



Kuwait University  
College of Business Administration  
Information Systems and Operations Management  
Department



## Course Syllabus- Fall 2023

**ISOM 454: Introduction to Human-Computer Interaction (HCI) – (3 Credits)**

**Dr. S. Zamoan**

**Final Exam Jan 3<sup>rd</sup>, 2024 8:00 am – 10:00 am**

### Lecture Time and Location

Section 01A Sunday, Tuesday, Thursday (11:00 AM– 11:50 AM) – Room C2-1003

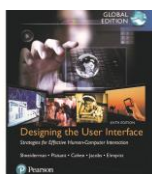
### Contact Information

**Email** [DrZamoan@gmail.com](mailto:DrZamoan@gmail.com)<sup>1</sup>  
**Office** Room # B2-1025 (South Building)  
**Office Hours** Sun/ Tues/ Thur 12:00 pm- 1:00 pm (in person and virtual appointments welcome)

**Teaching Assistant** TBA  
**Email** [@ku.edu.kw](mailto:@ku.edu.kw)  
**Office Hours** X, Room A2-10XX

### Required Material:

#### Textbook



B. Shneiderman, C. Plaisant, M. Cohen, S. Jacobs, N. Elmqvist, N. Diakopoulos, *Designing the User Interface: Strategies for Effective Human-Computer Interaction*, 6<sup>th</sup> Edition, Pearson, 2017.

**You need a physical copy of the textbook for exams; no digital copies can be used**

**Other Material** Additional material such as lecture slides, case studies, articles, videos, and assignments will be posted on the course websites.

**Course Website** Microsoft Teams/ Moodle (for announcements, materials, assignments)

**Presentations** Daily discussions and presentation of project

**Tools to be Used** E-Plagiarism systems (Turnitin: [www.turnitin.com](http://www.turnitin.com))

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Email is the best way to contact me, NOT MS TEAMS Chats. I check email between 8:00 am and 1:00 pm, but not on weekend or holidays.

Course Description by Dr. AlJazzaf, Execution by Dr. Zamoan

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**Course Description:**

This course introduces students to fundamental concepts and challenges pertinent to Human-Computer Interaction (HCI). Students will learn the importance of user's experience and human-related factors in the design and use of effective information systems. Students will also learn how HCI integrates concepts from different fields (e.g., cognitive psychology, design, computer science, etc.) to identify and understand human factors that influence systems design, accessibility, usability, and acceptance. Moreover, students will be introduced to user-centered design methods, techniques, and tools that could be used to design, evaluate, and choose effective human-computer interfaces.

**Course Learning Objectives (CLOs)**

Upon successful completion of the course, students will be able to:

- CLO1.** Design, implement and evaluate effective computer interfaces [LG5].
- CLO2.** Understand the concepts of user differences, user experience and collaboration as well as how to design contextually.
- CLO3.** Understand the basic cognitive psychology issues involved in HCI.
- CLO4.** Interact with the software design process in order to create computer interfaces [LG5].
- CLO5.** Understand the role of theory and frameworks in HCI.
- CLO6.** Apply contemporary techniques to evaluate computer interfaces [LG2].

**CLO Mapping to CBA Skill Based Competency Goals<sup>2</sup>**

CLO	Competency Goal			
	Analytical	Communication	Information Technology	Business Ethics
1		A	I	
2			I	R
3				I
4			I	
5			I	
6	I		A	

**Type of Emphases:**

- **(I)ntroduce:** Students will be introduced to the skill and their grasp of it assessed in the course.
- **(A)pply:** The course will not cover the skill. Students should have a high-level grasp of the skill and are required to apply it in the course.
- **(R)einforce:** Students should have an introductory-level grasp of the skill and the course will improve their mastery to a higher level.

<sup>2</sup> CBA Competency Goals can be found at the end of this document.

