

DEPARTMENT OF COMPUTER SCIENCE **COURSE SYLLABUS**

Course Details								
Code				Acade	emic Ye	ar	Semester	
INF523				3	3		Spring	
Title					Α	L	ECTS	
Human-Machine Interaction				2	0	2	6	
Language	German							
Level	Undergraduate	х	Graduate		Postgraduate			
Department / Program	Computer Science							
Forms of Teaching and Learning	Online course with VL, exercises and project work							
Course Type	Compulsory		X					
Objectives	 After successful completion of thismodule, the Students will have a well-founded basic knowledge of human-machine interaction and its specific application areas Thestudents will be able to apply knowledgeof human-centered development and evaluation of human-machine systems In addition to knowledge of basics, research methods and application domains, students will also gain the ability to incorporate ethical and social aspects into the design process 							
Content	 Human information processing and function allocation in the human-machine system Human-centered system development and evaluation Research methods and conception of user studies Application domains, such as automotive, aviation and human-robot interaction 							
Prerequisites	None							
Coordinator	Dr. Öğr. Üyesi Ahmet Yıldız							
Lecturer(s)	Dr. Felix Siebert							
Assistant(s)	Eileen Roesler							
Work Placement	None							
Recommended or Required Reading								
Books / Lecture Notes	- Provided in the digital classroom to suit any appointment.							
Other Sources	-							
Additional Course Material								
Documents	Online scripts in the form of PowerPoint Slides							
Assignments	Reading current scie	entific articles						
Exams	Portfolio review with 20% presentation of the project idea, 20% presentation of the results and 60% project report							
Course Composition								
Mathematics und Basic Sciences	%						%	



