



DISCIPLINE ACADEMIC SHEET
ACADEMIC YEAR 2025 – 2026

1. PROGRAMME DATA

1.1. Higher Education Institution	UNIVERSITY OF CRAIOVA
1.2. Faculty	Automation, Computers and Electronics
1.3. Department	Computers and Information Technology
1.4. Field of Study	Computers and Information Technology
1.5. Study level	L(License / Undergraduate)
1.6. Organizational form	IF
1.7. Study Program (name/code) /Qualification	Computers / L2060101010

2. DISCIPLINE DATA

2.1 Discipline Name	Human-Computer Interaction						
2.2 Course Activities Holder	Elvira Popescu						
2.3. Practical Activities Holder	Gabriel Badea						
2.4. Study Year	4	2.5. Semester	2	2.6. Evaluation type	V	2.7. Discipline regime	DOP

3. ESTIMATED TOTAL TIME (hours per semester of teaching activities)

3.1. Number of hours per week	4	in which: 3.2 course	3	3.3. sem./lab./pr.	1
3.4. Total hours of curriculum	40	in which: 3.5 course	30	3.6. sem./lab./pr.	10
Time distribution - hours/week					
Study after manual, course support, bibliography and notes					14
Additional documentation in library, on specialized electronic platforms and field					12
Training seminars / labs, homework, portfolios and essays					30
Tutorial					2
Examinations					2
Other activities.....					
3.7. Total hours per individual activities					60
3.8. Total hours per semester					100
3.9. Number of credits					4

4. PRECONDITIONS (where appropriate)

4.1. of curriculum	The student must possess knowledge and skills acquired at the following disciplines: Computer Programming and Programming Languages, Object Oriented Programming, Computer Graphics, Web Applications Design
4.2. of competence	N/A

5. CONDITIONS (where appropriate)

5.1. of the course	Course lectures are taught using the video projector. Students are provided with course materials (in electronic format) and up-to-
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	date documentation. The teaching process has the following structure: ▪ 70% theoretical presentations, based on lecture slides ▪ 30% interactive activities (discussions with students)
5.2. of seminar/ laboratory/project	The laboratory uses a computer network with the required software packages and programming environments. The applicative activities are carried out using tutorials and practical demonstrations; students are provided with up-to-date educational materials and continuous feedback for each phase of analysis, modeling, design, implementation and evaluation of human-computer interfaces.

6. COURSE OBJECTIVES – expected learning outcomes that are supported by completing and passing the course

Knowledge	The student/graduate describes, identifies, and summarizes basic concepts and methods related to human-computer interaction: models, theories, techniques and tools for interaction, design methodologies for human-computer interfaces, usability issues, evaluation techniques, and performance improvement methods.
Skills (Abilities)	The student/graduate analyzes requirements, creates use cases, builds prototypes, implements user interfaces, and applies evaluation techniques for interface usability. They also acquire practical experience with respect to state-of-the-art languages and tools for creating user interfaces, as well as problem solving abilities.
Responsibility and autonomy	The student/graduate behaves honorably, responsibly, and ethically, in accordance with the law, in order to uphold the reputation of the profession.

7. CONTENT

<i>7.1. Course</i>	The method of implementation	Teaching methods	Allocated time (hours)
Introductory concepts for human-computer interaction	face to face	Course lectures are taught using the video projector (70% theoretical presentations, based on lecture slides; 30% interactive activities, discussions with students)	3
Interaction types, theories and models	face to face		3
Cognitive aspects in HCI and design implications	face to face		3
Social interaction – mechanisms and technologies	face to face		3
Emotional interaction – mechanisms and technologies	face to face		3
Interface types – research and design issues	face to face		3
Interface usability. Qualitative and quantitative evaluation techniques	face to face		6
Data visualization interfaces	face to face		6
Bibliography:			

1. David Benyon: Designing User Experience. A Guide to HCI, UX and Interaction Design (4th edition), Pearson, 2019.
2. Jeff Johnson: Designing with the Mind in Mind (2nd edition). Morgan Kaufmann, 2014.
3. I. Scott MacKenzie: Human-Computer Interaction: An Empirical Research Perspective (2nd edition), Morgan Kaufmann, 2024.
4. Dan Norman: The Design of Everyday Things: Revised and Expanded Edition. Basic Books, 2013.
5. Yvonne Rogers, Helen Sharp, Jennifer Preece: Interaction Design: Beyond Human-Computer Interaction (6th Edition), Wiley, 2023.
6. Ben Shneiderman, Catherine Plaisant, Maxine Cohen, Steven Jacobs, Niklas Elmqvist, Nicholas Diakopoulos: Designing the User Interface: Strategies for Effective Human-Computer Interaction (6th Edition), Pearson, 2018.

7.2. Laboratory	The method of implementation	Teaching methods	Allocated time (hours)
Introductory concepts, requirements analysis for the chosen application	face to face	Lab sessions include tutorials, practical demonstrations, code writing, use of prototyping tools; interpretation of results and discussions with students are highly encouraged, providing feedback for each phase of analysis, modeling, design, implementation and evaluation of interfaces.	2
User modeling, roles and stereotypes (<i>personae</i>) & generating use cases (<i>storyboarding</i>)	face to face		2
Building paper mockups, low fidelity protoypes (<i>wireframing</i>) & high fidelity protoypes	face to face		2
User interface implementation	face to face		2
Interface evaluation and usability testing	face to face		2
Bibliography:			
1. E. Canziba: Hands-On UX Design for Developers: Design, Prototype, and Implement Compelling User Experiences from Scratch, Packt Publishing, 2018. 2. G. J. Kim: Human–Computer Interaction: Fundamentals and Practice, CRC Press, 2015. 3. F. Staiano: Designing and Prototyping Interfaces with Figma (2nd edition), Packt Publishing, 2023. 4. C. Stephanidis, G. Salvendy: User Experience Methods and Tools in Human-Computer Interaction, CRC Press, 2024. 5. J. Tidwell, C. Brewer, A. Valencia: Designing Interfaces (3rd edition). O'Reilly Media, 2020.			

8. Correlating the content of the discipline with the expectations of representatives from the epistemic community, professional associations and representative employers in the field related to the program

The course and lab content are in agreement with similar disciplines taught at other universities (both from Romania and from abroad). Additionally, the acquired competences follow the requirements of employers in the area (discussions have been conducted with local companies' representatives, such as Netrom, Quest Global, CS Romania).

9. EVALUATION

Activity Type	9.1. Evaluation criteria	9.2. Evaluation methods	9.3. Final mark weight
9.4. Course	- Understanding core theoretical concepts for human-computer interaction - Ability to make connections between the various concepts taught	Written exam	50%

	- Analysis and synthesis skills in practical settings		
9.5. Laboratory	- Ability to apply in practice the theoretical notions and tutorials - Problem solving skills - Ability to analyze the user requirements and create use cases - Ability to use languages and tools for prototyping and interface implementation - Capacity to create test plans and evaluate interface usability	Assessment of lab activity over the course of the semester	50%
9.6. Minimum standard of performance			
- Obtaining minimum 50 % of the total score for the exam and for the lab assessment throughout the semester - The final grade is computed by rounding the final score to the nearest integer.			

Date of Completion	Signature of the Course Activities Holder,	Signature of the Practical Activities Holder,
23.08.2025		

Date of Approval in the Department	Signature of the Department Director,
25.08.2025	Ș.l.dr.ing. Nicolae ENESCU

Date of Approval in the Faculty	Signature of the Dean,
	Prof.dr.ing. Dorin ȘENDRESCU