## Course Outline

Unit	Key Topics	Resources
<b>Usability of Interactive Systems</b>	Introduction, Usability Goals and Measures, Usability Motivations, Goals for HCI Profession	Chapter 1
<b>Universal Usability</b>	Variations in Physical Abilities, Diverse Cognitive and Perceptual Abilities, Personality Differences, Cultural and International Diversity, Users with Disabilities, Older Adult Users, Children, Accommodating Hardware and Software Diversity	Chapter 2
<b>Guidelines, Principles, and Theories</b>	Guidelines, Principles, Theories	Chapter 3
<b>Design</b>	Organizational Support for Design, Design Process, Design Frameworks, Design Methods, Design Tools and Practices, Social Impact Analysis, Legal Issues	Chapter 4
<b>Evaluation and the User Experience</b>	Expert Reviews and Heuristics, Usability Testing, Survey Instruments, Acceptance Tests, Evaluation during Active Use and Beyond, Controlled Psychologically Oriented Experiments	Chapter 5
<b>Design Case Studies</b>	Two or Three case studies.	Chapter 6
<b>Fluid Navigation</b>	Navigation by Selection, Small Displays, Content Organization, Audio Menus, Form Fill-in and Dialog Boxes	Chapter 8
<b>Advancing the User Experience</b>	Display Design, View Management, Animation, Webpage Design, Color, Nonanthropomorphic Design, Error Messages	Chapter 12
<b>Special Topics</b>	Ethics of HCI and Emerging Topics	Afterword And articles

\* Sections shown in grey can be skipped.

## Grading and Course Requirements

- All dates (except for the final) may change due to class circumstances and holidays. Always check the course website for the latest version of the syllabus.

Weight	Category	Description
30%	Quizzes	Four quizzes: A quiz for each chapter 1-4 worth 10% each quiz. The quiz with the lowest grade will be dropped.
30%	Group Project	The project consists of six deliverables (milestones). Details are provided below.
40%	Final Exam	Date/Time: Wednesday Jan/3/2024 (8:00 AM).
5%	Bonuses	Participation and other opportunities
105%	TOTAL	Bonuses = no curve for the course

### Grade Distribution

Grade	Range
A	$\geq 95$
A-	$\geq 90$ and $< 95$
B+	$\geq 87$ and $< 90$
B	$\geq 83$ and $< 87$
B-	$\geq 80$ and $< 83$
C+	$\geq 77$ and $< 80$
C	$\geq 73$ and $< 77$
C-	$\geq 70$ and $< 73$
D+	$\geq 65$ and $< 70$
D	$\geq 60$ and $< 65$
F	$< 60$

### Important Dates Instructor will NOT remind you of these dates

Date	Event
Assessments	
Bonus 1% Due by Sep 23 @ 00:01	Syllabus Quiz
Sep 26 in class	Quiz 1
Oct 3 in class	Quiz 2
Oct 24 in class	Quiz 3
Oct 31 in class	Quiz 4
Project Deliverables	
Oct 4 @ 00:01	Milestone 1 5%
Oct 25 @ 00:01	Milestone 2 5%
Nov 8 @ 00:01	Milestone 3 5%
Nov 22 @ 00:01	Milestone 4 5%
Bonus 2% Nov 28 @ 00:01	Evaluation
Dec 6 @ 00:01	Milestone 5 5%
Dec 13 @ 00:01	Milestone 6 5%
Last day to withdraw	
Monday Dec/25/2023	Oct 28
Monday Dec/25/2023	
Last day of classes	
<b>Wednesday Jan/3/2024 (8:00 AM)</b>	<b>Final exam</b>

## Quizzes

Quizzes will be given at the beginning of class. Quiz questions are a good reflection of what the final exam questions will look like. I will drop the lowest quiz score you get from your total quizzes grade. The total quizzes grade is worth 30% of your final grade. The quiz dates will be announced later.

## Final Exam

The final exam is worth 40% of your final grade. Please be advised that no test banks will be used in the development of the final exam. If you have a test bank, you can use it as a personal evaluation of your learning and in solving homework. Do not rely on it to prepare for the exams.

**Identification:** You must bring and display a valid Kuwait University student ID to the examinations.

**Late Arrival:** If you arrive late for an examination, you will be given the remaining amount of time to complete your examination. However, after the first student hands in her/his examination, late students cannot start the examination. These late students will receive a zero grade in the final exam.

**Questions during the examination:** You are not allowed to ask questions about the exam content during the examination, unless you feel that there is a typographical error. Reading and understanding the question is part of the exam. If you need to make any assumptions, then make sure to clearly write those assumptions in your response.

**Note:** Working on your examination after time has already ended is not allowed and will lead to deduction of points from your exam grade.

