

(Table 5.2) Course unit description

Study program: <b>Economy</b>			
Type and level of studies: <b>Doctoral studies</b>			
<b>Course unit: Multicriteria analysis and decision making</b>			
<b>Teacher in charge: Mimović Predrag</b>			
Language of instruction: <b>English</b>			
ECTS: <b>9</b>			
Prerequisites:			
Semester: <b>Summer Semester</b>			
<b>Course unit objective:</b>			
<p>Uncertainty and complexity are the main features of managerial decision-making. The decision-making analysis provides a framework for the analysis of decision-making problems, structuring them into parts that are easier to manage, through explicit observing possible alternatives, available information, and relevant preferences. Objective of the course decision making analysis is to acquire the knowledge necessary for independent analysis and implementation of business decisions.</p>			
<b>Learning outcomes of Course unit</b>			
<p>Students are enabled to make decisions in terms of uncertainty and risk, to avoid the pitfalls of intuitive decision making, by getting to know the concepts that explain the phenomena of thinking and choice, and through discussion of methods for structuring and modeling decision-making problems and their application in different contexts of managerial and personal decision making.</p>			
<b>Course unit contents</b>			
<p>Use to analysis of decision-making in terms of uncertainty (expected value, decision tree, Bayes theorem, expected value of perfect and imperfect information, function of utility and risk-related, sequential analysis); Decision-making in risk management and multiple goals (decision-making, multi-purpose structuring, utility theory, business decision-making analysis, behavioral criticism of utility theory); Multicriteria decision-making (modeling of conflicting goals, multi attribute decision models, complexity and hierarchy as presentation of complexity, hierarchical and network decision models); Applied decision analysis;</p> <p>Software Expert Choice, Superdecisions</p>			
<b>Literature</b>			
<ol style="list-style-type: none"> <li>1. Doumpos, M., Zopounidis, C. <i>Multicriteria Decision Aid Classification Methods</i>, Kluwer Academic Publishers New York, Boston, Dordrecht, London, Moscow, 2004.</li> <li>2. Triantaphyllou, E. <i>Multi-Criteria Decision Making Methods: A Comparative Study</i>, SPRINGER-SCIENCE+BUSINESS MEDIA B.V., 2000.</li> <li>3. Ishizaka, A., Nemery, P., <i>Multi-Criteria Decision Analysis, Methods and software</i>, John Wiley &amp; Sons, Ltd, 2013.</li> <li>4. Albright, C.S., Winston, W.L., <i>Management Science Modeling</i>, South – Western, 2012.</li> <li>5. Saaty, T., <i>Fundamentals of Decision Making and Priority Theory with Analytic Hierarchy Process</i>, Vol. VI of the AHP series, Library of Congress Cataloging in Publication Data, RWS Publications, 2006.</li> </ol>			
<b>Number of active teaching hours</b>			<b>Other classes</b>
Lectures	Practice	Other forms of classes	
			Independent work
<b>Teaching methods</b>			
<b>Examination methods (maximum 100 points)</b>			
<b>Exam prerequisites</b>	<b>No. of points:</b>	<b>Final exam</b>	<b>No. of points:</b>
Student's activity during		Verbal examination	50

lectures			
practical classes/tests	20		
Seminars/homework	30		
Project			
Other			
<b>Grading System</b>			
<b>Grade</b>	<b>Bo. Of Points:</b>		<b>Description</b>
<b>10</b>	<b>91-100</b>		Excellent
<b>9</b>	<b>81-90</b>		Exceptionally good
<b>8</b>	<b>71-80</b>		Very good
<b>7</b>	<b>61-70</b>		Good
<b>6</b>	<b>51-60</b>		Passing
<b>5</b>	<b>0-50</b>		Failing