

Data Sheet of International Graduate's Course, Tongji CAUP

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	2010281 1010281	Department 所在系(✓)	A ✓	P	L	D	院登记号 CAUP Code	
Instructor(Title) 主讲教师(职称)	Prof. TAN Zheng 谭峥 副教授	Other Teachers 合作教师	Prof. JIANG Jiawei 江嘉玮 助理教授			Prof. MO Wanli 莫万莉 助理教授		
课程中文名	建筑学学科前沿动态: 机器与环境							
Course Name (E)	LECTURES ON FRONTIERS OF ARCHITECTURE : CRAFT							
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		18	
Semester 春季或秋季学期	Fall 秋季	Tongji Credits 同济 学分数	2					
Brief Course Description 课程简述 (中英文)								
<p>Equipment and services in the buildings compose a specific type of infrastructure within contemporary society. They are self-standing hardware and provide life-supporting functions to everyday life. Since the end of the first Industrial Revolution, the use of machine has not only enhanced dramatically production efficiency but also accelerated urbanization. It was not until the end of the First World War that the issue of environment was made into a main public concern. The emerging prosperous world of machine has changed the way how the human bodies to experience speed, motion, heat, light, and comfort as a whole. This course, through retrospective study of the dilemma brought by the interconnection between machine-environment, looks into new possibilities of reconciling such conflicting issues as well as potentials towards a well-tempered architecture that reflects on both environmental meaning of architecture, and architecture's disciplinary future.</p> <p>服务性设备构成了现代社会的特殊基础设施。它们也是独立的硬件系统, 支持着日常生活的运行。自从第一次工业革命结束时开始, 机器的逐步广泛应用不仅极大地提高了生产效率, 而且加速了城市化。直到第一次世界大战结束, 环境议题才被人们纳入为一个重要的公共议题。涌现的机器世界改变了身体体验速度、运动、热量与舒适的方式。这门课通过对“机器-环境”的互相牵连进行回溯式的研究, 寻找调和这些矛盾因素之间的新可能, 以及研讨一种能够深入反思机器与环境的适应式建筑学。在这个过程中我们可以反思建筑的环境意义与学科未来。</p> <p>This course will be given in a series of lectures. For the assignment, students are supposed to work as teams. Each team are obliged to give two presentations (midterm and final) and submit a 4*N (N=Number of Members) page folded booklet (A4 size, in PDF format), or an equivalent presentation (only for cross-disciplinary students) based on relevant research topics. The topic of the booklet should be closely related to one speaker's lecture.</p> <p>本课程将以系列讲座的形式授课。学生必须做两次书面及口头报告(中期末和期末, 检查形式待定), 作业要求就一位演讲人的讲座主题进行拓展研究, 提交一份4*N(N=组人数)页的报告或同等的powerpoint报告(仅仅适用于非建规-设计类的跨专业同学)。</p>								
Brief Schedule and Topics 课程进度简表 (中英文)								

(Since the arrangement of the lectures is subject to our guest speakers instant schedules, the sequence of the invited lectures is difficult to be fixed in advance. The following schedule provides the supposed guest speakers and their tentative topics, while not finalized yet.)

(由于本课程特邀讲座的顺序难以全部提前确定。以下为暂定的特邀演讲嘉宾及演讲话题。)

Week 1 (Sept 12)

Course Introduction and Special Lecture “Environmental Tectonics: 10 Key Words in the History of Modern Built Environmental Control”

Speaker: TAN Zheng

第一周

课程导论与讲座“环境建构：现代建成环境控制的10个关键词”

演讲人：谭峥

Week 2 (Sept 19)

Archigram

Speaker: Erlend Blakstad Haffner

第二周

建筑电讯派

演讲人：Erlend Blakstad Haffner

Week 3 (Sept 26)

Reyner Banham I: Bibliography of A Historian and Critic that Loves Machine

Speaker: JIANG Jiawei

第三周

雷纳·班纳姆（一）：一位歌颂机器的史学/批评家的文献回顾

演讲人：江嘉玮

Week 4 (Oct 3)

No Class

Week 5 (Oct 10)

Module, Joints and Surface : The Story of Prefabrication

Speaker: Zheng TAN

第五周

模数、节点与表面：预制的故事

演讲人：谭峥

Week 6 (Oct 17)

