

# **Faculty of Transportation Engineering and Vehicle Enginee**

1. Subject name Transport Economics					
2. Subject name in Hungarian	Közlekedésgazdaságtan				
3. Code	BMEKOKGM201	4. Evaluation type	exam grade	5. Credits	4
6. Weekly contact hours	2 (9) Lecture	1 (5) Practice	0 (0) Lab		
7. Curriculum	Transportation Engineering MSc (K)	8. Role	Mandatory (mc) at Transportation Engineering MSc (K)		
9. Working hours for fulfilling the requirements of the subject 120					
Contact hours	42	Preparation for seminars	8	Homework	18
Reading written materials	30	Midterm preparation	12	Exam preparation	10
10. Department	Department of Transport Technology and Economics				
11. Responsible lecturer	Dr. Mészáros Ferenc				
12. Lecturers	Dr. Mészáros Ferenc, Mátrai Tamás				
13. Prerequisites					
4.4. Description of	le eture e				

## 14. Description of lectures

Evolution and development of modern transportation systems. Process of transport strategy planning. Transportation policy of the European Union and Hungary. Methods and transportation applications for efficiency evaluation. Interrelations and modeling of the economic, environmental and social sustainability objectives of transportation. Economic principles determining the transportation policy process. Evaluation and internalisation methods of external effects for transportation. Regulation, deregulation, privatization and community (state / municipal) involvement in transportation. The economic issues of transportation: the characteristics of the market, the factors determining the mode and route choice of users and the availability of supply. The specific economic issues of urban transportation: public transportation - individual transportation, traffic management, restrictions, parking policies, city logistics, local transportation of smaller regions, interactions of transportation development and land use. Some of the key economic aspects of each transportation sectors: service development, infrastructure use and financing.

### 15. Description of practices

Elaboration of sub-tasks related to cost-benefit analysis (CBA) (traffic forecasting, elasticity calculation, efficiency assessment) and presentation, individual consultation to prepare a seminar report consisting of sub-tasks.

## 16. Description of labortory practices

## **17. Learning outcomes**

### A. Knowledge

- The student learns the different efficiency evaluation tools of transportation developments, the EU and Hungary's transport policy, the economic aspects of sustainable transport, the basic tools of pricing and tariff policy, the economic aspects of transport information utilization.
- B. Skills
  - The student is able to assess the most important problems to be solved in the transportation system, to select the most effective assessment methods based on sustainability aspects and to propose the most effective transportation development option.
- C. Attitudes
  - The student strives for completeness in the acquisition of knowledge, cooperates with the teacher and other students, is open to new and innovative ideas, researches, and uses information technology and computing tools for its work.
- D. Autonomy and Responsibility
  - The student takes social aspects into account in the utilization of its knowledge and asks for professional opinions of others in addition to the narrow professional aspects, makes responsible decisions in the selection of the most efficient transportation developments, and takes care of the challenges responsibly.

Requirements for signature: successful completion (min. 50%) of the two midterms, report and submission of the seminar report. There is a verbal examination at the end of the semester. Weights of requirements in final mark: seminar reporting activity (20%), average of midterms (30%), verbal examination (50%).

19. Opportunity for repeat/retake and delayed completion

There are retakes from 1st and 2nd midterms, the seminar report can be delayed completed till end of delayed completion period.

20. Learning materials

- Eddy Van de Voorde, Thierry Vanelslander (2010) Applied Transport Economics, De Boeck

- André de Palma , Robin Lindsey , Emile Quinet , Roger Vickerman (2011) A Handbook Of Transport Economics, Edward Elgar

Effective date 10 October 2019 This Subject Datasheet is valid for Inactive courses