

Study programme(s): Applied Mathematics (MB)				
Level: master				
Course title: Modelling Seminar 2 (MB-11)				
Lecturer: Arpad Takači				
Status: obligatory for MB, module Techno-mathematics				
ECTS: 3				
Requirements: none				
Learning objectives Understanding and learning the simulation and/or modelling methods by using some simulation language.				
Learning outcomes <i>Minimal:</i> Learning the basic methods of system modelling and computer simulation. <i>Desirable:</i> Students should be able to construct and analyze a mathematical or a simulation model of some real system.				
Syllabus <i>Theoretical instruction</i> Basics of modelling and dynamical systems, simulation. <i>Practical instruction</i> Learning the basics of the AnyLogic modelling language and construction of some simulation models.				
Literature 1. A. Takači, <i>Skripta iz Matematičkog modeliranja</i> , Departman za matematiku i informatiku PMF i WUS, Novi Sad 2006. 2. S. M. Ross, <i>Simulation</i> , Third Edition, Academic Press, New York 2002. 3. S. Lynch, <i>Dynamical Systems with Applications using MATLAB</i> , Birkhauser Verlag, Boston 2004.				
Weekly teaching load				Other: 0
Lectures: 1	Exercises: 2	Other forms of teaching: 0	Student research: 0	
Teaching methodology Teaching is conducted partly on the blackboard and partly on computers. The students have to write a seminar paper and present it to their colleagues and the teacher.				
Grading (maximum number of points 100)				
Pre-exam obligations	Points	Final exam	points	
Colloquia	25	Oral exam	50	
Seminar paper	25			