Reyner Banham II: The Issue of Built Environment after WWII

Speaker: JIANG Jiawei

第六周

雷纳·班纳姆（二）：二战之后的建成环境议题

演讲人：江嘉玮

Week 7 (Oct 24)

Secret of Section

Speaker: WANG Fei

第七周

剖面的秘密

演讲人：王飞

Week 8 (Oct 31)

A Cybernetic View of Body-Architecture: From Fun Palace/SEEK to the Contemporary Adaptive Environment and its Paradox

Speaker: YANG Chao

第八周

身体建筑学的控制论视角：从欢乐宫到当代的适应式环境及其悖论

演讲人：闫超

Week 9 (Nov 7)

Medical Body: from inhabitable machine to therapeutic environment

Speaker: DOU Pingping

第九周

医药之身：从宜居机器到疗愈环境

演讲人：窦平平

Week 10 (Nov 14)

Midterm review of students' assignments

第10周

学生作业中期汇报

Week 11 (Nov 21)

Disease, Sewages and Civilization: A Brief Introduction of Subterranean Infrastructure

Speaker: WANG Zigeng

第十一周

疾病，排污与文明：地下基础设施的简史

演讲人：王子耕

Week 12 (Nov 28)

Sustainable Regeneration in Historical Buildings

Speaker: ZHAO Mosha

第十二周

历史建筑的节能保护

演讲人：赵沫沙

Week 13 (Dec 5)

What is to be Done? The Socialist Moment of the Dimensionless Movement

Speaker: ZHOU Shiyan/WANG Jiahao

第十三周

怎么办？无量纲运动的社会主义时刻

演讲人：周诗岩/王家浩

Week 14 (Dec 12)

Thermal Governance: Architecture, Climate and Technopolitics in Urban Asia

Speaker: Jiat Hwee Chang

第十四周

热能治理：城市化亚洲的建筑、气候与技术政治

演讲人：曾若晖

Week 15 (Dec 19)

Ruins

Speaker: MO Wanli

第十五周

废墟

演讲人：莫万莉

Week 16 (Dec 26)

Manufacturing Weather: Architectural Environments as Media

Speaker: WENG Jia

第十六周

制造天气：建筑环境作为媒体

演讲人：翁佳

Week 17 (Jan 2)

Final review of students' assignments

第十七周

期终作业汇报

Course Syllabus 课程大纲 (中英文)

COURSE DESCRIPTION

This course will be carried out in a series of lectures, which are given by scholars or architects experienced in teaching or practice. All these lectures focus on machine and environment. We attempt to evoke the essence of architecture by emphasizing machine and environment, and to reflect on current architectural practice in China.

课程介绍

本课程全程以讲座的形式开展，邀请具有丰富实践或者教学经验的校内外学者及建筑师来讲授关于机器与环境的相关话题。尝试通过对机器与环境的关注重新唤起对建筑本质的认识，并放置到当下中国建筑实践的总体环境中去进行反思。

REQUIREMENTS

Totally there are 36 contact hours in this course, of which about three fourths are lectures given by the coordinator himself or invited speakers, and the rest one fourth is for students to do case studies or make surveys. All students having chosen this course are required to submit a brief thesis based on his/her own case study, which should relate to machine and environment. These theses should be submitted at the end of the semester.

课程要求

本课程预计授课 36 学时，当中约四分之三由带课教师及相关邀请演讲者在课堂上讲课，其余约四分之一时间让学生进行案例分析或者实地调研。所有选课学生必须根据自己的案例分析在期末递交一份论文，主题与机器与环境相关。

Main Reference Books 主要参考书目

1. Banham, Reyner. *Theory and Design in the First Machine Age*[M]. New York: Praeger, 1960
2. Banham, Reyner. *The Architecture of the Well-tempered Environment* [M]. 2nd Edition. Chicago: The University of Chicago Press, 1984
3. Giedion, Sigfried. *Mechanization Takes Command*[M]. New York: Oxford University Press, 1948
4. Hawkes, Dean. *The Environmental Imagination. Technics and Poetics of the Architectural Environment* [M]. London and New York: Routledge, 1989