

Name of the course:

URBAN OASIS

Teachers: Associate Professor Ph.D. Budimir S. Sudimac

Status of the subject: elective

Number of ECTS credits: 2

Subject goal

This elective course presents the secondary subject in master studies. The main goal of lectures is the acquisition of a specific fund of theoretical knowledge as a supplementation of the matter. The lectures are scheduled analyses and design of architectural elements that contribute to the reduction of extreme natural and created impacts on comfort and the comfort living zone in different climate areas. During the lecture, types of protection and design and technological potentials of specific types of protection as an answer to the challenges of the sustainable world are investigated. Lectures aim to acquaint students with contemporary protection systems, basic design principles of protection elements, and their possibilities of integration in urban structures during the theoretical lessons, case study analysis, and guest lectures. Protection elements are treated as part of the whole process of energy optimization of the building or as a part where technological development allows the use of today and future nature potentials. Through the practical work on the seminar paper, students are getting knowledge about the complex aspects of the design of comfortable space for living.

Outcome of the subject

Lectures aim to acquire primarily theoretical knowledge. Lectures present a combination of a variety of different forms of work - lectures, literature studies and case study analysis of domestic and foreign examples. Students active participation in analyses and presentations of examples from practice is expected

Subject content

Theory Students are introduced to the phenomena that affect to the comfort zones and which except functional have formative, ecological and energetic character. Lectures aim to present the analyses of different tendencies in conception and design of elements of protection for buildings and open spaces in different climate regions. Through analyses of different concepts possibilities of design of integrated systems as parts of structures and systems which can be recycled in case of reuse and recycling are investigated.

Literature:

- Klaus Daniels, TECHNOLOGIE DES ÖKOLOGISCHEN BAUENS, Birkhauser, 1999.,
- Behling Sophia and Behling Stefan, SOLAR POWER the evolution of sustainable architecture, New York, Prestel, 2000
- Herzog Thomas (ed.), SOLAR ENERGY IN ARCHITECTURE AND URBAN PLANING, London, Prestel, 1996.
- Kemp Wiliam H. SMART POWER:AN URBAN GUIDE TO RENEWABLE ENERGY AND EFFICIENCY, Tamworth, Azttext Press, 2004.
- Gerhard Hausladen, CLIMA SKIN, Callwey, 2006.

Number of active teaching classes

Lectures: 2	Exercises: 0	OFL: 0	SRW: 0	Other: 0
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Method of carrying out the teaching

Ex-cathedra lectures, interactive lectures, and workshop

Evaluation of knowledge (maximum number of points 100)

Pre-exam obligations	total points 30	Final exam	total points 70
activity during lectures	10	seminar	70
colloquium(s)	20		