

Data Sheet of International Graduate's Course 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	2010307	Department 所在系(√)	A	P	L	D	院登记号 CAUP Code	
Instructor(Title) 主讲教师(职称)	Prof. ZHUO Jian 卓健 教授	Other Teachers 合作教师		√				
课程中文名	中国城市交通发展状况与公共政策 (城市交通规划前沿动态)							
Course Name (E)	Urban mobility and transport at stake in China's urbanization (Frontiers of Urban Transportation Planning)							
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	34	Hours per Week 周课时	2		Weeks 教学周数	16		
Semester 春季或秋季学期	Fall 秋季	Tongji Credits 同济 学分数	1					
Brief Course Description 课程简述 (中英文)								
<p>With a focus on the metropolitan area of Shanghai, this course provides a historical and theoretical overview on the transformations and consequences of urban mobility in Chinese urban areas. It will be developed in three parts. Initially we will survey the recent history and current state of the urban transportation system in China to identify its problems and benefits. Next, we will analyze the interrelationships between the transportation system and urban spatial development patterns under Chinese political/institutional context. Finally, we will explore the relative policies, from general political orientations to detailed proposed solutions, including taxation policies, consumer regulation, traffic management and public investment strategies. Although the course is not primarily practice-oriented, it will address the common planning tools in land use and transportation planning.</p> <p>课程选取上海为案例，对中国城市地区中的机动性发展演变及其带来的后果进行理论上的概述。主要包括三个方面：首先，回顾近代以来城市交通系统的发展和演变，以及对城市发展的作用与影响；其次，考察中国城市背景下城市机动性系统与城市空间发展模式之间的相互关系；最后，分析总体的政策导向和具体的应对措施，包括税收政策、消费调控、交通管理和公共投资策略等。课程虽然不是以规划实践为导向的，但将介绍相关的交通规划和土地利用规划工具。</p>								
Brief Schedule and Topics 课程进度简表 (中英文)								
<p>Week 1 Introduction and overview 绪论与课程介绍</p> <p>Week 2 The urban development of Shanghai, a brief review from XX century to nowadays 廿世纪以来上海城市建设发展回顾</p> <p>Week 3 Modes of transportation 1: public transit 城市交通的系统 1: 公共交通</p> <p>Week 4 Modes of transportation 2: cycling and walking</p>								

城市交通系统 2: 非机动车交通

Week 5 Modes of transportation 3: automobile
城市交通系统 3: 小汽车

Week 6 Debate 1: Multi-mobility and inter-mobility in urban areas
讨论课: 多方式的城市交通、交通换乘与整合

Week 7 [Invited speaker] Dr. Jean-François Doulet : the innovation of urban mobility
[讲座] 法国马赛大学杜雷博士: 创新的城市机动性 (暂定)

Week 8 The effects of transportation investments on land use
城市交通投资建设对土地使用的影晌

Week 9 Influences of land use on travel: density, jobs-housing balance and spatial sprawl
土地使用对交通出行的影响: 工宿平衡和城市扩张

Week 10 Transportation and built environment: streets, mixed uses and urban design
交通和建成环境: 街道、综合开发和城市设计

Week 11 [Invited speaker] Prof. PAN Haixiao: To Low Carbon City, the strategies of Chinese cities
[讲座] 潘海啸教授: 中国城市的低炭战略 (暂定)

Week 12 Policies: Governance: networks versus territories
政策 1: 城市管治: 网络和地域

Week 13 Policies: The Public Transit Priority (PTP) strategy
政策 2: 公交优先发展战略

Week 14 Policies: The motorization under restraint
政策 3: 对小汽车发展的控制

Week 15 Policies: The movement of Slow City and the promotion of green transportation modes
政策 4: 慢城运动和绿色交通的发展

Week 16 Conclusion and final presentations
复习与总结

Course Syllabus 课程大纲 (中英文)

Urban mobility and transport at stake for the urbanization in China

Instructor: Dr. **ZHUO Jian**, Associate Professor

Email : zhuojian.tongji@gmail.com

Office: Room 509, Building C, CAUP

Office Hours: by appointment

Course Description

The evolution of contemporary society is characterized by two major trends, the lasting urbanization and the growth of urban mobility. The interrelationships between these transformations have been made known by many studies: The improvement of transportation has effectively contributed to the concentration of peoples, goods and information in the space; in return, the ongoing urbanization in form of metropolization has induced more and more demands of mobility.

In China, the current transformations in the urban areas are even more brutal. The rapid spatial expansion is coming with the construction of transportation infrastructures and the introduction of new vehicles.

When the urban mobility has been clearly considered as an essential factor for the local dynamics and attractability, the spatial, environmental and social consequences it has generated should not be ignored.

