

**“BOGDAN VODĂ” UNIVERSITY OF CLUJ-NAPOCA**  
**FACULTY OF ECONOMICAL SCIENCES**  
**SPECIALIZATION: MANAGEMENT, MANAGEMENT BAIA MARE,**  
**FINANCE AND BANKS, ACCOUNTING AND MANAGEMENT**  
**INFORMATICS**  
**ACADEMIC YEAR 2010-2011**

**DISCIPLINE FILE**

<b>Name of discipline</b>	<b>APPLIED MATHEMATICS IN ECONOMICS</b>				
<b>Code of discipline</b>	EC1102	<b>Year</b>	<b>I</b>	<b>Number of credits</b>	<b>5</b>
		<b>Semester</b>	<b>I</b>		

<b>Faculty</b>	<b>ECONOMICAL SCIENCES</b>	<b>Number of hours in semester /activities</b>		
<b>Profile</b>	<b>ECONOMIC</b>	<b>Total</b>	<b>C</b>	<b>S</b>
<b>Specialization</b>	MB, FB	<b>56</b>	<b>28</b>	<b>28</b>

<b>Course type</b> DF – fundamental, DS – specialized, DC – complementary	<b>DF</b>
<b>Optional course category:</b> DI – imposed, DO – optional, DF – facultative	<b>DI</b>

<b>Prevision disciplines</b>	<b>Mandatory disciplines (conditioned)</b> -
	<b>Recommended</b> ALGEBRA, XI and XII class. MATHEMATICAL ANALYSIS, XI and XII class.
<b>Objectives</b>	Logical-mathematical thinking development of students. Analysis of the applicability of mathematics in economics.
<b>Content (description)</b>	<b>CHAPTER 1 - Elementary matrix transformations. Systems of Linear Equations.</b> <b>CHAPTER 2 - Mathematical analysis of functions of several variables.</b> <b>CHAPTER 3 - Elements of probability theory.</b> <b>CHAPTER 4 - Linear programming.</b>

<b>Form of evaluation (E – exam, C – colloquy/final test, CW – control works)</b>	<b>E</b>
<b>Final grade (percentage)</b>	Knowledge evaluation will take into account: 75% of the exam result 25% activity at the seminars.
<b>Bibliography</b>	1. Mihaela Jaradat, A. Muresan, <i>Mathematics for economists</i> , Theory and Applications, Ed RISOPRINT, Cluj Napoca, 2004 2. Rip, I., Oh God, I, <i>Applied Mathematics in Economics</i> , Ed

	RISOPRINT, 2001. 3. Collectively Department of Applied Mathematics in Economics, <i>Mathematics for economists</i> , Vol I and II, Ed Dacia, Cluj Napoca, 2000. 4. Muresan, AS, P. Blaga, <i>Applied Mathematics in Economics</i> , Vol I and II, Ed PRESS Transilvania, Cluj Napoca, 1996 5. Mihoc M., Applied Mathematics. <i>Linear Algebra</i> , Lito., UBB Cluj Napoca, 1995 6. Muresan AS, <i>Mathematics for economists</i> , Vol II, Lito. UBB, Cluj Napoca, 1991				
<b>List of necessary didactic materials</b>	Book, course notes, content to solve problems, laptop, videoprojector. Reports of problems in mathematics for economists.				
<b>Course holder</b>	<b>Didactic degree</b>	<b>Science title</b>	<b>First name</b>	<b>Name</b>	<b>Signature</b>
	<b>LECTURER</b>	<b>PhD</b>	<b>DANIEL VASILE</b>	<b>BOTIȘ</b>	