CRP 454 URBAN TRANSPORT SYSTEMS

Course Code: 1210454

METU Credit (Theoretical-Laboratory hours/week): 3(3-0)

ECTS Credit: 5.0

Department: City and Regional Planning

Language of Instruction: English

Level of Study: Undergraduate

Course Coordinator: Assoc. Prof. Dr. Ela BABALIK SUTCLIFFE

Offered Semester: Spring Semesters

Course Objective

This course aims to provide urban planning students with technical knowledge and design skills regarding urban transport systems. Its main objective is to improve urban planning and design skills through reinforcing students’ knowledge of form, capacity, magnitude, and design of transport systems, modes, stations, and other mobility related urban elements. The course also aims to support and integrate into teaching projects in Planning Studio classes of the Department of City and Regional Planning.

Course Content

The course covers a variety of themes, including the planning and design of transport networks, modes, systems, stations; network and urban form considerations; route and capacity planning for urban rail and bus public transport systems; planning for pedestrian circulation and for bicycles; principles of city centre pedestrianisation; principles of traffic calming; design considerations for planning car parks, road junctions, stations, and interchange facilities; and planning for transit-oriented neighbourhoods.

Weekly Program

Week 1 - Introduction
Week 2 - Planning Transport Networks
Week 3 - Planning Highways and Roads
Week 4 - Planning Public Transport
Week 5 - Planning urban rail systems: Metro, Commuter Rail, Regional Rail Systems, Light Rail, Tramways, Monorail Systems
Week 6 - Planning bus systems and integrated transport planning for public transport
Week 7 - Design of Streets
Week 8 - Design of Junctions and Intersections; Design of Car Parks
Week 9 - Planning for non-motorised modes of transport: Pedestrians and cyclists
Week 10 - Car-free residential area development concept; Transit-Oriented Development
Week 11 - Workshop: incorporation of Planning Studio Design Projects into the Course
Week 12 - Workshop: incorporation of Planning Studio Design Projects into the Course
Week 13 - Workshop: incorporation of Planning Studio Design Projects into the Course
Grading

Learning Outcomes

By the end of the course, the students will have the theoretical and technical knowledge regarding the planning and design of urban transport systems; the design knowledge regarding the principles of urban design for creating pedestrian-oriented and transit-oriented neighbourhoods; and sufficient skills and knowledge to analyse and criticise sketch studies on urban design prepared by each member of the class.

Reference Material