Study program: Road Traffic Engineering

Course title: Spatial and Traffic Planning

Professor/assistant: Predrag Ralević

Type of course: Elective

ECTS credits: 6

Prerequisites: none

Aims of the course:
Students gain scientific and professional knowledge related to the modern methodologies and procedures for spatial and traffic planning.

Learning outcomes:
Students understand conditions and ways of planning; they are taught to make, compare, describe and define procedures in the analyses of transport needs in the process of preparing planning documentation. Additionally, students are able to use research methods in traffic and make databases about the characteristics of transport demands.

Syllabus:
Theoretical part: Scientific status of spatial planning. Planning models. Historical roots and first official spatial planning policies. Scales and the content of spatial planning. Tools for spatial planning. The meaning of certain terms: regulation line, construction line, construction plot, urban renewal, area of public use, land use, populated place, object, linear infrastructure object, technical documentation. Principles of organization and use of space. Horizontal and vertical coordination. Documents for spatial and urban planning: planning documents, documents for implementation of spatial plans and urban-technical documents. Construction and use permit. Professional examination and licenses for a responsible planner, urbanist, designer, and contractor. Relation between traffic planning and land use. Methods of research and forming databases about characteristics of transport demands. Analysis of characteristics of transport demands. The forecast of transport needs. Four-step approach (motion formation – spatial distribution of motion – distribution based on a type of motion – network overload). Analyses of the transport offer and assessment of the situation. Modern software in traffic planning.
Practical part: The research of traffic and data processing as the basis for the use of software packages to plan the traffic.

Literature:

1. Đorđević, D., Dabović T. (2009). Osnove prostornog planiranja, Geografski fakultet, Beograd.
2. Forester, J (1989). Planning in the face of power, Berkeley, University of California Press.
3. Jović, J., Ivanović, I. (2011). Zbirka zadataka iz planiranja saobraćaja, Saobraćajni fakultet, Beograd.
4. Časopisi : Transportation, Journal of Transportation Engineering, Regional Science and Urban Economics, Tehnika – separat saobraćaj.
5. Zakon o planiranju i izgradnji ("Službeni glasnik RS", br. 145 od 29. decembra 2014).

Total number of active classes: 60	**Lectures:** 30	**Practical classes:** 30

Teaching methods: Lectures. Auditory and computational exercises connected with the task. Individual consultations or consultations in small groups. Homework.

Grading system (maximum 100 points)
grading scale from 5 to 10: below 51 points grade 5, grade 6 from 51- 60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91- 100 points.

Pre-exam obligations:	**Points:**	**Final exam:**	**Points:**
Activity during theoretical lectures	max 5	Oral exam	50
Practical training	max 5		
Written test(s)	max 20		
Term papers/essays	max 20		
Minimum requirement for the final exam	30		