

Management Information Systems			
Bachelor	TR-NQF-HE: Level 6	QF-EHEA: First Cycle	EQF-LLL: Level 6

## Course Introduction and Application Information

Course Code:	YBS313						
Course Name:	System Analysis and Design						
Semester:	Fall						
Course Credits:	<table border="1"> <tr> <td>ECTS</td> </tr> <tr> <td>3</td> </tr> </table>			ECTS	3		
ECTS							
3							
Language of instruction:	Turkish						
Course Condition:							
Does the Course Require Work Experience?:	No						
Type of course:	Compulsory Courses						
Course Level:	<table border="1"> <tr> <td>Bachelor</td> <td>TR-NQF-HE:6. Master`s Degree</td> <td>QF- EHEA:First Cycle</td> <td>EQF-LLL:6. Master`s Degree</td> </tr> </table>			Bachelor	TR-NQF-HE:6. Master`s Degree	QF- EHEA:First Cycle	EQF-LLL:6. Master`s Degree
Bachelor	TR-NQF-HE:6. Master`s Degree	QF- EHEA:First Cycle	EQF-LLL:6. Master`s Degree				
Mode of Delivery:	Face to face						
Course Coordinator:	Doç. Dr. MUSTAFA SUNDU						
Course Lecturer(s):	Dr. Öğr. Üyesi Mustafa SUNDU						
Course Assistants:							

## Course Objective and Content

Course Objectives:	The goal of this course for each student is: To teach how to fulfill the system analysis in the direction of requirements and current changes by understanding concept of the system and software development life cycle (SDLC).
Course Content:	Course Content This course covers the specification of the system, its elements, system development life cycle, design steps, user-computer interface, database design, test and

deployment phases of system analysis and design process.

## Learning Outcomes

The students who have succeeded in this course;

- 1) I. Knows the differences between type of a system, the system, its element and scope, and defines them by giving examples
- 2) Knows phase of system development life cycle
- 3) Builds the problem definition for a case/situation
- 4) IV. Explains the importance of feasibility phase and builds a feasibility matrix by using feasibility types
- 5) V. Explains the content of the design phase Understand the scope of test-deployment phase and builds the SDLC for a case

## Course Flow Plan

Week	Subject	Related Preparation
1)	Concept of the system, the elements, specifications, types and skills – competences of a system analyst and his/her responsibilities in the process	
2)	The scope and importance of system development life cycle	
3)	Initial research: the process of defining problem and interview techniques	
4)	Importance of feasibility study, technic and financial feasibility	
5)	Cultural, organizational and legal status feasibility	
6)	Schedule feasibility	
7)	The concept of design phase, general design	
8)	The concept of design phase, detailed design	
9)	The concept of design phase, detailed design	
10)	The actualization phase	
11)	The actualization phase	
12)	The test and deployment phase	
13)	The test and deployment phase	
14)	The critical role of SDLC in the business	

## Sources

Course Notes / Textbooks:	- Nafiz ÜNLÜ, 2017. Sistem Analizi ve Tasarımı, Abaküs Yayınları. - Oya KALIPSIZ, Ayşe BUHARALI, Göksel BİRİCİK, 2012. Sistem Analizi ve Tasarımı: Nesneye Yönelik Modelleme. Papatya Bilim - Kenneth E. Kendall, Julie E. Kendall 2014. Systems Analysis and Design, Global Edition- Pearson Education Limited. - Ders notları
References:	Ek kaynak ihtiyacı bulunmamaktadır. - There is no need for additional resources.

### Course - Program Learning Outcome Relationship

Course Learning Outcomes	1	2	3	4	5
Program Outcomes					
1) It has a wide range of interdisciplinary approaches to management information systems, primarily business and computer engineering.	3	3	2	2	3
2) Comprehends the management information systems in terms of technical, organizational and managerial aspects and uses the current programming language by knowing the logic of programming.	3	3	3	3	2
3) Uses different information technologies and systems for understanding and solving various business problems.	3	3	3	3	3
4) Interpret the data, concepts and ideas in the field of management information systems with scientific and technological methods.	3	3	2	3	3
5) Analyze the needs for an information system and analyze the processes of analysis, design and implementation of the database.	3	3	2	3	2
6) Gains technical and managerial contributions to IT projects and takes responsibility.	3	3	3	3	3
7) Solve complex business and informatics problems by using various statistical techniques and numerical methods and make analyzes using statistical programs effectively.	3	2	3	3	3
8) Uses a foreign language at the B1 General Level in terms of European Language Portfolio criteria according to the level of education.	3	3	3	2	2
9) Develops teamwork, negotiation, leadership and entrepreneurship skills.	2	3	3	3	3
10) Has universal ethical values, social responsibility awareness and sufficient legal knowledge.	2	3	3	2	3
11) Develops positive attitudes related to lifelong learning and identifies individual learning needs and carries out studies to correct them.	2	3	3	2	3

Course Learning Outcomes	1	2	3	4	5
12) Students will be able to communicate their ideas and solutions both written and orally, and present and publish them on both national and international platforms.	2	3	3	3	3
13) It uses information and communication technologies together with computer software at the advanced level of European Computer Driving License required by the field.	2	3	3	2	3

### Course - Learning Outcome Relationship

No Effect	1 Lowest	2 Average	3 Highest

	Program Outcomes	Level of Contribution
1)	It has a wide range of interdisciplinary approaches to management information systems, primarily business and computer engineering.	3
2)	Comprehends the management information systems in terms of technical, organizational and managerial aspects and uses the current programming language by knowing the logic of programming.	1
3)	Uses different information technologies and systems for understanding and solving various business problems.	3
4)	Interpret the data, concepts and ideas in the field of management information systems with scientific and technological methods.	2
5)	Analyze the needs for an information system and analyze the processes of analysis, design and implementation of the database.	3
6)	Gains technical and managerial contributions to IT projects and takes responsibility.	3
7)	Solve complex business and informatics problems by using various statistical techniques and numerical methods and make analyzes using statistical programs effectively.	1
8)	Uses a foreign language at the B1 General Level in terms of European Language Portfolio criteria according to the level of education.	1
9)	Develops teamwork, negotiation, leadership and entrepreneurship skills.	2
10)	Has universal ethical values, social responsibility awareness and sufficient legal knowledge.	1
11)	Develops positive attitudes related to lifelong learning and identifies individual learning	1

	needs and carries out studies to correct them.	
12)	Students will be able to communicate their ideas and solutions both written and orally, and present and publish them on both national and international platforms.	2
13)	It uses information and communication technologies together with computer software at the advanced level of European Computer Driving License required by the field.	2

### Assessment & Grading

Semester Requirements	Number of Activities	Level of Contribution
Quizzes	3	% 30
Midterms	1	% 30
Final	1	% 40
<b>total</b>		<b>% 100</b>
PERCENTAGE OF SEMESTER WORK		% 60
PERCENTAGE OF FINAL WORK		% 40
<b>total</b>		<b>% 100</b>

### Workload and ECTS Credit Calculation

Activities	Number of Activities	Preparation for the Activity	Spent for the Activity Itself	Completing the Activity Requirements	Workload
Course Hours	14	1	2		42
Study Hours Out of Class	14	2	2		56
Quizzes	3	2	3		15
Midterms	1	10	1		11
Final	1	15	2		17
<b>Total Workload</b>					<b>141</b>