

**PAMANTASAN NG LUNGSOD NG PASIG
SECOND SEMESTER, SCHOOL YEAR 2024-2025**

COLLEGE OF COMPUTER STUDIES

COURSE TITLE	: INTRODUCTION TO HUMAN COMPUTER INTERACTION
COURSE DESCRIPTION	: This course introduces students to the discipline concerned with the design, evaluation, and implementation of various computing systems intended for human use. The understanding of human behavior with interactive objects, knowing how to develop and evaluate interactive software using a human-centered approach, and general knowledge of HCI design issues with multiple types of interactive applications.
COURSE CREDITS	: 3 units
PRE-REQUISITE/S	: COMP 102
CONTACT HOURS	: 5 hours LECTURE & LABORATORY per week
INSTRUCTORS	: Bobis, Fernandez, Menor, Siao
CONSULTATION HOURS	:
COURSE LEARNING OUTCOMES	: At the end of the semester, the students are able to:

Cognitive:

- 1. Examine integrated areas of HCI.
- 2. Use existing interactive systems and applications associated with HCI.
- 3. Create and evaluate simple applications related with HCI and
- 4. Formulate possible solutions to HCI design issues through learning activities related to HCI technologies.

Affective:

- 1. Appreciate the importance of learning HCI in creating and implementing applications.
- 2. Demonstrate a sense of responsibility in collaborative exercises and group’s deliverables.
- 3. Demonstrate passion and excellence in delivering the course requirements.
- 4. Develop positive attitude and teamwork in group activities.

LEARNING PLAN

Time Frame	Intended Learning Outcomes	Course Contents	Teaching and Learning Activities	Evidence of Learning/Output (Summative/Formative Assessment/Performance Assessment)	Learning Resources
Week 1-2	<p>Discuss the definition and importance of HCI in creating software and technology</p> <p>Discuss every HCI Principle and provide examples</p>	<p>Orientation/Course Introduction</p> <p>Introduction to Human Computer Interaction</p> <p>Importance of HCI</p> <p>Principles of HCI</p> <ul style="list-style-type: none"> ○ “Know Thy User” ○ Understand the Task ○ Reduce Memory Load ○ Strive for Consistency ○ Naturalness 	<p>Lecture and discussion of the topics using PowerPoint presentations</p> <p>Readings</p>	<p>Assignment</p> <p>Recitation</p> <p>Quiz</p>	<p>Course Outline</p> <p>PowerPoint Presentation Module 1</p>
Week 3-4	<p>Discuss and explain the different criteria and categories of HCI Guidelines</p>	<p>HCI Guidelines Criteria and Categories</p> <ul style="list-style-type: none"> ○ User Type ○ Platform/System Setup ○ Vendors/Organizations ○ Interface Style/Modality/Technology ○ Task/Operational Context 	<p>Lecture and discussion of the topics using PowerPoint presentations</p> <p>Readings</p>	<p>Assignment</p> <p>Recitation</p>	<p>PowerPoint Presentation Module 2</p>

	Discuss the example of HCI Guidelines and provide examples of application and technology	Example of HCI Guidelines <ul style="list-style-type: none"> ○ Visual Display Layout ○ Information Structuring And Navigation ○ Taking User Input ○ Users with Disability (User Type) 			
Week 5-6	Discuss Human Factors as HCI Theories Discuss the Human Information Processing Discuss the Human Factors such as Sensation and Perception of Information, and Human body ergonomics and provide examples of application and technology	Human Information Processing Sensation and Perception of Information <ul style="list-style-type: none"> ○ Visual ○ Aural ○ Tactile and Haptic ○ Multimodal Interaction Human Body Ergonomics <ul style="list-style-type: none"> ○ Fitt's Law ○ Motor Control 	Lecture and discussion of the topics using PowerPoint presentations Readings	Assignment Recitation Quiz	PowerPoint Presentation Module 3
Week 7-8	Discuss HCI Design Process	Design Process Interface Selection Options <ul style="list-style-type: none"> ○ Hardware Platforms ○ Software Interface Components Wire-Framing	Lecture and discussion of the topics using PowerPoint presentations Readings	Recitation Lab Activity	PowerPoint Presentation Module 4

