



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

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SYLLABUS

COURSE NAME	COURSE CODE	SEMESTER	COURSE LOAD	ECTS
DISTRIBUTED_SYS	CEN-4002	7	180	6

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

Course Objectives	The aim of this course is to introduce the basic concepts of distributed systems and applications, to define the defining features of these systems, to gain the ability to design distributed systems..
Course Learning Outcomes	Students can explain architecture options for distributed systems, create different tasks, and use socket mechanisms for inter-task communication. Explain the structure and steps of Remote Procedure Call and Remote Method Invocation. Understands the functional structure of the naming service, can design and implement a naming service. Designs simple operations for Distributed File Systems.
Course Contents	Distributed System objectives and attributes. Resource sharing in the network. Distributed System Types. Architectural structures. Layered Structure. middleware. Threads and Tasks. clients. servers. Inter-task communication. Remote Program Invocation. Naming and network services. Security in distributed systems. File system architecture. Logical time and logical clock.

WEEKLY SUBJECTS AND RELATED PREPARATION STUDIES

Week	Subjects	Related Preparation
1	Login; ds related definitions, ds properties	Related Chapters of Course Sources
2	Architectural Options	Related Chapters of Course Sources
3	Tasks and Threads	Related Chapters of Course Sources
4	Inter-Process Communication, socket, server socket	Related Chapters of Course Sources
5	Clients and Servers; design options	Related Chapters of Course Sources
6	Layered Structure in Communication	Related Chapters of Course Sources
7	Midterm	Related Chapters of Course Sources
8	Middleware: RPC and RMI	Related Chapters of Course Sources
9	Naming	Related Chapters of Course Sources
10	Consistency and Data Repetition	Related Chapters of Course Sources
11	Distributed File Systems	Related Chapters of Course Sources
12	Distributed File Systems: Architecture	Related Chapters of Course Sources
13	Distributed File Systems: examples	Related Chapters of Course Sources
14	Security in Distributed Systems	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,

In order to be included in the lesson, learn the lesson fully and achieve the success you deserve, you must come to each lesson prepared by reading the sections related to the subjects to be covered from the basic and supplementary textbooks. We expect you to meticulously comply with the lesson hours, not to interrupt the lessons unless it is absolutely necessary, to participate actively in the lesson, to communicate fully with your teacher and classmates, and to be active by participating in the discussions in the class. Unethical behaviors that may occur both in classes and in exams will be acted upon within the framework of the relevant regulation. Attendance will be taken at the time your teacher requests, at the beginning, middle or end of each lesson. Students who attend all classes during the semester will be given a 15-point attendance grade in addition to the exam grade.

SOURCES

COMPULSORY LITERATURE		
No	Name of the book	Author's Name, Publishing house, Publication Year
1	Dağıtık sistemler	Endru S. Tenebau(2009), Ars lamina
2	Dağıtık sistemleri	M.Van Steen (2016), Amazon
3	Learning network programming with java	Richard M. Reese

ADDITIONAL LITERATURE		
No	Name of the book	Author's Name, Publishing house, Publication Year
1	Dağıtık işletim sistemleri	Endru S.Tenebau (2009),Prosvetno delo
2	Bilgisayar sistemleri mimarisi	Abdülislam Marşoğlu (2015), Literatür – ders kitapları
3	Distributed Syst.3.01 ed.	Maarten van Sten etc.(2017), Createspace Ind.Publishingplatform.

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 North Macedonia and International Vision University, apply relevant disciplinary rules. International Vision University students are expected never attempts in this kind of behavior.