

Study: Physics			
Type and level of studies: Bachelor studies			
Course name: Renewable Energy Sources			
Lecturer: Adrović D. Feriz			
Status: Elective			
ECTS: 6			
Attendance prerequisites:			
Course aims			
Introduction to the physical foundations of the process of transforming energy types and the modern methods of different kinds of energy transformation.			
Course outcome			
By the end of the course, the student should have developed:			
- General capabilities: a perspective on modern energy management.			
- Subject-specific abilities: understanding and adopting the general principles of transformation of various energy forms and the techniques and technologies that accompany this transformation.			
Course content			
Theoretical part			
The concept of energy (Energy as a global problem. Basic laws. Methods of energy transformation analysis). Solar energy. Wind, tidal energy, geothermal energy. MHD method of energy transformation. Thermoelectric and thermionic generators. Fuel cells. Fission energy. Fusion energy. Energy and environmental issues.			
Practical Part:			
The exercises are demonstrative and include a visit to the available facilities.			
Literature			
1. Т. Павловић, Б. Чабрић: Физика и техника соларне енергетике, Грађевинска књига , Београд 1999.			
2. Б. Вујичић: Основи енергетике, скрипта, Нови Сад, 1997.			
3. Р. Јанев: Контролисана термонуклеарна фузија, СФИН II бр. 1, Београд, 1989.			
4. В. Кнап: Нови извори енергије, Школаска књига Загреб, 1993.			
Number of active classes			Other classes
Lectures: 2	Practical classes: 2	Other forms of teaching:	
Teaching methods			
Lectures (2 classes per week during the semester), exercises (2 classes per week during the semester).			
Assessment (maximum 100 points)			
Course assignments	points	Final exam	points
Lectures	10	Written exam	
Term test 1	20	oral exam	50
Term test 2	20	.....	
Total	50		50