

<b>Course title: Web Mining</b>		
<b>Teacher or teachers (surname, middle initial, first name): Blagojević D. Marija</b>		
<b>Course status: Elective course</b>		
<b>Number of ECTS credits: 15</b>		
<b>Prerequisites: None</b>		
<b>Course objective</b>		
<p>The aim of the course is to prepare students for independent scientific research in the field of Web mining. Students are introduced to the basic methods and techniques of Web mining, with a special emphasis on the applications in certain technical disciplines, such as Web Content Mining, Web structure Mining and Web usage mining. In addition to the mathematical basis of the method, special attention is paid to specific problem solving applications.</p>		
<b>Outcomes</b>		
<p>Master algorithms and techniques of Web mining. Use of ready-made software packages and applications in selected technical disciplines. Using Web Mining Techniques to Analyze Web Content, Structure, and Usage. Knowledge of the mathematical basis of Web mining methods. Recognizing the benefits of applying Web mining methods. Students are able to independently analyze and solve problems in the field of Web mining, as well as to conduct research in the field of the application of advanced concepts in these areas.</p>		
<b>Course content</b>		
<b>Theoretical classes</b>		
<p>Introduction to Web mining. Techniques for analyzing the content of Web documents. Classification and clustering of documents. Web structure analysis, ranking documents by importance. Website Rating Improvement Techniques. Web access analysis. Discovering patterns of behavior of Web site users. Web visualization. Social network statistics.</p>		
<b>Practical classes</b>		
<p>Web mining softwares. Application of Web mining in selected technical disciplines. Application of web mining techniques for analyzing the content, structure and use of the Web. Analysis of the mathematical basis of Web mining method techniques.</p>		
<b>Literature</b>		
<p>[1] Bing Liu: Web Data Mining: Exploring Hyperlinks, Contents, and Usage Data, Спрингер, Heidelberg; New York, 2011  [2] Soumen Chakrabarti, Mining the Web: Discovering Knowledge from Hypertext Data, Morgan Kaufmann, 2002  [3] Matthew A. Russell, Mining the Social Web, O'Reilly Media, 2013.</p>		
Number of hours of active teaching: 10	Theoretical teaching: 5	Practical teaching: 5
Teaching methods		
Lectures, consultations and study research work.		
Knowledge assessment (maximum number of points 100)		
Seminar paper - 50;		
Oral part of the exam - 50.		