



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

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### DERS İZLENESİ (SYLLABUS)

COURSE NAME	COURSE CODE	SEMESTER	COURSE LOAD	ECTS
ACADEMIC SOFTWARE	4005	1	180	6

Prerequisite(s)	None
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Course Language	Turkish
Course Type	Elective
Course Level	First Cycle
Course Lecturer	
Course Assistants	
Classroom	
Extra-Curricular Office Hours and Location	

Course Objectives	The aim of this course is to provide students with knowledge and abilities to design and implement programs using object oriented methodologies and modern development environments.
Course Learning Outcomes	<ul style="list-style-type: none"><li>-Knowledge in object oriented programming concepts; ability to use theoretical and applied information in object oriented to model and solve engineering problems.</li><li>-Ability to design and implement object oriented programs (design overall hierarchy, classes and methods) under realistic constraints and conditions.</li><li>-Knowledge and ability to implement multithreaded interactive applications with graphical user interface components (mouse, window, button).</li><li>-Knowledge and ability to devise, select, and use modern techniques and tools needed for the design and implementation of software using object oriented concepts.</li></ul>
Course Contents	Approaches to modular program design, basic concepts of objects: classes and instances, single and multiple inheritance, polymorphism, object hierarchies and exceptions and exception handling, graphical user interface (GUI) implementation, multithreading and file I/O. The course will also focus on object-oriented (OO) requirements and design principles, techniques for transforming design models to code and data structures. Special emphasis will be given to programming in Java.

## WEEKLY SUBJECTS AND RELATED PREPARATION STUDIES

Week	Subjects	Related Preparation
1	Introduction to object oriented programming	Related Chapters of Course Sources
2	Objects & classes	Related Chapters of Course Sources
3	Method calls & type conversions	Related Chapters of Course Sources
4	Data structures & array and arraylists	Related Chapters of Course Sources
5	Inheritance	Related Chapters of Course Sources
6	Polymorphism	Related Chapters of Course Sources
7	Mid-term Exam	Related Chapters of Course Sources
8	Exception handling	Related Chapters of Course Sources
9	File i/o	Related Chapters of Course Sources
10	Object serialization	Related Chapters of Course Sources
11	Introduction to gui design	Related Chapters of Course Sources
12	Multithreading & multithreaded gui	Related Chapters of Course Sources
13	Accessing databases (jdbc)	Related Chapters of Course Sources
14	Review of the Semester	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>	Yazılım Mühendisliği Temelleri	Erhan SARIDOĞAN, Papatya Yayıncılık Eğitim, 2011
<b>2</b>	Пишување со смисла,	Маргот Нортхеј/ Цуди, Цевински, Арберија дизајн, Тетово
<b>3</b>	HOW TO PROGRAM	BY H.M.DEITEL & P.J. DEITEL (8TH EDITION)

<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.