## Group Project

The course includes a group assignment that is worth 30%. The objective of this project is to allow students to apply conceptual and methodological tools learnt in class to design, implement, and evaluate user interface designs. Students will be asked to form groups of four members, choose a specific electronic system, design its user interface, and show their work in the form of a prototype, a report, and a presentation. The project will be completed in a set of deliverables based on the following milestones (deadlines will be provided later). **You must complete the project to pass the course.**

### **Milestone #1. A description of the proposed system**

This document should include a definition of the system, your target users, multiple tasks they might perform with your system, current problems or challenges with these tasks, and a description of how your system could provide possible solutions.

### **Milestone #2. User interviews**

Students must conduct in-person interviews and/or use online surveys to collect the basic requirements expected from the proposed system. At this stage, students should provide a document that shows their requirement collection method (interviews, questionnaire, etc.), the sample size, questions used, and a basic analysis/summary of the data collected.

### **Milestone #3. Requirements analysis**

Based on the data collected in the previous stage, students should prepare the requirements analysis document which specifies functional, non-functional, and user-experience requirements.

### **Milestone #4. Initial design**

The initial design document should include basic design sketches (prototypes) demonstrating all tasks performed by the system. The design should demonstrate the sequence of actions (steps) taken to achieve each task and provide details such as screen and menu structures, icons, and graphics.

### **BONUS 2%. Design evaluation**

Each team will evaluate the initial design of one of the other teams. Each team should prepare a document with detailed feedback by walking through the key requirements and functions. This report should include all identified problems and recommendations for changes. Each team should also receive evaluations from a sample of the targeted users.

### **Milestone #5. Final design**

Each team should revise their initial design and prepare a report documenting their process to refine their design. The report should include a summary of the feedback received (from classmates and targeted users) and the changes made based on the evaluation process.

### **Milestone #6. Final presentations**

Each team will conduct a presentation using PowerPoint slides that show their design details and summarize their design process. Details about the presentation requirements will be provided later.

## Attendance and Participation

**Attendance in this class is required.** While there is no specific grade given for attendance, absences and late attendance will negatively affect your in-class experience. It is your responsibility to seek out help from classmates to fill you in on missed materials. Students are expected to be on time to the lectures. Students who arrive late can enter the classroom but will be marked as late or absent.

In addition, every student must abide by the Kuwait University Policy on Attendance (published in the Student Guide). A copy of the student guide can be accessed online on:

[http://vpaa.ku.edu.kw/ar/documents/KU%20ByLaws/Students/Curriculum\\_Regulations.pdf](http://vpaa.ku.edu.kw/ar/documents/KU%20ByLaws/Students/Curriculum_Regulations.pdf)

- Each student should turn silent his/her mobile at the beginning of class
- Every student in this course must abide by the Kuwait University Policies (including ERT additions) on Attendance (published in the Student Guide, Chapter 3, Section 13). A copy of the student guide can be accessed online on:  
<http://kuweb.ku.edu.kw/ku/Students/References/index.htm>  
[http://kuweb.ku.edu.kw/cs/groups/ku/documents/ku\\_content/kuw055940.pdf](http://kuweb.ku.edu.kw/cs/groups/ku/documents/ku_content/kuw055940.pdf)
- Be on time for the lecture (remember, class starts on time, NOT 5 minutes later). At the beginning of each lecture, I will take attendance.
- Students must attend the classes they are enrolled in (i.e., no informal switching between sections for the same faculty member or between different faculty members). The same is applied to taking quizzes, midterm, and final exams.
- University regulations governing absenteeism are applied to all students. This involves a first warning after **3 hours (not lectures)**, a second warning after additional 3 hours absence and a failure notice for any absence beyond the six hours. Absence with a valid excuse will still count as an absence. But each student is allowed two absences (no questions asked), after that, each absence will be counted.

