

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

1. Subject name	Road Safety				
2. Subject name in Hungarian	Közlekedésbiztonság				
3. Code	BMEKOKKM222	4. Evaluation type	mid-term grade	5. Credits	3
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					90
Contact hours	42	Preparation for seminars	8	Homework	20
Reading written materials	8	Midterm preparation	12	Exam preparation	0
10. Department	Department of Transport Technology and Economics				
11. Responsible lecturer	Dr. Juhász János				
12. Lecturers	Dr. Juhász János				
13. Prerequisites					
14. Description of	lectures				

The road safety indicators. Development of road safety indicators in Europe and in Hungary. Characteristics of the traffic actors (human, infrastructure, vehicles and regulation), their impact on road safety. Review of the traffic regulation. Features of secure infrastructure. Features of passive and active vehicle safety systems. Human factors of traffic safety, traffic behaviour. Advanced methods of driver training, best practices. Characteristics of pedestrian and cycling traffic.

## **15. Description of practices**

Statistical analysis of the road accidents by Statistical Centre Office's database. Case studies of road accidents by forensic methods. Measurement of the vehicle's blind spot. Study of driver fitness testing methods. Assignment: study on road safety, written summary and presentation, in a group of 2-3 people.

### 16. Description of labortory practices

### **17. Learning outcomes**

## A. Knowledge

- Knows the most common indicators of traffic safety in Hungary and in Europe.
- Knows the laws related to road safety.
- Knows the aspects and methods of safe infrastructure design.
- Knows the operation of the active and passive safety systems of vehicles and their impact on road safety.
- Knows the human factors of traffic safety, the behaviour of traffic.
- Knows modern driver training methods.

#### B. Skills

- Able to evaluate the development of indicators for the classification of traffic safety.
- Able to investigate road infrastructure from the point of view of road safety, to elaborate proposals for improvement of traffic safety.
- Able to develop interventions that affect transport behaviour.
- C. Attitudes
  - Participates in lectures and exercises, prepares assignment study on time.
  - During the lectures, he/she is actively involved in processing the current topic.
  - Works with the quality of expect from an engineer.
  - In the course of the assignment study, he/she seeks to develop new technical solutions.
  - Participates in a professional debate following his/her lectures.
  - Watches with interest the development of road safety.
  - Open to learn new knowledge.
- D. Autonomy and Responsibility
  - Applies the knowledge acquired in the course of the course with responsibility.

- Can independently develop new technical solutions.
- Accepts the framework for collaboration, can do its job independently or as part of a team, depending on the task

18. Requirements, way to determine a grade (obtain a signature)

One midterm exam (50%) and an study paper and presentation (50%).

19. Opportunity for repeat/retake and delayed completion

Midterm exam can be retaken until the end of delayed completion period. The study paper cannot be delayed submitted and presented.

## 20. Learning materials

Lecture slides

Effective date 10 October 2019 This Subject Datasheet is valid for 2024/2025 semester II