OSTIM TECHNICAL UNIVERSITY
FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES
MANAGEMENT INFORMATION SYSTEMS DEPARTMENT
COURSE SYLLABUS FORM

MIS 344 Computer Interfaces and Human Computer Interaction							
Course Name	**Course Code**	**Period**	**Hours**	**Application**	**Laboratory**	**Credit**	**ECTS**
Computer Interfaces and Human Computer Interaction	MIS 344	1	3	0	0	3	3

Language of Instruction	English
Course Status	Elective
Course Level	Bachelor
Learning and Teaching Techniques of the Course	Lecture, Question-Answer, Problem Solving, Example

Course Objective

This course aims to teach designing user interfaces, implementing user interfaces and main concepts of human-computer interaction. According to this, this course is designed to provide in-depth exposure to both the theory and practice of human-computer interaction and methods of interactive information system design. The course focuses on the fundamental question "How can we create high-quality user interfaces?" through:

- The knowledge of core concepts of Human Computer Interaction (HCI) and usability engineering;
- The understanding of tools and techniques used to design and evaluate effective interactive systems;
- The entire system development lifecycle: user requirements analysis, information and interaction design, prototyping and evaluation.

Learning Outcomes

The students who succeeded in this course will be able to:

- Identify and define key terms related to user interfaces and user interface design and implementation
- Identify and describe various types of computer users and computer use contexts
- Identify and describe various types of user interfaces
- Describe and explain the user interface design process
- Identify and describe common abstract user interface components, such as buttons and layouts
- Identify and describe principal Java Swing classes used to realize common user interface components

Course Outline
This course covers main concepts about user interface design and human-computer interaction. These concepts span discovering the system for design, learning guidelines and principles, UI coding, system and task analysis, prototyping, screen design, layouts, dialogs, input / output and widgets. Course includes programming with Java and Java UI libraries.

Weekly Topics and Related Preparation Studies		
Weeks	**Topics**	**Preparation Studies**
1	Course Introduction	–
2	Design Discovery	–
3	Guidelines and Principles	–
4	UI Development	–
5	System Analysis	–
6	Task Analysis	–
7	Lo-Fi Prototyping	–
8	**MIDTERM EXAM**	
9	Screen Design and Layout	
10	Dialog Notations	–
11	UI SW Architecture	–
12	Input	–
13	Output	–
14	Toolkit Widgets	–
15	**FINAL EXAM**	

Textbook(s)/References/Materials:
Textbook: Preece, J., Rogers, Y., Sharp, H., Benyon, D., Holland, S., & Carey, T. (1994). Human-computer interaction. Addison-Wesley Longman Ltd Tan, D., & Nijholt, A. (2010). Brain-computer interfaces and human-computer interaction. In Brain-Computer Interfaces. Springer, London.
Supplementary References: -
Other Materials: Carroll, J. M. (1997). Human–computer interaction: Psychology as a science of design. International journal of human-computer studies.

Assessment		
Studies	**Number**	**Contribution margin (%)**
Attendance	1	10
Lab		
Class participation and performance	1	10
Field Study		
Course-Specific Internship (if any)		
Quizzes / Studio / Critical		
Homework		
Presentation		
Projects		
Report		
Seminar		
Midterm Exam/Midterm Jury	**1**	**30**
General Exam / Final Jury	**1**	**50**
Total		**100**
Success Grade Contribution of Semester Studies		**50**
Success Grade Contribution of End of Term		**50**
Total		**100**

ECTS / Workload Table			
Activities	**Number**	**Duration (Hours)**	**Total Workload**
Course hours (Including the exam week): 16 x totalcourse hours)	16	2	32
Laboratory	5	1	5
Application	5	1	5
Course-Specific Internship (if any)			
Field Study			
Study Time Out of Class	14	2	28
Presentation / Seminar Preparation			
Projects			
Reports			
Homework	5	1	5
Quizzes / Studio Review	**5**	**1**	**5**
Preparation Time for Midterm Exams / Midterm Jury	**1**	**10**	**10**
Preparation Period for the Final Exam / General Jury	**1**	**10**	**10**
Total Workload	**(100/30 = 3,33)**		**100**

Course' Contribution Level to Learning Outcomes						
Nu	**Learning Outcomes**	**Contribution Level**				
		1	**2**	**3**	**4**	**5**
LO1	Identify and define key terms related to user interfaces and user interface design and implementation					X
LO2	Identify and describe various types of computer users and computer use contexts					X
LO3	Identify and describe various types of user interfaces					X
LO4	Describe and explain the user interface design process					X
LO5	Identify and describe common abstract user interface components, such as buttons and layouts					X
LO6	Identify and describe principal Java Swing classes used to realize common user interface components					X

	Relationship Between Course Learning Outcomes and Program Competencies (Department of Management Information Systems)							
Nu	**Program Competencies**	**Learning Outcomes**						**Total Effect (1-5)**
		LO1	**LO2**	**LO3**	**LO4**	**LO5**	**LO6**	
1	Recognize and distinguish the basic concepts such as data, information, and knowledge in the field of Management Information Systems and know the processes to be followed for data acquisition, storage, updating, and security.	x	x	x	x	x	x	**5**
2	Develop and manage databases suitable for collecting, storing, and updating data.	x	x	x	x	x	x	**5**
3	As a result of his/her ability to think algorithmically, and easily find solutions to problems concerning basic business functions.	x	x	x	x	x	x	**5**
4	Learn programming logic, and have information about current programming languages.	x	x	x	x	x	x	**5**
5	Be able to use up-to-date programming languages.	x	x	x	x	x	x	**5**
6	Be able to take part in teamwork or lead a team using knowledge of project management processes.							
7	Know ethical and legal rules, and use professional field knowledge within the scope of ethical and legal rules.							
8	Know the fundamental areas of business administration namely management and organization, production, finance, marketing, numerical methods, accounting, etc., and have the knowledge and skills to work in-depth in at least one of them.							
9	Be able to solve the problems encountered in the field of internet programming by designing web applications.	x	x	x	x	x	x	**5**
10	Develop and manage logistics and supply chain management activities							
11	Adapt his/her theoretical knowledge and the experience he/she will gain through practice at the departments of businesses such as information technologies, R&D, and management to real life.							
12	Be able to develop strategies that will provide a competitive advantage with his/her advanced knowledge of management strategies and management							

	functions.							
13	Develop a business idea, commercialize the business idea, and design and manage his/her venture using entrepreneurial knowledge.							
14	By using English effectively, they can follow, read, write, speak and communicate universal information in the field of management information systems in a foreign language with professional competence.							
Total Effect								**30**

Policies and Procedures
Web page: https://www.ostimteknik.edu.tr/management-information-systems-english-1241/915
Exams: The exams aim at assessing various dimensions of learning: knowledge of concepts and theories and the ability to apply this knowledge to real-world phenomena, through analyzing the situation, distinguishing problems, and suggesting solutions. The written exams can be of two types, ie. open-ended questions, which can also be in the form of problems or multiple-choice questions.
Assignments: Quizzes and Homework (Assignments) might be applicable. Scientific Research Ethics Rules are very important while preparing assignments. The students should be careful about citing any material used from outside sources and reference them appropriately.
Missed exams: Any student missing an exam needs to bring an official medical report to be able to take a make-up exam.
Projects: A group project with teamwork is welcome.
Attendance: Attendance requirements are announced at the beginning of the term. Studentsare usually expected to attend at least 70% of the classes during each term.
Objections: If the student observes a material error in his/her grade, he/she has the right to place an objection to the Faculty or the Department. The claim is examined and the student is notified about its outcome.