## Exams and Quizzes

- Exams and Quizzes (**ONLINE on YOUR LAPTOP- NO handheld devices**)
  - Make-up quizzes and exams: **No make up for quizzes.** Midterm and final exams will be executed according to plans. In case Moodle fails for uncontrolled reasons, the exam will be re-scheduled the next Saturday (after the initial plan date) and at the same timing. **If you have Covid (during Midterm/ Final Exam time), then submit documentation of PCR/ Civil ID your instructor to decide on your case. For the Midterm, if your documentation is approved, you will be invited to complete a makeup (at a time set by your instructor). For the Final, if your documentation is approved, an "I" (Incomplete) will appear in the KU portal and you will be invited to complete the makeup the first week of the following academic term.** You must inform your instructor and share the results of a PCR test at least 4-5 days before and exam to be eligible for a make-up.
  - **Moodle will be used with LockDown browser and Respondus monitoring system (or comparable systems like Safe Exam Browser- SEB). Make sure you access Moodle using Google Chrome.** LockDown Browser/ SEB must be installed on laptop or desktop. Be sure to install LockDown Browser Respondus/ SEB BEFORE the exam date

by taking the compatibility test in Moodle (for technical help, please see your TA). **You are responsible for having a working computer (Systems Updates and Lockdown/ Respondus / SEB Updates) Fully Charged and with working Internet BEFORE THE EXAM.**

- Exams will **NOT** be administered using handheld devices like iPhone or iPad (even if it has worked in past exams). You need a desktop or laptop with a Camera and Microphone for the ENTIRE EXAM.
  - During the exam, Respondus monitoring system will record your exam session using the camera so please follow the Dress Code and make sure you take the exam in a quiet environment. Your face must be visible and sound on for the ENTIRE EXAM with NO HEADPHONES.
  - The instructor/ TA will review recorded videos of students taking the exam and flagged by Respondus Monitoring system (e.g., red indicator). Any suspicious behavior during the exam will be considered cheating. The student will receive a ZERO for the assessment.
- Every student in this course must abide by the Kuwait University Policy on Cheating and Plagiarism (published in the Student Guide, Chapter 3, Section 2; p. 22). A copy of the student guide can be accessed online on: [http://kuweb.ku.edu.kw/cs/groups/ku/documents/ku\\_content/kuw055940.pdf](http://kuweb.ku.edu.kw/cs/groups/ku/documents/ku_content/kuw055940.pdf)
    - If you have **special needs** (e.g., any type of disability, pregnancy, diabetes, etc.), please make sure you inform the instructor (**within the FIRST WEEK of class**). You can also check with Associate Dean for Student Affairs office for other rights and duties.
    - **The instructor will NOT answer any questions during the exam including clarification questions. Furthermore, dictionary use is prohibited during exams.**

- Grading:

It is important to recognize that a grade reflects another person's evaluation and judgment of your work. I will personally grade your homework, group presentation, quizzes, and final exam. You are encouraged to meet with me at any time to discuss the strengths and weaknesses of your course work (i.e., to gain understanding of your performance). I will do my best to ensure that grading is fair and consistent for all students. Your suggestions, questions, and grade challenges are welcomed and encouraged. However, no part of your grade will be based on anything other than your coursework and attendance.

- There are **NO** collaborations in quizzes and exams - this will be considered **cheating**. Plagiarism will also be considered as cheating. The student will receive a ZERO for the assessment and/ or an "F" grade in the course (see Academic Dishonesty below).
- Late submission of assessments will NOT BE ACCEPTED (NO EXTENSIONS) even with a valid excuse. A deduction will be applied [-25% per day] if a your instructor chooses to accept late submission.
- Writing Style: Students must refer to APA writing style for their assignments and report writing. Refer to the English Language Center for help (For more details see <http://www.easybib.com/guides/citation-guides/apa-format>).
- **After a grade is posted (quizzes, assignment, case study, midterm, ... etc), you will have two days to discuss it with your instructor or teaching assistant (TA). After that, the grade is FINAL and released.**



- Negotiation of the final grade is neither accepted nor discussed.  
**Important note:** Please DON'T send anyone (a family member or any other person) to talk to me about raising your grade. Any student who violates this rule will not receive class bonuses (if any).
- There will be **NO ROUNDING UP OR DOWN** once your grade is finalized (for example, 89.99% is B+ not A-).

