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| **AKADEMIA WSB** | | | | | | | | |
| **Field/Course of study: Transport** | | | | | | | | |
| **Subject: Transport and Infrastructure Management** | | | | | | | | |
| **Profile of education: practice** | | | | | | | | |
| **Education level: IInd level studies** | | | | | | | | |
| **Number of hours per semester** | | 1 | | | | 2 | | |
| I | | II | | III | | **IV** |
| **Full-time studies**  (l/ex/lab/pr/e)\* | |  | |  | |  | | **30ex** |
| **Part-time studies** (l/ex/lab/pr/e) | |  | |  | |  | |  |
| **Language of subject** | | Polish | | | | | | |
| **Lecturer** | | PhD Eng. Iwona Krzyżewska | | | | | | |
| **Form of subject** | | Exercises, consultations | | | | | | |
| **Aim of subject** | | To introduce students to basic issues related to transport management.  To present basic conditions and mechanisms of transport infrastructure development. | | | | | | |
| **Reference to learning outcomes** | | | **Description of learning outcomes** | | | | **The way of verifying the effect of learning outcomes** | |
| **Learning outcomes** | **PRK** | |
| **KNOWLEDGE** | | | | | | | | |
| T \_W04 | P6S\_WG  P6S\_WG\_INZ | | The student has advanced knowledge of definitions of transport and point and linear infrastructure of all types of transport. | | | | Test;  Discussion; | |
| T \_W05 | P6S\_WG | | Students are familiar with the transport management rules and basics. | | | | Test; | |
| **SKILLS** | | | | | | | | |
| T \_U01 | P6S\_UW | | The student is able to assess the usefulness and solve simple tasks concerning  technical and economic indicators for transport companies. | | | | Test, discussion in groups; | |
| T \_U09 | P6S\_UW | | The student can make an economic assessment of the functioning  of transport infrastructure. | | | | Discussion in groups; | |
| **SOCIAL COMPETENCES** | | | | | | | | |
| T \_K01 | P6S\_KK | | The student is ready to work in a team, shows ingenuity and skillfully identifies paths for solving dilemmas concerning  transport. | | | | Observation; | |
| **Student workload (in teaching hours 1 hour = 45 minutes)\*\*** | | | | | | | | |
| **Full-time studied**  Participation in lectures =  Participation in exercises = 30  Exercises preparation = 8  Lectures preparation =  Exam preparation = 8  Realization of project tasks =  e-learning =  Exam =  Other (which) = consultations 4  **TOTAL:50**  **Number of ECTS points: 2**  **Including practical courses:2** | | | | | **Full-time studied**  Participation in lectures =  Participation in exercises =  Exercises preparation =  Lectures preparation =  Exam preparation =  Realization of project tasks =  e-learning =  Exam =  Other (which) =  **TOTAL:**  **Number of ECTS points:**  **Including practical courses:** | | | |
| **PREREQUISITES** | Basics of management, basics of transport | | | | | | | |
| **CONTENT OF SUBJECT**  (divided on direct and e-learning) | Content implemented in a direct format:  Exercises:  1. Basics of transport management (means, infrastructure, resources of a transport company) - transport systems, transport processes, relations and factors influencing the development of transport.  2. Characteristics of infrastructure, its division and development in Poland and EU countries.  3. The characteristics of road and rail transport infrastructure in Poland and the EU. Point and line infrastructure - examples.  4. Legal regulations of the European Union in the field of transport infrastructure.  5. Charges connected with transport infrastructure.  6. Innovation and infrastructure development - examples from Poland and EU countries.  7. The solving of case studies in the field of using transport infrastructure, charges.  Content implemented in an indirect format: not applicable | | | | | | | |
| **REQUIRED LITERATURE** | 1. Stokłosa J. (2011): Intermodal transport: technology and organization, Scientific Publishing House of Higher School of Economics and Innovation, Lublin | | | | | | | |
| **ADDITIONAL LITERATURE**  (min. 2 pieces in English, books or articles) | 1. Mindur L. (Ed.) (2008): Transport technologies of the 21st century. Edited by. L. Mindur. Scientific Publishing Institute of Exploitation Technology - PIB. Radom 2. Wojewódzka- Król K., Rolbiecki R. (2018): Infrastruktura transportu, Wydawnictwo PWN, Warszawa. | | | | | | | |
| **TEACHING METHODS**  (split of direction and indirection form) | Direct form:  A presentation includes a slideshow of knowledge content.  E-learning: not applicable | | | | | | | |
| **TEACHING AIDS** | Movies, Presentation with slideshow, case studies | | | | | | | |
| **PROJECT**  (if it is realized) | No applicable | | | | | | | |
| **FORM AND PASSING CONDITION (divided into direct and e-learning)** | The form of passing the exercises is a test on the Moodle platform, consisting of 20 mixed questions (single-choice, multiple-choice, match values, add short answer, etc.). | | | | | | | |

*\* L-lecture, ex-exercises, lab- lab, pro- project, e- e-learning*