensitive biological factor, also. On the basis of preliminary courses as landscape plants, planting design, ecology, landscape planning, and scenic area planning, this course introduces the principles and methods of plant landscaping systematically to more specifically combined practice with development tendencies, application skills, and international cutting-edge strategies of landscape plants.

Lecture presents the knowledge of landscape plants and the guidance of ecology principles of plants landscaping, the natural distribution of plants with the impact by sites and climate, the adaption and of plants in response to environment and the further transformation of surroundings by plants, especially the multi-layer influence by environment to plant' genetic and morphological characteristics and geographic distribution. At the meanwhile, combined with planning and design, the basic method and procedure of plant survey, evaluation, and planning shall be preliminarily mastered.

The subject goal is to plan and design plant landscape scientifically by understanding the natural distribution and application principles of landscape plants and making full use of knowledge as ecology, geography, art, aesthetics and planning and design.

Brief Schedule and Topics 课程进度简表 (中英文)

- 第一周 园林植物学概论（一）
- 第二周 园林植物学概论（二）
- 第三周 园林植物保育
- 第四周 自然保护
- 第五周 中国的园林植物资源及其调查研究
- 第六周 珍稀濒危植物的保护与利用
- 第七周 珍稀濒危植物的保护策略
- 第八周 上海应对气候变化的植物选择
- 第九周 习题: 各国的园林植物
- 第十周 讨论: 如何利用园林植物
- 第十一周 讨论: 绿色基础设施与园林植物
- 第十二周 风景旅游区的植物应用
- 第十三周 植物园规划中的植物、文化和科学内涵

Week 1: Introduction of landscape plants (1)
Week 2: Introduction of landscape plants (2)
Week 3: Landscape plant conservation
Week 4: Nature conservation
Week 5: Landscape plant resources research in China
Week 6: Rare and endangered plant conservation and application
Week 7: Conservation strategy of rare and endangered plants
Week 8: Response of plant selection to climate change in Shanghai
Week 9: Assignment: landscape plants in different countries
Week 10: Presentations: How to use landscape plants
Week 11: Presentations: Green infrastructure and landscape plants
Week 12: Plant landscaping in scenic spots
Week 13: Botanical, cultural and scientific connotation in botanical garden planning

Course Syllabus 课程大纲 (中英文)

Week 1: Introduction of landscape plants (1)

Brian Clouston. Landscape Design with Plants. Heinemann:London. 1977

Nick Robinson. The Planting Design Handbook. 1992

Week 2: Introduction of landscape plants (2)

Florence Bell Robinson. Planting design. 1940

Brian Hackett. Planting Design .1979

Week 3: Landscape plant conservation

Global strategy for plant conservation:

<https://www.cbd.int/gspc/strategy.shtml>

Week 4: Nature Conservation

IUCN: <http://www.iucn.org/>

<http://www.iucn.org/about/union/commissions/cem/>

http://www.iucn.org/about/work/programmes/species/who_we_are/about_the_species_survival_commission/

http://www.iucn.org/about/work/programmes/gpap_home/

Week 5: Plant germplasm and resources conservation in China

BGCI: <http://www.bgci.org/worldwide/>

Week 6: Rare and endangered plant conservation

http://alyxia.umd.edu/teaching/files/Schemske_et_al.pdf

Week 7: Conservation strategy of rare and endangered plants

IUCN SSC:

http://www.iucn.org/about/work/programmes/species/who_we_are/about_the_species_survival_commission

Week 8: Response of plant Selection to Climate Change in Shanghai

<http://mall.cnki.net/magazine/article/ZGYL201008007.htm>

http://d.wanfangdata.com.cn/Periodical_zgyl201009018.aspx

Week 9: Assignment: landscape plant in different countries
<http://www.kew.org/>
<http://www.usna.usda.gov/>
<http://www.ccc.govt.nz/cityleisure/parkswalkways/christchurchbotanicgardens/index.aspx>
<http://www.sbg.org.sg/>

Week 10: Presentations: How to planting design in landscape
<http://www.greeningofcities.org/>

Week 11:: Plant landscaping in scenic spots
<http://file.lw23.com/c/c2/c23/c232e897-9de2-4732-8213-247057a5603b.pdf>
<http://www.jchla.com/show-inf01.asp?id=2693>

Week 12: Botanical, cultural and scientific connotation in botanical gardens
 Lynden B. Miller. Parks, Plants, and People: Beautifying the Urban Landscape. WW Norton & Co . 2009

Week 13: Final examination: assignment

Main Reference Books 主要参考书目

Zhang Deshun Plant Germplasm Resources and Conservation. Shanghai Scientific & technical Publisher. 2007

主要参考书

- 1、张德顺. 景观植物应用原理与方法(同济大学研究生规划教材). (Application Principles and Methods of Landscape Plants) [M]. Beijing: China Architecture & Building Press, 1997
- 2、陈有民编《园林树木学》中国林业出版社 2004
- 3、Brian Clouston. Landscape Design with Plants. Heinemann:London. 1977
4. 刘少宗主编《植物景观规划设计》天津大学出版社 2003 年

2026 Spring

- 1 Zhang Deshun: Introduction of Principles and Methods of Landscape Planning with Plants
- 2 Zhang Deshun: Symbiosis of Building and Landscape Plants, Let the Life Return to Natural Habitats
- 3 Zhang Deshun: Hot Topics and Development Trends of International Research on Landscape Architecture
- 4 Zhang Deshun: Microclimate Wisdom in Chinese Classical Gardens & Application in Modern Planning
- 5 Zhang Deshun: Planning Principles and Methods of Landscape Plants in Response to Climate Change
6. Cao Wei: Cooling and PM2.5 Mitigation Effects of Urban Green-Blue Spaces: Mechanism, Methods and Planning Insights
- 7 Guo Li: Digital Preservation of Xishu Garden and Design Practice
- 8 Guo Li: Healthy City and Low Carbon Landscape Architecture
- 9 Mohamed Elsadek: Biodiversity
10. Mohamed Elsadek: Vertical Greening
11. Mohamed Elsadek: Writing and Publishing a Scientific paper
- 12 Mohamed Elsadek : Healing Gardens
- 13 Mohamed Elsadek : Physiological and Psychological Effects of Landscaping on Different Target Groups
- 14 Mohamed Elsadek: Historical Overview of Gardens
- 15.Melissa R. Marselle: Biodiversity and Health in the Face of Climate Change
- 16 Zhang Deshun: Conclusion of the Course