

Syllabus

Course Title: Human Computer Interaction
Course Number: CIT 411

Course Description:

Investigates and analyzes user-centered methodologies in the development, evaluation, and deployment of IT applications and systems. Emphasizes HCI areas such as user and task analysis, human factors, ergonomics, accessibility standards, and cognitive psychology.

Prerequisite Courses:

Prerequisite(s): CIS 325.

Course Overview

The goal of this course is introduce the student to the area of human computer interaction and interaction design.

Key concepts covered in this course include:

- The user experience
- Conceptualizing interaction
- Cognitive, social, and emotional aspects of interaction
- Interface types
- Data gathering, analysis, interpretation, and presentation
- The process of interaction design
- Evaluating designs for usability

Course Outcomes:

Upon completion of this course, learners should be able to:

- Describe what interaction design is and how it relates to human-computer interaction and other fields.
- Explain the relationship between the user experience and usability.
- Discuss how to plan and run data gathering.
- Describe the different kinds of product requirements.

- Develop a scenario, a use case, and an essential use case from a simple problem description.
- Explain the use of scenarios and prototypes in interactive design.
- Identify and critique interaction design patterns.
- Explain the different methods used to evaluate designs.

Course Materials:

Required Texts:

Preece, J., Sharp, H., & Rogers, Y. (2015). *Interaction Design: Beyond Human-Computer Interaction* (4th ed.). UK: John Wiley & Sons Ltd. ISBN-13: 978-1119020752

American Psychological Association. (2010). *Publication Manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association. ISBN 1433805618, 978-1433805615. Companion website: <http://www.apastyle.org>.

Technology Tools:

Minimum Technology Requirements: <http://www.regis.edu/CPS/CPS-Student-Portal/College-for-Professional-Studies/Academic-Resources/Online-Learning/System-Requirements.aspx>.

Pre-Assignment:

Online Format: Sign on to D2L (Home Page) and become familiar with the course navigation of the Web Curriculum. Read chapters 1 & 2 from the textbook,

Classroom-based Format: Sign on to D2L (Home Page) and become familiar with the course navigation. Read chapters 1 & 2 from the textbook,

Pre-Assignment Due Dates:

Classroom-based Format: This assignment is due the first night of class.

Online Format: The instructor will specify the due date for this assignment.

Course Assignments and Activities:

	Topics	Readings	Activities Assignments and Associated Points
1	Interaction Design and Conceptual Models	Text : Chapters 1 & 2	Class Discussion: <ul style="list-style-type: none"> • Introductions • Discussion 1 (25 pts)
2	Cognitive, Social, and Emotional Aspects.	Text: Chapter 3, 4 & 5	Class Discussion: <ul style="list-style-type: none"> • Discussion 2 (25 pts) Written Assignment: <ul style="list-style-type: none"> • Collaboration, coordination and Communication (100 pts)
3	Interfaces	Text: Chapter 6	Class Discussion: <ul style="list-style-type: none"> • Discussion 3 (25 pts) Written Assignment: <ul style="list-style-type: none"> • Virtual Agents (100 pts)
4	Data Gathering	Text: Chapter 7	Class Discussion: <ul style="list-style-type: none"> • Discussion 4 (25 pts) Written Assignment: <ul style="list-style-type: none"> • Interface design (100 pts)
5	Data Analysis, and Interpretation	Text: Chapters 8	Class Discussion: <ul style="list-style-type: none"> • Discussion 5 (25 pts) Written Assignment: <ul style="list-style-type: none"> • Innovative timepiece design (100 pts)
6	The Design Process, Requirements Gathering and Analysis	Text : Chapters 9 & 10 Articles: Schneier, B. (2005)	Class Discussion: <ul style="list-style-type: none"> • Discussion 6 (25 pts) Written Assignment: <ul style="list-style-type: none"> • Ticketing System Part 1 (150 pts)
7	Design Prototyping and Construction	Text : Chapters 11 & 12	Class Discussion: <ul style="list-style-type: none"> • Discussion 7 (25 pts) Written Assignment: <ul style="list-style-type: none"> • Ticketing System Part 2 (150 pts)
8	Design Evaluation	Text : Chapters 13, 14, & 15	Class Discussion: <ul style="list-style-type: none"> • Discussion 8 (25 pts) Written Assignment: <ul style="list-style-type: none"> • Ticketing System Part 3 (100 pts)
			Maximum Points Possible: 1000

Course Policies and Procedures:

CC&IS Grading Scale

Letter Grade	Percentage	Grade Point
A	93 to 100	4.00
A–	90 to less than 93	3.67
B+	87 to less than 90	3.33
B	83 to less than 87	3.00
B–	80 to less than 83	2.67
C+	77 to less than 80	2.33
C	73 to less than 77	2.00
C–	70 to less than 73	1.67
D+	67 to less than 70	1.33
D	63 to less than 67	1.00
D-	60 to less than 63	.67
F	Less than 60	0

Additional information about grading can be found in the latest edition of the University Catalog, available at <http://www.regis.edu/Academics/Course%20Catalog.aspx>.

CC&IS Policies and Procedures

Each of the following CC&IS Policies & Procedures is incorporated here by reference. Students are expected to review this information each term, and agree to the policies and procedures as identified here and specified in the latest edition of the University Catalog, available at <http://www.regis.edu/Academics/Course%20Catalog.aspx> or at the link provided.

- The CC&IS Academic Integrity Policy.
- The Student Honor Code and Student Standards of Conduct.
- Incomplete Grade Policy, Pass / No Pass Grades, Grade Reports.
- The Information Privacy policy and FERPA. For more information regarding FERPA, visit the [U.S. Department of Education](http://www.ed.gov).
- The HIPAA policies for protected health information. The complete Regis University HIPAA Privacy & Security policy can be found here: <http://www.regis.edu/About-Regis-University/University-Offices-and-Services/Auxiliary-Business/HIPAA.aspx>.
- The Human Subjects Institutional Review Board (IRB) procedures. More information about the IRB and its processes can be found here: <http://regis.edu/Academics/Academic-Grants/Proposals/Regis-Information/IRB.aspx>.

The CC&IS Policies & Procedures Syllabus Addendum summarizes additional important policies including, Diversity, Equal Access, Disability Services, and Attendance & Participation that apply to every course offered by the College of Computer & Information Sciences at Regis University. A copy of the CC&IS Policies & Procedures Syllabus Addendum can be found here: <https://in2.regis.edu/sites/ccis/policies/Repository/CCIS%20Syllabus%20Addendum.docx>.