



Меѓународен Универзитет Визион - International Vision University  
Universiteti Ndërkombëtar Vizion - Uluslararası Vizyon Üniversitesi

Adres: Ul. Major C. Filiposki No.1, Gostivar – Makedonya  
tel: +389 42 222 325, [www.vizyon.edu.mk](http://www.vizyon.edu.mk), [info@vizyon.edu.mk](mailto:info@vizyon.edu.mk)

### DERS İZLENESİ (SYLLABUS)

COURSE NAME	COURSE CODE	SEMESTER	COURSE LOAD	ECTS
MODELING AND SIMULATION	4033	7	180	6

Prerequisite(s)	None
-----------------	------

Course Language	Turkish
Course Type	Required
Course Level	First Cycle
Course Lecturer	
Course Assistants	
Classroom	
Extra-Curricular Office Hours and Location	

Course Objectives	This course describes basic sytem simulation concepts, necassary statistical foundation for simulating, principal simulation notions in simulation software
Course Learning Outcomes	-Defining the principle components of system -Statistics foundations used for simulation -Simulating real systems -principal simulation notions in simulation software
Course Contents	*defining the principle components of system, *statistics foundations used for simulation *principal simulation notions in simulation software

## WEEKLY SUBJECTS AND RELATED PREPARATION STUDIES

Week	Subjects	Related Preparation
1	Introduction	Related Chapters of Course Sources
2	Monte Carlo simulation(1)	Related Chapters of Course Sources
3	Monte Carlo simulation (2)	Related Chapters of Course Sources
4	Probability distrubition	Related Chapters of Course Sources
5	Random number generation	Related Chapters of Course Sources
6	Random Change production	Related Chapters of Course Sources
7	Mid-term Exam	Related Chapters of Course Sources
8	Output analysis (1)	Related Chapters of Course Sources
9	Output analysis (2)	Related Chapters of Course Sources
10	Simulation modelling via software (1)	Related Chapters of Course Sources
11	Simulation modelling via software (2) Matlab and Arena documentation	Related Chapters of Course Sources
12	Simulation modelling via software (3)	Related Chapters of Course Sources
13	Simulation modelling via software (4)	Related Chapters of Course Sources
14	Variance reduction	Related Chapters of Course Sources
15	Final Exam	Related Chapters of Course Sources

**ECTS / WORKLOAD TABLE**

Presentation / Seminar			
Hours for off-the-classroom study (Pre-study, practice)	14	3	42
Midterm Exam	1	12	12
Final examination	1	14	14
<b>Total Work Load</b>			
<b>ECTS</b>	<b>6</b>		

**GENERAL PRINCIPLE RELATED WITH COURSE**

Dear students,

You need to be included in the flow, please follow the course of learning and using that to achieve our success you deserve, you need to practice every day on topics that are covered by the course. It takes practice reading basic and auxiliary literature that is strictly recommended. You should visit classes course I need to make an effort to visit all the professors' lectures. Your activity on the session will be assessed by your professors and the Battle active participant in the discussions that will take place during the time. Students visiting lectures for all at the end if an additional 15 points.

**SOURCES**

<b>COMPULSORY LITERATURE</b>		
<b>No</b>	<b>Name of the book</b>	<b>Author's Name, Publishing house, Publication Year</b>
<b>1</b>	Matematiksel Modelleme ve Simülasyon	Fikri Öztürk, Levent Özbek Ekim 2004 .
<b>2</b>		
<b>3</b>	Simulation Modeling and ARENA	Wiley. Banks J., Carson J., Nelson B., Nicol D., 2001,

<b>ADDITIONAL LITERATURE</b>		
<b>No</b>	<b>Name of the book</b>	<b>Author's Name, Publishing house, Publication Year</b>
<b>1</b>		
<b>2</b>		
<b>3</b>		

## EVALUATION SYSTEM

<b>Underlying the Assessment Studies</b>	<b>NUMBER</b>	<b>PERCENTAGE OF GRADE</b>
Attendance/Participation	15	% 10
Project / Event	1	%20
Mid-Term Exam	1	%35
Final Exam	1	%35
<b>TOTAL</b>	<b>17</b>	<b>%100</b>

## ETHICAL CODE OF THE UNIVERSITY

In case students are cheating on exams or preparation the same, it is not making reference to the source to be used in studies, as for example in assignments, projects and presentation (plagiarism), in accordance with legislations by Ministry of Education and Science of the Republic of Macedonia and International Vision University, apply relevant disciplinary rules. International Vision University students are expected never attempts in this kind of behavior.