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Engineering	50			%	
Engineering Desi	gn	50	%		
Social Sciences			%		
Educational Scier	nces		%		
Natural Sciences			%		
Health Sciences			%		
Expert Knowledg	e		%		
Assessment					
Activ	ity	Cou	Percentage (%)		
Midterm Exam	am 2			40	
Quiz					
Assignments					
Attendance					
Recitations					
Projects		1	60		
Final Exam	al Exam				
Total				100	
ECTS Points and	d Work Load				
Activity					
Activ	ity	Count	Duration	Work Load (Hours)	
Activ Lectures	ity	Count 14	Duration 2	Work Load (Hours) 28	
Activ Lectures Self-Study	ity	Count 14 12	Duration 2 3	Work Load (Hours) 28 36	
Activ Lectures Self-Study Assignments	ity	Count 14 12 5	Duration 2 3 8	Work Load (Hours) 28 36 40	
Activ Lectures Self-Study Assignments Presentation / Se Preparation	ity eminar	Count 14 12 5 2	Duration 2 3 8 12	Work Load (Hours) 28 36 40 24	
Activ Lectures Self-Study Assignments Presentation / Se Preparation Midterm Exam	ity eminar	Count 14 12 5 2 2 2	Duration 2 3 8 12 4	Work Load (Hours) 28 36 40 24 8	
Activ Lectures Self-Study Assignments Presentation / Se Preparation Midterm Exam Recitations	ity eminar	Count 14 12 5 2 2 7	Duration 2 3 12 4 2	Work Load (Hours) 28 36 40 24 8 14	
Activ Lectures Self-Study Assignments Presentation / Se Preparation Midterm Exam Recitations Laboratory	ity eminar	Count 14 12 5 2 2 7	Duration 2 3 8 12 4 2	Work Load (Hours) 28 36 40 24 8 14	
Activ Lectures Self-Study Assignments Presentation / Se Preparation Midterm Exam Recitations Laboratory Projects	ity eminar	Count 14 12 5 2 2 2 7 7 7 7	Duration 2 3 8 12 4 2 2 2 2 2 2	Work Load (Hours) 28 36 40 24 8 14 14 14	
Activ Lectures Self-Study Assignments Presentation / Se Preparation Midterm Exam Recitations Laboratory Projects Final Exam	eminar	Count 14 12 5 2 2 2 7 7 1 1	Duration 2 3 8 12 4 2 2 2 4 2 4 2 4 2 4 4 2 4 2 4 2 4	Work Load (Hours) 28 36 40 24 24 8 14 14 14 4	
Activ Lectures Self-Study Assignments Presentation / Se Preparation Midterm Exam Recitations Laboratory Projects Final Exam	eminar	Count 14 12 5 2 2 7 1	Duration 2 3 8 12 4 2 2 4 2 4 2 4 2 4 2 4 2 4 5 4 5 4 5 4 5 4 5 6 7 6 7 6 7 6 7 6 7 6 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Work Load (Hours) 28 36 40 24 24 8 14 14 4 168	
Activ Lectures Self-Study Assignments Presentation / Se Preparation Midterm Exam Recitations Laboratory Projects Final Exam	eminar	Count 14 12 5 2 2 2 7 7 1 ECTS I	Duration 2 3 8 12 4 2 4 2 4 2 4 2 4 2 4 2 4 Points (Total Work Load / 28)	Work Load (Hours) 28 36 40 24 24 8 14 14 14 168 6	
Activ Lectures Self-Study Assignments Presentation / Se Preparation Midterm Exam Recitations Laboratory Projects Final Exam	mes	Count 14 12 5 2 2 2 7 7 1 ECTS I	Duration 2 3 8 12 4 2 4 2 4 2 4 2 4 Points (Total Work Load / 28)	Work Load (Hours) 28 36 40 24 24 8 14 14 4 168 6	
Activ Lectures Self-Study Assignments Presentation / Se Preparation Midterm Exam Recitations Laboratory Projects Final Exam Learning Outcoon 1	ity eminar mes Cross-learning systems	Count 14 12 5 2 2 7 1 ECTS I in Denmark - current state of re	Duration 2 3 8 12 4 2 2 4 2 4 Points (Total Work Load / 28) search & design challenges in	Work Load (Hours) 28 36 40 24 8 14 4 14 4 6 ather field of human-machine	
Activ Lectures Self-Study Assignments Presentation / Se Preparation Midterm Exam Recitations Laboratory Projects Final Exam Learning Outco 1 2	ity eminar mes Cross-learning systems Knowledge of t	Count 14 12 5 2 2 7 1 ECTS I in Denmark - current state of re relevant cognitive psychology base	Duration 2 3 8 12 4 2 2 4 2 4 Points (Total Work Load / 28) esearch & design challenges in sics in human-machine interact	Work Load (Hours) 28 36 40 24 8 14 4 14 4 6 ion (MMI)	
Activ Lectures Self-Study Assignments Presentation / Se Preparation Midterm Exam Recitations Laboratory Projects Final Exam Learning Outco 1 2 3	ity eminar mes Cross-learning systems Knowledge of r Rules for the d	Count 14 12 5 2 2 7 1 ECTS I in Denmark - current state of re relevant cognitive psychology base esign of human-machine interfact	Duration 2 3 8 12 4 2 4 2 4 2 4 Points (Total Work Load / 28) esearch & design challenges in sics in human-machine interact ces	Work Load (Hours) 28 36 40 24 8 14 4 14 6 6 the field of human-machine tion (MMI)	



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5	Practical knowledge in the evaluation of human-machine interfaces								
Weekly Content									
1	Introduction to human-machine interaction								
2	Human inforn	nation processing							
3	Function alloc	ation in the huma	an-machine syst	tem					
4	Human-centered development								
5	Research methods								
6	Conception								
7	Evaluation								
8	Project idea								
9	Application Domain - Automobil I								
10	Application domain - new forms of mobility								
11	Application D	Application Domain - Aviation							
12	Application Domain - Human-Robot Interaction								
13	Application Domain - Artificial Intelligence								
14	Project presentation and seminar closing								
1	Introduction to human-machine interaction								
Contribution of Learning Outcomes to Program Objectives (1-5)									
	P1	P2	Р3	P4	P5	P6	P7		
1	5					5			
2	5					5			
3	5					5			
4	5					5			
5	5					5			
Contribution Lev	Contribution Level1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High								
http://bm.tau.edu.tr/learning-objectives-of-the-program									
Compiled by:		Ayşe Betül Yüce							
Date of Compilat	of Compilation: 24.05.2022								