

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

**DISCIPLINE FILE**

<b>Course name</b>	<b>Financial and Actuarial Mathematics</b>				
<b>Course code</b>	EC1203	<b>Year</b>	<b>I</b>	<b>Number of credits</b>	<b>5</b>
		<b>Semester</b>	<b>II</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, DG – 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>APPLIED MATHEMATICS IN ECONOMICS, CODE: EC1102</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 - Financial Mathematics.</b> <b>CHAPTER 2 - Actuarial Mathematics.</b> <b>CHAPTER 3 - Theory stocks.</b> <b>CHAPTER 4 - Graph theory.</b>

<b>Form of evaluation (E – exam, C – colloquy/final test, CW – control works) 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. A. Muresan, Mihaela Abdel Rahman, <i>Applied Mathematics in Finance, banks and exchanges - Vol II</i> , Ed. RISOPRINT, Cluj Napoca, 2003

	<p>2. A. Muresan, Mihaela Abdel Rahman, <i>Applied Mathematics in Finance, banks and exchanges - Vol I</i>, Ed. RISOPRINT, Cluj Napoca, 2001</p> <p>3. Muresan, A.S., <i>Applied Mathematics in finance, insurance, banking, grants</i>, Ed. RISOPRINT, Cluj Napoca, 2001</p> <p>4. Muresan, A.S., <i>Mathematics applied to finance, banks, stock exchanges</i>, Ed RISOPRINT, Cluj Napoca, 2000</p> <p>5. Muresan, A.S., <i>Operational Research, Vol I and II</i>, Ed Lito UBB, Cluj Napoca, 1996</p> <p>6. Muresan, A.S., P. Blaga, <i>Applied Mathematics in Economics, Vol II</i>, Ed PRESS Transilvania, Cluj Napoca, 1996</p> <p>7. Muresan, A.S., <i>Optimize financial operations</i>, Ed. PRESS Transilvania, Cluj Napoca, 1995</p> <p>8. Purcaru, I., <i>Financial Mathematics, Vol I and II</i>, Ed, Bucharest, 1992.</p> <p>9. Muresan, A.S., <i>Mathematics for economists Vol II</i>, Ed.LITO UBB, Cluj Napoca, 1991</p>				
<b>List of necessary didactic materials</b>	<p>Book, course notes, content to solve problems, laptop, videoprojector.</p> <p>Reports of problems in mathematics for economists.</p>				
<b>Course holder</b>	<b>Didactic degree</b>	<b>Science title</b>	<b>First name</b>	<b>Name</b>	<b>Signature</b>
	<b>LECT. UNIV.</b>	<b>DRD.</b>	<b>DANIEL VASILE</b>	<b>BOTIȘ</b>	