OSTİM TECHNICAL UNIVERSITY
FACULTY OF ENGINEERING
DEPARTMENT OF SOFTWARE ENGINEERING
Course Syllabus

SENG-217 Human Computer Interaction							
Course Name	**Course Code**	**Semester**	**Theoretical**	**Practice**	**Laboratory**	**Credit**	**ECTS**
Human Computer Interaction	SENG 217		3	0	0	3	5

Instruction Language	English
Course Status	Elective
Course Level	Undergraduate
Teaching Methods	Lecture, Discussion, Q&A, Problem Solving

Course Objectives
• Understanding how to design the use experience when interacting with modern applications, devices, and environments • Gaining in-dept knowledge of a human-centered process to create interactive systems and how to apply it in practice • Becoming familiar with methods to gather and listen to users' needs • Learning to evaluate interactive systems with their users • To learn about the cognitive, social, and cultural aspects of human-computer interaction, various evaluation methods, and the use of modern technologies (such as virtual reality, augmented reality, and eye-tracking systems). • To gain competence in understanding the strategic use of complex computer systems, collaboration, and social media engagement, and to be able to evaluate and design these systems.

Learning Outcomes
Learning outcomes for students; Students; • identify and explain basic concepts, theories, and models in the field of Human-Computer Interaction (HCI). • recognize various evaluation methods used in HCI and apply these methods to different interactive systems. • can test the usability of a technology or software • describe the effects of popular and emerging technologies such as virtual reality (VR) and augmented reality (AR) on HCI, and utilize these technologies in evaluation processes.

Weekly Topics and Preparation Work		
Week	**Topic**	**Preparation Materials**
1	• Human	Chapter 1
2	• Computer	Chapter 2
3	• Interaction • Paradigms	Chapters 3 and 4
4	• Foundations of Interaction Design	Chapter 5
5	• HCI in Software Processes • Design Rules • Application Support	Chapters 6, 7, and 8
6	• Usability and Evaluation Techniques	Chapters 9 and 10
7	• Universal Design • User Support	Chapter 10 and 11
8	MIDTERM EXAM	
9	• Cognitive Models • Socio-organizational Issues and Stakeholder Requirements	Chapter 12 and 13
10	• Communication and Collaboration Models • Task Analysis	Chapter 14 and 15
11	• Dialog Notations and Design • System Models	Chapters 16 and 17
12	• Modelling rich interaction	Chapter 18
13	• Group Software	Chapter 19
14	• Ubiquitous Computing and Augmented Realities • Hypertext, Multimedia, and the World Wide Web	Chapter 20 and 21
15	FINAL EXAM	

Testbook / Resources

Testbook:

HUMAN COMPUTER INTERACTION, BY A. DIX, J. FINLAY, G. D. ABOWD, R. BEALE (3RD EDITION) ISBN: 978-0130461094

Other Resources:

Carroll, J. M. (Ed.). (2002). *Human computer interaction in the new millennium*. Pearson Education India.

Rubin, J., & Chisnell, D. (2011). Handbook of usability testing: How to plan, design, and conduct effective tests. John Wiley & Sons.

Dumas, J. F., & Redish, J. C. (1993). A practical guide to usability testing. Greenwood Publishing Group Inc..

Assessment System		
Works	**Number**	**Contribution**
Attendance		
Laboratory		
Class Participation and Performance		
Field Work		
Course-Specific Internship (if any)		
Quizzes / Studio / Critical		
Homework	15	20% (combined with final exam)
Presentation		
Project		
Report		
Seminar		
Midterm Exam	1	40%
Final Exam	1	60 %
Total		**100**

ECTS / Workload Table			
Activity	**Quantity**	**Duration (hours)**	**Total workload**
Cours Hours (including exam weeks)	15	3	45
Laboratory			
Practice			
Course-Specific Internship (if any)			
Field work			
Out-of-Class Study	15	3	45
Presentation / Seminar Preparation			
Project			
Report			
Homework	15	1	15
Exams / Studio Review			
Preparation for Midterm Exam	1	3	3
Preparation for Final Exam	1	3	3
Total workload	47	13	111

Contribution of the Course Learning Outcomes

No	Learning Outcomes	Level of Contributions				
		1	2	3	4	5
LO 1	Application of science, mathematics, and engineering knowledge				X	
LO 2	Designing energy systems, components, or processes to meet industrial needs					X
LO 3	Ability to work with multidisciplinary teams			X		
LO 4	Identifying, formulating, and solving engineering problems				X	
LO 5	Taking responsibility for solving unforeseen and complex problems				X	
LO 6	Solving problems encountered individually and as part of a team				X	
LO 7	Planning and managing activities within team work				X	
LO 8	Using necessary techniques, skills, and modern engineering tools for engineering applications			X		

Policy and Procedure
Website: Software Engeniering Department | OSTIM Technical University (ostimteknik.edu.tr)
Exams: Exams assess conceptual and theoretical knowledge and the ability to apply this knowledge to real-world situations. They may include open-ended questions, problem-solving tasks, or multiple-choice questions.
Assignments Short quizzes and homework assignments may be given. Adherence to Scientific Research Ethics Guidelines is essential. Students must properly reference any materials used from external sources.
Missed exams : Students must provide an official medical report from a state hospital to be eligible for a make-up exam.
Projects: Not applicable
Attendance: De Attendance requirements are announced at the beginning of the semester. Students are generally expected to attend at least 70% of the classes each semester.
Appeals: Students have the right to appeal their grades if they detect a material error. Appeals will be reviewed, and the student will be informed of the outcome.