		<p>“Naive” Design Example</p> <ul style="list-style-type: none"> ○ Requirements Analysis ○ User Analysis ○ Making a Scenario and Task Modeling ○ Interface Selection and Consolidation 			
Week 9	Midterm Examination				
Week 10-11	<p>Understanding the UI Layer and its Execution Framework</p> <p>Discuss the Input and Output at the Low Level</p> <p>Discuss the Processing the Input and generating output</p>	<p>Layer</p> <p>I/O</p> <p>Events</p> <ul style="list-style-type: none"> ○ Events, UI Objects, and Event Handlers ○ Event-Driven Program Structure ○ Output 	<p>Lecture and discussion of the topics using PowerPoint presentations</p> <p>Readings</p>	<p>Assignment</p> <p>Recitation</p> <p>Quiz</p> <p>Case Study discussion</p>	PowerPoint Presentation Module 5
Week 12-13	<p>Discuss the different UI Toolkit</p> <p>Discuss The Java AWT UI Toolkit</p> <p>Discuss The Android UI Execution Framework and Toolkit</p> <p>Discuss The IOS UI kit</p>	<p>User Interface Development</p> <ul style="list-style-type: none"> ○ UI Toolkit ○ Web Tool kit ○ Mobile Tool kit 	<p>Lecture and discussion of the topics using PowerPoint presentations</p> <p>Readings</p>	<p>Assignment</p> <p>Recitation</p> <p>Quiz</p> <p>Case Study discussion</p>	PowerPoint Presentation Module 6

	Framework and Toolkit				
Week 14-15	<p>Discuss and provide example of Evaluation Criteria</p> <p>Discuss the different methods on how to evaluation the application/technology design</p>	<p>Evaluation Criteria</p> <ul style="list-style-type: none"> ○ Usability ○ User Experience (UX) <p>Methods</p> <ul style="list-style-type: none"> ○ Focus Interview/Enactment/Observation Study ○ Expert Heuristic Evaluation ○ Measurement ○ Safety and Ethics in Evaluation 	<p>Lecture and discussion of the topics using PowerPoint presentations</p> <p>Readings</p>	<p>Assignment</p> <p>Recitation</p> <p>Case Study discussion</p>	PowerPoint Presentation Module 7
Week 16	Case Study Preparation				
Week 17	Case Study Presentation				
Week 18	Final Examination				

READINGS AND REFERENCES

- **Dan Michael A. Cortez, et,al.** (2021). *Essentials of Human Computer Interactions*. UNLIMITED BOOKS LIBRARY SERVICES & PUBLISHING INC.
- **Teodoro Revano Jr. PhD, Dr. Charlemagne Lavina** (2023). *INTRODUCTION TO HUMAN COMPUTER INTERACTION*.
- <https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed?srsltid=AfmBOorkcKSLJT9ME-YdTmy4R26l4F7TvD6XGtuaGDCZ2dIrS3FzZRrw>
- https://www.tutorialspoint.com/human_computer_interface/guidelines_in_hci.htm
- <https://www.figma.com/resource-library/human-computer-interaction/>

COURSE REQUIREMENTS

Taking and Passing all Quizzes and Major Examinations
 Completion and Submission of Laboratory Exercises and Project
 Completion of assignments and readings
 Class Participation

GRADING SYSTEM

Criteria	Midterm	Final Grading Period
Class Participation	5%	5%
Quizzes	30%	30%
Recitation	5%	5%
Activity / Exercises / Assignments	20%	20%
Major Examination	40%	40%

CLASSROOM POLICIES:

Regular attendance is expected of all students. Attendance will be recorded at the start of each class. A student is allowed a maximum of three (3) unexcused absences per semester.

Students are expected to arrive on time for every class. Three (3) instances of tardiness will be considered equivalent to one (1) unexcused absence.

Students who cannot attend an examination must inform the professor either in advance or at the first possible opportunity, providing a valid reason (e.g., medical emergency). The administration of a make-up examination may be arranged at the discretion of the instructor, depending on the legitimacy of the given reason. Failure to contact the instructor or failure to provide an acceptable explanation will result in a grade of zero (0) for the examination in question.

Assignments and all course requirements must be submitted on the due date. If a student is unable to submit on time due to valid reasons, they must inform the professor in advance or as soon as possible.

Engagement in class discussions and activities is highly encouraged and will count towards the final grade. Students are expected to make contributions to discussions, ask questions, and to engage with the course material.

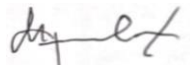
Students should respect all the opinions and contributions of others during discussions. No disruptions or disrespect will be tolerated and may invoke disciplinary action.

Academic integrity is expected of all students. No form of cheating, plagiarism, or other dishonest conduct in any academic endeavor is tolerated. This includes copying others' work, using unauthorized materials on a test, claiming work done by another as one's own, or falsifying data.

Prepared by:



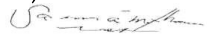
BOBIS, Berlinne



FERNANDEZ, Michael



MENOR, Dawn Bernadette



SIAO, Samantha

Faculty Members

Noted by:



Department Chairperson

Approved by:



RIEGIE D. TAN
College Dean