

GEOG3405 Sustainable Urban Transport (First Semester 2012-2013)

Course Instructor: Dr. James J. Wang (jwang@hku.hk), Room 1009 Jockey Club Building, Centennial Campus HKU

Time and Venue: 3:30-5:20pm Mondays, PO245 (Podium of Centennial Campus, HKU)

Teaching assistant: Miss Liu Qian

Objective

Understand how urban transport and mobility are related to sustainable development in cities.

COURSE SYNOPSIS

This course introduces a new approach to apply the concept of sustainability to urban transport. It provides basic knowledge about the operation of urban transportation systems, urban transport planning and policy. Trends in population and urbanization will be associated closely with the patterns of travel behavior and demand, transport technology, and energy use. Personal mobility and accessibility in the urbanized developed and developing worlds will be explained with cases over the globe. An introduction of trends in intercity travel and freight mobility bring this course further with a regional context, and examples are drawn from the Hong Kong, Pearl River Delta, and other world cities.

MAJOR LECTURE TOPICS

- ❑ Introduction: Mobility, accessibility and sustainability
- ❑ Patterns of mobility demand, technology and energy use
- ❑ Personal mobility in different worlds
- ❑ Case studies of Hong Kong and other cities
- ❑ Freight mobility and its impact on urban sustainability
- ❑ Worldwide mobility and the challenges to its sustainability

ASSESSMENTS

Examination 60%, (including the final exam of 40%, and one interim MC test of 20%)
Coursework 40% (including one reflection report of 30%, class participation of 10%).

Course Outcomes

Knowledge:

- Understanding of basic interrelationship among landuse, urban form, and urban transportation provision
- Understanding of sustainability concept and its meaning in developing urban transport
- Appreciation of accessibility planning and other ideas to promote sustainable development

Skills:

- Analytical capacity of case studies in urban transport issues
- Ability of linking up theoretical measurements with practical issues
- Capacity in policy analysis

Course Information Website: <http://geog.hku.hk/undergrad/geog3405/>

BASIC READING

Partnership for Sustainable Urban Transport in Asia (PSUTA) (2007): Sustainable Urban Transport in Asia: Making the Vision a Reality (Main Report), available on line: <http://www.wri.org/publication/sustainable-urban-transport-asia>

Hanson, Susan (ed) (2004) The Geography of Urban Transportation (third edition), New York: Guilford

Cervero, R. (1998) The Transit Metropolis, Island Press, Washington, DC. (388.4 C419 t)

Newman, P. and Kenworthy, J. (1999) Sustainability and Cities, Island Press, Washington, DC .(388.4 N554 s)

World Business Council for Sustainable Development (2004) Mobility 2030: Meeting the challenge to sustainability. (full report in pdf format available at our course website <http://geog.hku.hk/undergrad/geog2081/> and www.wbcsgdmobility.org)

Newman, Peter (2000) Sustainable Transportation and Global Cities (web source: http://www.istp.murdoch.edu.au/ISTP/casestudies/Case_Studies_Asia/sustrans/sustrans.html)

Content of Coursework:

- (1) A reflection report (about 2500 words) on **one** of the two aspects given below:
 - a. A social issue of Hong Kong urban transport system, or
 - b. An environmental issue in Hong Kong caused by transportation.
 - c. Any specific issue to discuss with agreement from the course instructor.

- (2) A class discussion: a debate centered at the issues written in students' reflection reports.

Submission Deadline: Handing in your essay (printed copy) to the General Office of Department of Geography with a hard copy of 'Turnitin' report by 5pm of 30 November, Friday, 2012. The late submission penalty rule of the Department applies (5% of total mark down per day).