

Study program: Waste management			
Course title: Recyclable materials			
Professor/assistant: PhD Aleksandra D. Boričić			
Type of course: compulsory			
ECTS credits: 8			
Pre-requisites: -			
Aims of the course: Prepare students to: recognize the sources of recyclable materials, introduce the characteristics of recyclable materials, introduce the terminology, concept, perspective and tools for obtaining recyclable materials, introduce planning documents and strategic measures related to recyclable materials, introduce measures for reduction of waste disposal, learn the term of nus product and procedures for changing the status of waste.			
Learning outcomes: Students is able to:determine the basic characteristics of recyclable materials, identify the advantages and disadvantages for different types of recyclable materials in use,define a strategy for the development of recyclable materials methodologies,identify the most appropriate methodologies and techniques for recycling different types of materials,optimize resources, processes and products obtained by recycling,respond to the urgent market needs and services in order to obtain recyclable materials,monitor and implement legal regulations in the field of recyclable materials,develop a system for increasing the rate of reuse.			
Syllabus			
<i>Theoretical part</i> Sources and properties of recyclable materials. Types of recyclable materials. The benefits of using recyclable materials. Perspectives and legal framework in the field of recyclable materials. The concept of sustainable material development and the development and use of recyclable materials in energy consumption. New raw materials and classification. Application of recyclable materials. Trends and perspectives.			
<i>Practical part</i> Working on project assignment independent or in team work.			
Literature			
<ol style="list-style-type: none"> 1. A. Boričić, P. Đekić, <i>Reciklabilnimaterijali – nemetali, skripta</i>, VTŠ Niš, 2017. 2. S. Janković, D. Mitić, <i>Tehničkimaterijali</i>, FakultetzaštitenaraduNiš, 2000. 3. D. E.Hudgin., <i>Plastic Technology Handbook-Fourth edition</i>, CRCPress, 2006. 4. B. Addis, <i>Building with Reclaimed Components and Materials- A Design Handbook for Reuse and Recycling</i>, Earthscan, 2006. 			
Number of active classes			Other forms of teaching:
Lectures: 2	Practical classes: 3	Laboratory class: 1	
Teaching methods Combined, interactive with solving examples from practice.			
Grading system (maximum 100 points), grading scale from 5 to 10: below 51 points grade 5, grade 6 from 51-60 points, grade7 from 61-70 points, grade8 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	10	written exam	30
practical training	10	oral exam	
colloquium(s)/seminar papers	40/10		
Sum	70	Sum	30