Level: master	
Course title: Urban ecology	
Status: elective	
ECTS: 5	
Requirements: none	

# Learning objectives

In the framework of theoretical teaching students should obtain knowledge of changed and diversified - anthropogenic – ecosystem, whose development and the degradation process depend on the man. Students need to get the main guidelines about the essence of sustainable development, sustainable settlement planning/city.

### **Learning outcomes**

Students are prepared to give complex judgment about the ecological structure of the urban environment and use their theoretical and practical knowledge. Students will be able to participate in the task solving processes and make conclusions in the process of designing development guidelines for ecological towns.

# **Syllabus**

#### Theoretical instruction

Theme: Introduction to urban ecology, urban ecosystem concept, circulation of matter and energy in cities, town micro climate, environmental needs and requirements of proper construction, air pollution of urban areas, structure, meaning and urban greenery development, circulation of water in urban areas and the impact on the urban ecosystem, ecological aspect of use of construction materials, "sick building syndrome", ecology of home and work, noise and vibration, waste management, problem and practice of depositing and processing of urban waste. Integral (complex) evaluation of urban environment, urban development and ecocentric urban planning with a special focus on climate change, comparative analysis of urban ecological status of European and Serbian cities.

## Practical instruction

Comparative analysis of urban-ecological conditions in cities of developing countries and European and American cities. Ecocentric strategic analysis and spatial planning of cities.

Research study: Urban-environmental (complex or thematic) analysis of a city.

Weekly teach	Other:			
Lectures: 2	Exercises: 2	Other forms of	Student research:	
		teaching:		