



COURSE DESCRIPTION CARD - SYLLABUS

Course name

History of transport

Course

Field of study

Year/Semester

Civil Engineering

2 / 3

Area of study (specialization)

Profile of study

general academic

Level of study

Course offered in

Second-cycle studies

polish

Form of study

Requirements

part-time

elective

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

0

0

0

Tutorials

Projects/seminars

12

0

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

DSc Eng. Jeremi Rychlewski

email: jeremi.rychlewski@put.poznan.pl

phone. 61 647 5816

Faculty of Civil and Environmental Engineering

ul. Piotrowo 5 60-965 Poznań

Prerequisites

KNOWLEDGE: student has knowledge on design of car and rail roads, advantages and disadvantages of these roads;

student has knowledge on modes of personal and mass transport;

student knows rules of developing the procedures of construction project quality management.

SKILLS: student can compare and contrast technical parameters of roads, depending on class and category;

student can think logically, including an ability to combine facts in order to get conclusions;



student can choose pavement class and road category (class) depending on their function and needs.

SOCIAL COMPETENCIES: student is ready to autonomously complete and broaden (extend) knowledge in the field of road construction.

student is ready to cooperate with other students and with the lecturer, knows it is necessary to avoid actions disrupting other student's learning;

student applies rules of culture and social cohabitation, notices other people's needs.

Course objective

The aim of this subject is to carry discussions on important aspects of design and maintenance of transport infrastructure. The discussion will be based on historical analogies and processes – *historia magistra vitae est*. The tutorials will have a form of a seminary: chosen students will present a certain topic, which will be followed by a discussion on historic conditioning and their influence on present and future transport quality.

Course-related learning outcomes

Knowledge

1. Has knowledge on history's influence on design and realisation of transport infrastructure;
2. Has basic knowledge allowing an analysis and optimisation of transport infrastructure from such points of view as: history, transport policy and rules of sustainable development;
3. Has extended knowledge about influence of transport investments on environment, understands a need to implement rules of sustainable development.

Skills

1. Can, with help of historic data and processes, formulate and test hypothesis dealing with design of transport infrastructure, taking into account rules of transport policy and sustainable development;
2. Can discuss quality of a transport project and its cohesiveness with criteria accepted a priori;
3. Is able to cooperate with others during team work.

Social competences

1. Is conscious about a need to implement sustainable development rules and protect historical heritage in construction process;
2. Participates in cultural events of a town, city region and country and uphold the history and traditions of local communities;
3. Can realise how important it is to take care of health and physical fitness.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The evaluation will be based on quality of preparation and presentation of the chosen topic by



presenting students and discussion activity, including substantive quality of statements, by discussing students.

For student being minor active, or absent on some tutorials due to important reasons, an oral colloquium will check the acquired knowledge and competence.

Topics for the discussions will be agreed with students on the first tutorial.

Programme content

The tutorials will have a seminar character, with a presentation of a chosen topic by chosen student and a discussion on the topic by all students. Following topics are expected (in a given year only some of the topics will be used, with an acceptance that topics not listed, but proposed by students and being in the field of transport engineering, will also be taken):

1. evolution of road pavements, their advantages and disadvantages and influence on competitiveness of transport modes;
2. historical conditioning and hazards for road investments;
3. history of noticing social and ecological aspects (currently: sustainable development aspects) in road infrastructure design;
4. History of road infrastructure utilisation optimisation and provisions for traffic safety;
5. world class achievements of chosen polish transport engineers;
6. historical overview of transport policy;
7. influence of historical processes on current and future shape of transport and urban development in Poznań;
8. influence of history on current and future shape of polish transport network.

Teaching methods

Tutorials based on discussion, dominantly in a seminar form, but accepting, depending on topic and student's activity, other searching methods.

Bibliography

Basic

1. Wł. Czarnecki. To też był mój Poznań. Wydawnictwo Poznańskie, Poznań 1987.
2. J. Podoski. Transport w miastach. WKiŁ, Warszawa 1985.
3. D. St. Clair. The motorisation of American cities. Praeger 1986.
4. J. Sysak. Drogi kolejowe. WKiŁ, Warszawa 1982.



5. J. Tazbir. Zarys historii Polski. PIW, Warszawa 1980.
6. Dzieje Poznania. Pr. zbior. p. red. J. Topolskiego. PWN, Poznań-Warszawa 1988.

Additional

1. Kronika miasta Poznania. Wydawnictwo miejskie.
2. R. Ast. Kształtowanie przestrzeni regionów i miast. Wyd. Politechniki Poznańskiej, Poznań 2001.
3. K. Borowski. Śródmiejskie transurbacje technologiczne. Wyd. Politechniki Poznańskiej, Poznań 2001.
4. J. Dutkiewicz. Tramwaje w Poznaniu. Kolpress, Poznań 2005.
5. A. Nowak. Dzieje Polski. Biały Kruk, Kraków 2015-2020.
6. M. Mikulski. Komunikacja lotnicza na świecie. PAN, Kraków 1972.
7. J. Rossman. Studia i projekty metra w Warszawie 1928-1958. Arkady, Warszawa 1962.
8. M. i L. Trzeciakowscy. W XIX-wiecznym Poznaniu. Wydawnictwo Poznańskie, Poznań 1987.
9. Transport samochodowy w Polsce Ludowej. WKiŁ, Warszawa 1973.

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	12	0,5
Student's own work (literature studies, preparation for tutorials) ¹	38	1,5

¹ delete or add other activities as appropriate