With a focus on the metropolitan area of Shanghai, this course provides a historical and theoretical overview of these transformations and consequences in Chinese urban areas. It will be developed in three parts. Initially we will survey the recent history and current state of the urban transportation system in China to identify its problems and benefits. Next, we will analyze the interrelationships between the transportation system and urban spatial development patterns under Chinese political/institutional context. Finally, we will explore the relative policies, from general political orientations to detailed proposed solutions, including taxation policies, consumer regulation, traffic management and public investment strategies. Although the course is not primarily practice-oriented, it will address the common planning tools in land use and transportation planning.

Assignments & Grading

The course will be run partly in lecture and partly in seminar format. During both parts, students are expected to participate actively.

During the course of the semester, students will give about ten-minute presentations to the class summarizing that week's readings. The speakers should hand in a two-page reading review after the presentation.

Students must complete one five-page case study or analytical essay. The final product will be due at the beginning of the last class.

Reading reviews will account for 30% of the grade; in-class participation and presentations, 40%; and the paper 30%.

Main Reference Books 主要参考书目

(以下参考文献均可在同济大学图书馆查阅到。)

[1] Ralph Gakenheimer (1999), Urban mobility in the developing world, in *Transportation Research Part A*, 33(1999), 671-689.

[2] Ji Han, Yoshitsugu Hayashi (2008), Assessment of private car stock and its environmental impacts in China from 2000 to 2020, in *Transportation Research Part D* 13(2008), 471-478.

[3] Christopher R. Cherry, Jonathan X. Weinert, Yang Xinmiao (2009), Comparative environmental impacts of electric bikes in China, in *Transportation Research Part D*, 14(2009), 281-290.

[4] Jiming Hao, Jingnan Hu, Lixin Fu (2006), Controlling vehicular emissions in Beijing during the last decade, in *Transportation Research Part A*, 40(2006), 639-651.

[5] Xiaohong Chen, Feng Tang, Zhaoyi Huang, Guangtao Wang (2007), High-speed maglev noise impacts on residents: A case study in Shanghai, in *Transportation Research Part D*, 12(2007), 437-448.

[6] Christopher Cherry, Robert Cervero (2007), Use characteristics and mode choice behavior of electric bike users in China, in *Transport Policy*, 14(2007), 247-257.

- [7] John Zacharias (2002), Bicycle in Shanghai: movement patterns, cyclist attitudes and the impact of traffic separation, in *Transport Reviews*, 2002, VOL. 22, NO. 3, 309-322.
- [8] Hans De Bruijn, Wijnand Veeneman (2009), Decision-making for light rail, in *Transportation Research Part A*, 43(2009), 349-359.
- [9] Qing Shen (1997), Urban transportation in Shanghai, China : problems and planning implications, in *International Journal of Urban and Regional Research*, N° 21, 589-606.
- [10] Pan, H. X., Q. Shen, and M. Zhang (2009). Influence of Urban Form on Travel Behaviour in Four Neighbourhoods of Shanghai. *Urban Studies*, Vol. 46, No. 2, pp. 275-294.
- [11] Robert Cervero, Jin Murakami (2008), Rail and Property Development in Hong Kong: Experiences, Impacts, and Extensions, *Urban Studies*, vol. 46, 10: pp. 2019-2043.
- [12] Robert Cervero, Jennifer Day (2008), Suburbanization and transit-oriented development in China, *Transport Policy* (15):315-323.
- [13] Zhong-ren PENG, Yi ZHU, Shunfeng SONG (2008), Mobility of the Chinese Urban Poor: A Case Study of Hefei City. *The Chinese Economy*, vol. 41, no. 1, pp. 36-57.
- [14] Manuel Castells (2010), Globalisation, Networking, Urbanisation: Reflections on the Spatial Dynamics of the Information Age, *Urban Studies*, 47(13) 2737–2745.
- [15] Robert Cervero, and Kara M. Kockelman (1997), Travel demand and the 3 Ds: Density, diversity, and design. *Transportation Research D* 2 (3):199-219.
- [16] Robert Cervero, Aaron Golub (2007), Informal transport: A global perspective, in *Transport Policy*, 14 (2007), 445-457.
- [17] Piet Rietveld, Vanessa Daniel (2004), Determinants of bicycle use: do municipal policies matter?. *Transportation Research Part A* (38): 531-550.
- [18] Shoup, Donald C. (1999). The trouble with minimum parking requirements. *Transportation Research A* 33 (7-8):549-574.
- [19] Robert Cervero (2002), Built environments and mode choice: toward a normative framework, *Transportation Research Part D* (7): 265-284.
- [20] David A. Hensher, Sean M. Puckett (2007), Congestion and variable user charging as an effective travel demand management instrument, *Transportation Research Part A* (41), 615-626