



**HASAN KALYONCU UNIVERSITY**  
**Faculty of Engineering**  
**Course Description Form**

<b>COURSE: Human Computer Interaction</b>					
<b>CODE: SENG228</b>		<b>SEMESTER: Spring</b>			
<b>LANGUAGE: ENGLISH</b>		<b>TYPE: TECHNICAL ELECTIVE</b>			
<b>PRE-REQUISITES: NONE</b>		<b>THEORY</b>	<b>PRACTICAL</b>	<b>CREDIT</b>	<b>ECTS</b>
<b>CO-REQUISITES:</b>					
<b>WEEKLY HOURS:</b>		3	0	3	4

**CONTENT OF THE COURSE:**

This course introduces students to the core principles of human-computer interaction (HCI), focusing on the design of user interfaces that align with the capabilities of technology and the intricacies of human cognition. Students will explore foundational theories in HCI, gaining practical experience in areas like usability engineering, usability inspection methods (including heuristic evaluation and guideline checking), user research, interaction design, prototyping, usability testing (usage studies and remote user testing), visual design, and the design of multimodal interfaces, virtual reality, and spatial displays. Alongside lectures, students will engage in hands-on assignments to apply their knowledge to the creation and evaluation of interactive systems and user interfaces, equipping them with valuable skills in the ever-evolving field of HCI.

**OBJECTIVE OF THE COURSE:**

The objective of this course is to teach the use and results of the methods of analyzing social networks on the Internet.

**WEEKLY SCHEDULE**

<b>Week</b>	<b>Topics</b>
1	Introduction
2	The Psychology of Usable Things
3	Usability Engineering
4	Usability Inspection Methods: Heuristic Evaluation, Severity Ratings
5	User Research, Usability Benchmarking,
6	Interaction Design
7	Midterm
8	Prototyping
9	Usability Inspection Methods: Guideline Checking, Guideline Scoring, Cognitive Walkthrough, Action Analysis
10	Usability Testing Methods P1
11	Usability Testing Methods P2: Usage Studies, Remote User Testing
12	Usability in Practice, Visual Design and Typography, Icon Design
13	A Brief History of HCI
14	Review; Q & A.

**TEXTBOOK:**

*Handouts.*

**REFERENCE BOOKS:****EVALUATION SYSTEM:**

IN-TERM STUDIES	QUANTITY	PERCENTAGE (%)
Midterm Exam	1	30%
Homework	10	10%
Laboratory works	-	-
Quiz	4	20%
Final Exam	1	40%
<b>TOTAL</b>	<b>16</b>	<b>100%</b>
CONTRIBUTION OF INTERIM STUDIES TO OVERALL GRADE	6	60
CONTRIBUTION OF FINAL EXAMINATION TO OVERALL GRADE	1	40
<b>TOTAL</b>	<b>7</b>	<b>100</b>

**COURSE CATEGORY:**

COURSE CATEGORY:	PERCENTAGE (%)
Mathematics and Basic Sciences	30%
Engineering	40%
Engineering Design	20%
Social Sciences	10%

**TABLE OF ECTS / WORKLOAD:**

Activities	QUANTITY	Duration (Hour)	Total Workload
Course Duration	13	3	39
Hours for off-the-classroom study (Pre-study, practice)	13	4	52
Laboratory works	-	-	-
Mid-term	1	2	2
Final examination	1	2	2
Homework	10	2	20
Quiz	4	1	4
<b>Total Workload</b>			<b>119</b>
<b>Total Workload / 30</b>			<b>3.97</b>
<b>ECTS Credit of the Course</b>			<b>4</b>

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
<b>LO1</b>	1	0	0	1	0	0	0	1	0	0	2
<b>LO2</b>	2	0	0	2	0	0	0	2	0	0	2
<b>LO3</b>	2	0	0	1	0	0	0	2	0	0	1
<b>LO4</b>	3	0	0	2	0	0	0	3	0	0	2
<b>LO5</b>	3	0	0	2	0	0	0	3	0	0	1
PO: Program Outcomes   LO: Learning Outcomes											

Values: 0: None   1: Low   2: Medium   3: High
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<b>INSTRUCTOR(S):</b>	Doç.Dr. Abdul Hafez ABDULHAFEZ
<b>FORM PREPARATION DATE:</b>	25.03.2021

<b>LEARNING OUTCOMES OF THE COURSE:</b>	<b>PROGRAM OUTCOMES</b>
<p><b>LEARNING OUTCOMES OF THE COURSE:</b></p> <p><b>LO1: Recognize and use community networks</b></p> <p><b>LO2: Designs algorithms for processes to produce results using community networks.</b></p> <p><b>LO3: Analyze the algorithms for creating and using community networks.</b></p> <p><b>LO4: Know and evaluate the legal and application areas of community networks</b></p> <p><b>LO5: Know and evaluate the legal aspects of community networks</b></p>	<p><b>PO1:</b> Adequate knowledge in mathematics, science, and engineering subjects about the relevant discipline; ability to use theoretical and applied knowledge in these areas in complex engineering problems.</p> <p><b>PO2:</b> Ability to identify, formulate, and solve complex engineering problems; ability to select and apply proper analysis and modeling methods for this purpose.</p> <p><b>PO3:</b> Ability to design a complex system, process, device, or product under realistic constraints and conditions, in such a way as to meet the desired result; ability to apply modern design methods for this purpose.</p> <p><b>PO4:</b> Ability to devise, select, and use modern techniques and tools needed for analyzing and solving complex problems encountered in engineering practice; ability to employ information technologies effectively.</p> <p><b>PO5:</b> Ability to design and conduct experiments, gather data, analyze, and interpret results for investigating complex engineering problems or discipline-specific research questions.</p> <p><b>PO6:</b> Ability to work efficiently in intra-disciplinary and multi-disciplinary teams; ability to work individually.</p> <p><b>PO7:</b> Ability to communicate effectively in Turkish, both orally and in writing; knowledge of a minimum of one foreign language; ability to write effective reports and comprehend written reports, prepare design and production reports, make effective presentations, and give and receive clear and intelligible instructions.</p> <p><b>PO8:</b> Recognition of the need for lifelong learning; ability to access information, to follow developments in science and technology, and to continue to educate him/herself.</p> <p><b>PO9:</b> Consciousness to behave according to ethical principles and professional and ethical responsibility; knowledge of standards used in engineering practice.</p> <p><b>PO10:</b> Knowledge about business life practices such as project management, risk management, and change management; awareness in entrepreneurship, innovation; knowledge about sustainable development.</p> <p><b>PO11:</b> Knowledge about the global and social effects of engineering practices on health, environment, and safety, and contemporary issues of the century reflected into the field of engineering; awareness of the legal consequences of engineering solutions.</p>