

CA4190: TRANSPORT POLICY AND PLANNING

Effective Term

Semester A 2022/23

Part I Course Overview

Course Title

Transport Policy and Planning

Subject Code

CA - Civil and Architectural Engineering

Course Number

4190

Academic Unit

Architecture and Civil Engineering (CA)

College/School

College of Engineering (EG)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course aims to cover a wide range of transport issues, with a focus on both conventional system efficiency and unconventional policy outcomes (financial viability, economic competitiveness, social equity, and environmental

sustainability in urban contexts). Through a series of lectures and assignments, students will try to understand the importance of policy and planning, accompanied by the installation of innovative and green infrastructure and technologies, in guiding sustainable urban development across Hong Kong, Chinese city-regions, and other global city cases. Students are expected to cope with multi-faceted transportation issues and challenges by integrating multiple mobility options (rail, bus, taxi, bike, walk, air, ship, and commercial vehicle) and enhancing social accessibilities through pricing, land management, housing supply, and environmental policies and planning tools in path-dependent and local sensitive ways.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if DEC-A1 DEC-A2 DEC-A3 app.)			
1	Identify key issues and challenges related to transportation policy and planning in urban contexts;	20	x		
2	Understand both conventional and unconventional approaches in transportation policy and planning;	20	x		
3	Address and evaluate advantage and disadvantages of various mobility options and related policies in different urbanization patterns and social contexts;	20	x		
4	Connect economic and engineering theories to policy and planning practices in a logical order;	20		x	
5	Propose critical and innovative solutions to real issues by combining a range of technologies, policies, and planning tools.	20			x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Teaching and Learning Activities (TLAs)

TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	Introduce key issues, specific policies, planning tools, and implications.	1, 2, 3, 4
2	Individual Report/ Group Project	Set up one transportation case, find out real issues and, propose innovative and creative solutions to the issues from multiple viewpoints.	1, 2, 3, 4, 5

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Individual Assignment 1	1, 2, 3	15	
2	Individual Assignment 2	1, 2	15	
3	In-class Assignment	1, 2, 3	20	

Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

2

Additional Information for ATs

To pass a course, a student must obtain minimum marks of 30% in both coursework and examination components, and an overall mark of at least 40%.

Assessment Rubrics (AR)**Assessment Task**

Individual Assignment 1

Criterion

Ability to Investigate Transportation Issues using Materials and Figures based on Theories and Practices

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

Individual Assignment 2

Criterion

Ability to Investigate Transportation Issues using Materials and Figures based on Theories and Practices

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

In-class Assignment

Criterion

Ability to Solve and Evaluate Complex and Dynamic Issues and Projects related to Transport Policy and Planning in Well-Integrated Ways

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

Examination

Criterion

Ability to Identify Problems in several ways and Provide Pragmatic Implications to Sustainable Transport Policies

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Part III Other Information**Keyword Syllabus**

Transport Policy and Planning; System Efficiency; Economic Competitiveness; Social Equity; Environmental Sustainability

Reading List**Compulsory Readings**

Title	
1	Nil

Additional Readings

Title	
1	Hanson, Susan, and Genevieve Giuliano, eds. The geography of urban transportation. Guilford Press, (2004).
2	Banister, David, and Joseph Berechman. Transport investment and economic development. Psychology Press, (2000).
3	Flyvbjerg, Bent, Nils Bruzelius, and Werner Rothengatter. Megaprojects and risk: An anatomy of ambition. Cambridge University Press, (2003).
4	Cervero, Robert. The transit metropolis: a global inquiry. Island press, (1998).
5	Gomez-Ibanez, Jose A., William B. Tye, and Clifford Winston. "Essays in transportation economics and policy: A handbook in honour of John R. Meyer." (1999).
6	Suzuki, Hiroaki, Robert Cervero, and Kanako Iuchi. Transforming cities with transit: Transit and land-use integration for sustainable urban development. World Bank Publications, (2013).
7	Dimitriou, Harry T., and Alison Cook, eds. Land-use/transport planning in Hong Kong: the end of an era: a review of principles and practices. Ashgate Publishing, (1998).
8	Gwilliam, Kenneth M. Cities on the move: a World Bank urban transport strategy review. World Bank Publications, (2002).
9	Litman, Todd. "Transportation cost and benefit analysis: techniques, estimates and implications." (2003).