



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
COMPUTER ARCHITECTURE	4013	3	180	6

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

Course Objectives	The aim of this lecture is to teach students how the CPU (Central Processing Unit) which forms the basis of modern computers, pipeline and vector operations work and how a computer makes arithmetic operations.
Course Learning Outcomes	1-to have advanced knowledge about computer systems architecture 2-to learn the advantages of different computer architecture, 3-to observe advantages of the use of pipeline to computer systems 4-to have advanced knowledge about computer arithmetic 5-to have knowledge about floating point numbers and hardware of floating point numbers 6-to have knowledge about decimal numbers and hardware of decimal numbers
Course Contents	The lecture is given under three sections. In first section CPU, in second section how pipeline and vector operations work and in the last section computer arithmetics is aimed to teach.

WEEKLY SUBJECTS AND RELATED PREPARATION STUDIES

Week	Subjects	Related Preparation
1	Central Processing Unit, General Register Organization	Related Chapters of Course Sources
2	Stack Organization, Instruction Formats	Related Chapters of Course Sources
3	Addressing Modes	Related Chapters of Course Sources
4	Data Transfer and Manipulation, Program Control	Related Chapters of Course Sources
5	Reduced Instruction Set Computer (RISC)	Related Chapters of Course Sources
6	Parallel Processing	Related Chapters of Course Sources
7	Mid-term Exam	Related Chapters of Course Sources
8	Pipelining	Related Chapters of Course Sources
9	Arithmetic Pipeline	Related Chapters of Course Sources
10	Instruction Pipeline, RISC Pipeline	Related Chapters of Course Sources
11	Computer Arithmetic, Addition and Subtraction	Related Chapters of Course Sources
12	Multiplication Algorithms	Related Chapters of Course Sources
13	Floating-Point Arithmetic Operations	Related Chapters of Course Sources
14	Decimal Arithmetic Unit, Decimal Arithmetic Operations	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
Total Work Load			
ECTS	6		

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

COMPULSORY LITERATURE		
No	Name of the book	Author's Name, Publishing house, Publication Year
1	Bilgisayar Sistemleri Mimarisi,	Moris Mano, Literatür Yayıncılık Dağıtım, 2010.
2		
3	Computer Organization and Design: The Hardware/Software Interface,	David A. Patterson, John L. Hennessy, Morgan Kaufmann, 2012

ADDITIONAL LITERATURE		
No	Name of the book	Author's Name, Publishing house, Publication Year
1		
2		
3	Digital Design	M. Morris Mano, Third Edition, Prentice Hall, 2002

EVALUATION SYSTEM

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

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.