Course title: Web mining	
Teacher(s): Marija D. Blagojević	
Course status: elective	
Number of ECTS credits: 10	
Condition: None	

Course objectives

The aim of the course is to train students for independent scientific research work in the field of Web mining. Introducing students to the basic methods and techniques of Web mining, with special emphasis on applications in certain technical disciplines. Web Content Mining. Mining Web structures. Web usage mining. In addition to the mathematical basis of the method, special attention is paid to the application to solve specific problems.

Learning outcomes

Master the 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 application of advanced concepts in these areas.

Contents

Theoretical classes
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 the patterns of behavior of website users. Web visualization. Social network statistics.

Practical teaching
Web mining software. Application of Web mining in selected technical disciplines. Application of Web mining techniques for analysis of Web content, structure and usage. Analysis of mathematical bases of Web mining method techniques.

Recommended literature

[1] Bing Liu: Web Data Mining: Exploring Hyperlinks, Contents, and Usage Data, Springer, Heidelberg; New York, 2011
   [2] Jiawei Han and Micheline Kamber, Data mining, Elsevier, 2006/
   [3] Matthew A. Russell, Mining the Social Web, O'Reilly Media, 2013.

Number of active classes: 7	Theory: 5	Practice: 2

Teaching methods

Lectures, consultations, and study research work.

Evaluation (maximum number of points 100)

<div align="center">Prerequisites: 50 points</div>
<div align="center">Final part of the exam: 50 points</div>

Ways of testing the knowledge may vary: (written tests, oral exam, project presentation, seminars etc.)

*maximum length 1 A4 page