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| *Subject*: **Environmental effects of Transport** |
|  | *Evaluation*: **Exam** | *Credits*: **2** |
| *Lectures/week*: 1 | *Seminars/week*: 1 | *Laboratory work hours/week*: - | *Code*: **KOKUD020** |
| *Department:* **Transport Technology and Economics** |
| *Lecturer:* **Péter Mészáros** **Ass. Prof.** |
| *Mandatory pre-requirement:*  | *Recommended pre-requirement:* |
| *Objective of subject:* Survey of environmental impacts of transport, methods of transport planning, management and control, based on environmental consciousness. Investigation of feasibility of sustainable transport systems.. |
| *Description of subject*: Transport- environment, factors of environmental impact, the problem of sustainability. Mitigation of environmental impacts of transport, regulations, policies, tendencies, practices. Local and international case studies. EIA, decision making, preparation of decisions on the field of transport infrastructure development. Integration of transport and land use policies. Environmental conflicts of freight transport, intermodality and transit policies. Environmental costs of transport, the case of externalities, prices and charges. Urban transport, opportunities of sustainable urban environmental management, integration of environmentally sound mobility forms. Sustainable Urban Mobility Plans. Demand management, parking and road charges. Requirements of fuel efficiency, alternative fuels, energy efficient and environmentally enhanced vehicles.*Practice:* The objective of the practical seminars is to extend and deepen the knowledge of the different measurement, methods. Case studies. Independent literature research supported by consultations. Student presentations. External and internal consultations with experts of related fields. |
| *Individual student assignments*: During the semester the students should elaborate one individually selected and formulated assignment. The task should be presented. |
| *Determination of mark, requirements of exam*: Evaluation of submitted and presented assignment, semester paper of the student. |
| *Literature, study-aid*:1. Knoflacher H.: Zur Harmonie von Stadt und Verkehr. Springer Verlag.
2. Knoflacher H.: Umweltgerechter Verkehr – Innovative Konzepte für den Stadt und Regionalverkehr. Springer Verlag.
3. Hensher. D.A. – Button K.J.: Handbook on Transport and Environment. Elsevier. 2003.
4. Feitelson E. – Verhoef E.T.: Transport and Environment. In search of Sustainable Solutions. Edward Elgar. 2001.
5. A European Federation for Transport and Environment: <http://www.transportenvironment.org>
6. Mobility and Transport, EC: <http://ec.europa.eu/transport/index_en>
7. Hensher. D.A. – Button K.J.: Hanbook on Transport and Environment. Elsevier. 2003.
8. Feitelson E. – Verhoef E.T.: Transport and Environment. In search of Sustainable Solutions. Edward Elgar. 2001.
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