Mobility, Logistics and Transport

Code: 104542
ECTS Credits: 6

Degree	Type	Year	Semester
2503743 Management of Smart and Sustainable Cities	OB	3	1

Contact

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Use of Languages

Principal working language: catalan (cat)

Some groups entirely in English: No

Some groups entirely in Catalan: Yes

Some groups entirely in Spanish: No

Prerequisites

There are no prerequisites.

Objectives and Contextualisation

This subject aims to study mobility and transport within the framework of the new paradigm of sustainability. More specifically, the following specific objectives are raised.

- Know the basic concepts of mobility

- Understand the complex relationship between mobility and territory

- Know the limits and impacts associated with the current mobility model

- Understand and be able to predict the positive and negative externalities of future developments in terms of mobility and transport

- Know the main methodologies of study of mobility

- Know the necessary instruments and their methodologies for the management of mobility

Competences

- Generate innovative and competitive proposals in professional activity.
- Identify and use different sources, models and data bases of information generated by urban activity, as well as their principles of operation, access policies and standards.
- Measure the technological infrastructure necessary to respond to the needs of cities, understanding the interactions between technological, social and operational aspects of cities.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.

Learning Outcomes

1. Analyse and model urban-mobility flows (traffic and public transport) in order to plan and manage the necessary services and infrastructures required to serve this area.
2. Apply methods and techniques for capturing, storing, modelling, analyzing and using data for the environmental management of mobility and territorial planning.
3. Be aware of required standards for processing information in each of the fields referred to.
4. Generate innovative and competitive proposals in professional activity.
5. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
6. Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.

Content

Part 1. GETTING TO KNOW: Sustainable, safe, healthy, equitable and inclusive mobility (Theoretical and conceptual framework)

- What is mobility?

- The evolution of mobility

- Means of transport

- Conditioners of the forms of mobility

- The costs of mobility

- Right to the city and to mobility

- Vulnerable groups in mobility

- Active mobility

- Climate change and mobility

- Mobility and energy

- Equity in mobility

- Inclusive mobility

- Mobility and health

- Mobility with a gender perspective

- Public space and mobility

- Mobility and economy

- The street as a multifunctional space

- Urban quality and outdoor spaces

- Rural and / or suburban areas and mobility

- Future scenarios

Part 2. OBSERVE AND ANALYZE (Intervention and analysis methodologies)

- Sources to study mobility

- What to observe and how to observe: methods and techniques of observation and analysis

- Statistical analysis: variables, sources of information ...

- Qualitative methods

- Observation of public space

Part 3. DEBATE (Knowledge and positioning in today's controversies)

- The electric vehicle and tech solutions: a real solution?

- Road safety education: at school or at driving school?

- 'If you don't want cars, go live in the countryside'

- Right to park (or not)

- ZBE, urban tolls or pay for parking: 'communism or freedom'?

- Motorcycles on the sidewalks? An open debate

- The tram on the Diagonal?

- 'Cycling is the slow death of our economy (and walking is even worse, pedestrians don't even buy a bicycle)'

Part 4. ACT (Tools and methods of intervention)

- New priorities in road design

- Public space and urban quality: living spaces

- Moderation and pacification of traffic

- Pedestrian areas

- The bicycle network

- Mobility planning

Methodology

Methodology

The teaching methodology will consist of:

- Theoretical classes

- Sessions for debate and critical analysis of multimedia media

- Active participation in class discussions

- Presentation of the work

- Course reading

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Practical sessions and class debates	20	0.8	1, 2
Theoretical classes	37	1.48	3, 6, 5
Type: Supervised			
Class project	20	0.8	4
Individual or small group tutorization	10	0.4	4
Type: Autonomous			
Preparation of written exams	18	0.72	6
Readings	18	0.72	3, 5

Assessment

Continued avaluation
A continuous assessment system is established with four types of assessment activities to be carried out throughout the course.
The delivery of an evaluation activity outside the established term will suppose the obtaining of a maximum note of 5. In case that the delivery after term is due to a cause of force majeure (that will be necessary to justify duly) the qualification will realize on 10.

Not evaluable
To be evaluated you will need:
- Take the exam
- Make a class presentation
- Have delivered at least 80% of the internship
- Deliver the course work
Failure to do so will result in it being deemed not to be assessable.

Suspense
The subject will be considered suspended when the overall grade, applied to the percentages of each assessment activity, is less than 5.

Review of grades
Once the grade for each assessment activity has been announced, a 10-day period will be set for reviewing grades.
The most appropriate review format will be announced for each assessment activity: face-to-face, online ...

Recovery
All assessment activities can be retrieved, except for class presentations.
In order to be eligible for recovery, an overall grade of at least 3.5 will be required.
A period of between 10 and 20 days is established for the new delivery of the recoverable activities (as long as they have been delivered in the established term and do not exceed any of the terms indicated by the coordination of the degree, especially the closing date of acts).

Honors
The criteria for the award of Honor Rolls are those established by UAB regulations (https://www.uab.cat/Document/543/151/MH.pdf).

Repeating students

No differentiated treatment is established in the assessment criteria and mechanisms for repeat students.

Plagiarism

The copying or plagiarism of material, both in the case of works and in the case of examinations, constitute a crime that will be sanctioned with a zero to the activity. In case of recidivism, the whole subject will be used. Let's remember that a "copy" is considered a work that reproduces all or most of the work of one or more partners. "Plagiarism" is the fact of presenting all or part of a text of an author as its own, without mentioning the sources, being in paper format in digital format. See UAB documentation on "plagiarism" at: http://wuster.uab.es/web_argumenta_obert/unit_20/sot_2_01.html

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Class exhibitions	10%	1	0.04	1, 3, 4, 5
Class project	30%	12	0.48	2, 5
Exam	30%	2	0.08	2, 3, 6
Practic exercises	30%	12	0.48	1, 3, 4, 6

Bibliography

The bibliography and the web links that will be used for the development of the subject will be specified in the Moodle platform as the progress of the course requires.

Software

None specific. Office package or similar is recommended