## Academic Integrity

The University's code of academic integrity is designed to ensure that the principles of academic honesty and integrity are upheld. All students are expected to adhere to this code. All acts of academic dishonesty will be dealt with in accordance with the provisions of this code. Every student in this course must abide by the Kuwait University policy on cheating and plagiarism. A copy of the student guide can be accessed online on:

[http://vpaa.ku.edu.kw/ar/documents/KU%20ByLaws/Students/Curriculum\\_Regulations.pdf](http://vpaa.ku.edu.kw/ar/documents/KU%20ByLaws/Students/Curriculum_Regulations.pdf)

In particular,

- You should neither give nor receive assistance from anyone in taking the quizzes, homework, and other exams.
- You should immediately report to me any act of academic dishonesty that you may observe. Your anonymity will be protected.

Cheating includes (but not limited to):

- Using unauthorized notes during the examination.
- Using unauthorized devices during the examination.
- Communicating with anyone besides instructor or exam proctor.
- Looking at another student's work during the examination.
- Copying another student's work.

Academic Dishonesty will not be tolerated. Cheating/ submitting work prepared by someone else/ resubmitting work from other courses/ plagiarism and the like will earn you an "F" grade in the course.

## Other Course Policies

Your fellow students and I need 100% of your attention and mindshare while the class is in session. Toward this end:

- For each class meeting, please arrive sufficiently ahead of the official start time in order to collect any handouts or prior quizzes and get yourself ready.
- Please do not walk around or out of the classroom, while class is in session.
- All electronic gadgets must be turned off or set silent while class is in session (vibrate mode is not accepted).
- Students are responsible to have working and up to date computer/ laptop and internet. Students are responsible for making sure their work is posted to the LMS: make sure the

posting to the forum is uploaded fully, make sure files uploaded are not corrupt (download then upload the work and make sure it is readable) etc.

- Students are responsible for the content/ instructions etc. on LMS as well as emails. For example, your instructor will not remind you of due dates.
- Students are responsible for content of any social media groups setup. These are NOT monitored by your instructor.
- Recording (audio/ video) as well as still photography are strictly prohibited (in accordance with KU policies).
- Students should contact instructor by email (NOT MS Teams) within working hours and days. Using the subject format ISOM 454-Sec 01A: Topic. With greeting, request, and closing with full name and KU ID. Students cannot contact instructors or TAs out of normal hours (e.g., 2am on Friday) to get help if they have a question or technical issue and will not get an extension for deadlines to solve technical problems.

### **Common Excuses that are not Acceptable**

“I am a senior and I need an A in the class to graduate because my GPA is low.”

“My scores do not reflect the enormous effort I am putting into this course.”

“I spent hours studying for this test, but I just blanked out during the test.”

## APPENDIX: CBA'S VISION, MISSION & COMPETENCY GOALS

**CBA Vision:** To be the leading provider of quality business education in the region.

**CBA Mission:** As part of Kuwait University, the leading national institution of higher education, the College of Business Administration is committed to providing quality business education, engaging in research and community services to contribute to the socio-economic development of the country.

### CBA Competency Goals

1. **Analytical Competency:** A CBA graduate will be able to use analytical skills to solve business problems and make a well-supported business decision.

#### Student Learning Objectives:

- 1.1. Use appropriate analytical techniques to solve a given business problem.
- 1.2. Critically evaluate multiple solutions to a business problem.
- 1.3. Make well-supported business decisions.

2. **Communication Competency:** A CBA graduate will be able to communicate effectively in a wide variety of business settings.

#### Student Learning Objectives:

- 2.1. Deliver clear, concise, and audience-centered presentations.
- 2.2. Write clear, concise, and audience-centered business documents.

3. **Information Technology Competency:** A CBA graduate will be able to utilize Information Technology for the completion of business tasks.

#### Student Learning Objectives:

- 3.1. Use data-processing tools to analyze or solve business problems.

4. **Ethical Competency:** A CBA graduate will be able to recognize ethical issues present in business environment, analyze the tradeoffs between different ethical perspectives, and make a well-supported ethical decision.

#### Student Learning Objectives:

- 4.1. Identify the ethical dimensions of a business decision.
- 4.2. Recognize and analyze the tradeoffs created by application of competing ethical perspectives.
- 4.3. Formulate and defend a well-supported recommendation for the resolution of an ethical issue.

5. **General Business Knowledge:** A CBA graduate will be able to demonstrate a basic understanding of the main business disciplines' concepts and theories.

#### Student Learning Objectives:

- 5.1. Acquire a fundamental understanding of knowledge from the main business disciplines (e.g. finance, accounting, marketing, and management information systems, among others).