



COURSE: URBAN AND METROPOLITAN TRANSPORT			
ACADEMIC YEAR: 2019 - 2020			
TYPE OF EDUCATIONAL ACTIVITY: Characteristic			
TEACHER: Prof. Umberto Petruccelli			
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phone: 0971-205173		mobile (optional):	
Language: Italian			
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ECTS: 6 of which: 5 ECTS for lessons 1 ECTS for tutorials/ practice	n. of hours: 54 of which: 45 hours of lessons 9 hours for tutorials/ practice	Campus: Potenza School of Engineering Program: Master's degree in Civil Engineering	Semester: 1 th

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

This teaching, the only one of the Transport sector within the Master's Degree, deals with the urban transport system, that is the set of the demand and supply components of the different transport modes, including non-motorized ones, operating inside urban and metropolitan area.

Knowledge and ability to understand

To know and understand the problems of the urban mobility and analyze its components by quantitative methods.

Ability to apply knowledge and understanding

Being able to use quantitative tools to analyze the urban mobility, identify its critical issues and design the improvement actions.

The main supplied knowledges are methods and tools to analyze and evaluate the system operating in its different modal components and design the necessary actions.

The ability to operate autonomously on urban mobility using quantitative methods and tools able to take into account the overall effects is the expertise transferred also through the exercises and laboratory. In particular, this expertise is to analyze the urban mobility system, detect the critical issues, identify the intervention objectives, design, under the functional aspect, the necessary actions and evaluate the effectiveness of the latter with respect to the objectives.

Autonomy of judgment

To be able to autonomously evaluate the problems related to urban mobility and set the most suitable methodologies to study them.

Communication skills

Knowing how to explain in a simple way, even to non-expert people but using an appropriate scientific language, the problems related to the urban transport system, any critical issues and possible solutions.

Learning ability

Being able to continuously update by selecting and consulting texts and publications more relevant to the issues to be addressed.

PRE-REQUIREMENTS: None



SYLLABUS

Objectives and instruments of urban transport planning
Technical and management measures, control and regulation of traffic
Road safety, environmental protection and traffic calming
Control and capacity of the road intersections
Parking
Non-motorized traffic components
Public transport
Freight transport
Fixed installations for public transport
Distribution of goods and transport
Issues of urban transit services and cost assessment.

TEACHING METHODS

Lectures on all subjects of the Teaching for a total of about 45 hours;
an exercise which is the analysis of transport system criticalities of a sample city and the functional design of remedial measures to solve one or more of the found problems. The exercise is generally made in small groups and requires a commitment in the classroom (with the assistance of the teacher) of about 9 hours, in addition to the commitment of the students at home

EVALUATION METHODS

Oral examination to ensure the knowledge and skills of the candidate and discussion of the results of the exercise carried out during the course.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

Reference text:

- Cappelli A., Luongo A.S., Mallano D., Petruccelli U. (2000), Strumenti e metodologie per la gestione del sistema stradale urbano, Franco Angeli, Milano
- Fancello G. (2005), Distribuzione commerciale e trasporti in Italia (Metodo e manuale per le previsioni di mobilità), Franco Angeli, Milano
- On-line integrative teaching notes (on the website <https://elearning.unibas.it/>)

Deepening text:

- Maternini G. (a cura di) (2013), Trasporti e città: mobilità e pianificazione urbana, EGAF, Forlì
 - Maternini G., Foini S. (a cura di), (2010), Tecniche di moderazione del traffico: Linee guida per l'applicazione in Italia, Egaf, Forlì
 - Montella B. (1996), Pianificazione e controllo del traffico urbano: modelli e metodi, CUEN, Napoli
 - Cascetta E., Montella B. (2003), Metodologie per la redazione e la gestione dei piani urbani del traffico e della mobilità, Franco Angeli, Milano
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INTERACTION WITH STUDENTS

The Professor receives students in his studio, at the 4th floor of the School of Engineering, on Wednesday, by appointment to be taken by email.

The Professor is always available through its e-mail and soon after each lesson.

EXAMINATION SESSIONS (FORECAST)¹

On the 1st and 3rd Wednesday of each month, except in August

SEMINARS BY EXTERNAL EXPERTS YES NO

FURTHER INFORMATION

¹ Subject to possible changes: check the web page "Servizi on line studenti/docenti" on the the Unibas web site for updates.