

COURSE PROFILE

Course Name	Code	Semester	Term	Theory+PS+Lab (hour/week)	Local Credits	ECTS
Current Issues in Information Systems Analysis and Design	IT421	Fall	7	3 + 0 + 0	3	6

Prerequisites	None
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Course Language	English
Course Type	Elective
Course Lecturer	Assist. Prof. Dr. Cüneyt Sevgi
Course Assistant	Kerem Ok
Course Objectives	This course aims to provide students with the state-of-art knowledge in IS analysis and design.
Course Learning Outcomes	<p>Upon successful completion of the course, students will:</p> <ul style="list-style-type: none"> • understand basic knowledge about ISAD (methodologies, lifecycles, analysis and design process) • be able to use key notions (methods, tools and techniques, approaches) and modeling requirements • be able to define the approaches and modeling aspects of an information systems • be able to perform model mapping and transformation (e.g. UML model dependency and XML matching) • identify and understand most critical issues related to ISAD • relate theoretical underpinnings to practical issues (analyst problems and project characteristics) related to ISAD or vice versa • be able to deal with in-depth analysis of a contemporary issue (agile modeling, JAD, advanced database issues,) • exercise and augment how to use effective methods and techniques for modeling (UML and ER)
Course Content	Object-oriented systems analysis and design methodology, agile methods with special consideration to extreme programming, advanced database concepts, XML, data warehousing and data mining, designing user interfaces.

COURSE CONTENT

Week	Subjects	Related
1	The Role of a System Analyst	
2	Understanding Organizational Style and Its Impact on IS	
3	Approaches and Methods	
4	Approaches and Methods	
5	Object Oriented Systems Analysis and Design using UML	
6	Object Oriented Systems Analysis and Design using UML	
7	Designing Effective Input and Output	
8	Presentation	
9	Designing Effective Input and Output	
10	Business Process Specification and Decision Models	
11	Business Process Specification and Decision Models / Advanced	
12	Advanced Database Concepts	
13	Advanced Database Concepts	
14	Facilitated discussion on specific subjects	

Course Textbook	Certain chapters from Systems Analysis and Design, Kendall & Kendall, Prentice Hall, 7th Ed. ISBN-13: 978013 157986-6
Recommended References	

Semester Requirements	Number	Percentage of Grade
Attendance/Participation		
Laboratory		
Application		
Special Course Internship (Work Placement)		
Quizzes/Studio Critics	6	36
Homework Assignments	5	30
Presentation		
Project		
Seminar/Workshop		
Midterms/Oral Exams		
Final/Resit Exam	1	34
Total		100

PERCENTAGE OF SEMESTER WORK		66
PERCENTAGE OF FINAL WORK		34
Total		100

Course Category	Core Courses	
	Major Area Courses	X
	Supportive Courses	
	Media and Management Skills Courses	
	Transferable Skill Courses	

COURSE'S CONTRIBUTION TO PROGRAM

#	Program Qualifications / Outcomes	* Level of Contribution				
		1	2	3	4	5
1	A foundation in mathematics and basic sciences and ability to apply acquired knowledge as they relate to the study and practice of information technology		X			
2	An ability to analyze a problem, identify and define the computing requirements appropriate to its solution, to understand, select and use appropriate technology, tools, standards, protocols, building blocks, and components to solve the problem					X
3	An ability to propose, analyze, design, develop, test and maintain an information technology system including software solutions, security model, computer and network infrastructure, information systems etc. to solve information technology problems				X	
4	An ability to analyze local and global impact of computing on individuals, organizations and society; and the ability to apply information technology techniques, skills, and tools for regular computing practices as well as to improve effectiveness of current methodologies	X				
5	An ability to effectively communicate in oral and written media with all kinds of related audiences; and prepare documentation for this purpose as required	X				
6	An understanding of professional, ethical, legal, and social issues and responsibilities of information technology profession		X			
7	A taste and breadth of knowledge across several social topics outside the immediate requirements of the information technology profession, and the ability to work within heterogeneous teams to accomplish a common goal including people from the information technology area as well as other disciplines			X		
8	An ability to engage in life-long learning and professional development for personal improvement to follow contemporary information technology issues			X		

*1 Lowest, 2 Low, 3 Average, 4 High, 5 Highest

**ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE
DESCRIPTION**

Activities	Number	Duration	Total Workload
Course Hours (Including Exams)	14	3	42
Tutorials			
Laboratory			
Application			
Special Course Internship (Work			
Field Work			
Study Hours Out of Class	14	4	56
Presentations / Seminar			
Project			
Preparatory reading	14	3	42
Homework Assignments	5	2	10
Quizzes	6	2	12
Midterm Exams			
Final / Resit Exam	1	3	3
		Total Workload	165

COURSE CATEGORY

ISCED GENERAL AREA CODES	GENERAL AREAS	ISCED BASIC AREA CODES	BASIC EDUCATIONAL AREAS	
1	Education	14	Teacher Training and Educational Sciences	0
2	Humanities and Art	21	Art	0
2	Humanities and Art	22	Humanities	0
3	Social Sciences, Management and Law	31	Social and Behavioural Sciences	40
3	Social Sciences, Management and Law	32	Journalism and Informatics	0
3	Social Sciences, Management and Law	38	Law	0
4	Science	42	Life Sciences	0
4	Science	44	Natural Sciences	0
4	Science	46	Mathematics and Statistics	10
4	Science	48	Computer	50
5	Engineering, Manufacturing and Civil	52	Engineering	0
5	Engineering, Manufacturing and Civil	54	Manufacturing and Processing	0
5	Engineering, Manufacturing and Civil	58	Architecture and Structure	0
6	Agriculture	62	Agriculture, Forestry, Livestock, Fishery	0
6	Agriculture	64	Veterinary	0
7	Medicine and Welfare	72	Medical	0
7	Medicine and Welfare	76	Social Services	0
8	Service	81	Personal Services	0
8	Service	84	Transport Services	0
8	Service	85	Environment Protection	0
8	Service	86	Security Services	0