CIS 1410-NET01 Introduction to Human Computer Interaction

Course Information

Semester Credit Hours: 3 **Lecture Hours:** 3 **Lab Hours:** 0

Course Meeting Dates and Times:

> **Tue**, **9:00AM – 12:50AM**, Seaton Computing Center (SCC) 110
> **Start Date:** 1/27/26 **End Date:** 5/19/26

Instructor Name: Carolyn England

Instructor Contact Information:

> **COD Main #:** 942-4125 Voicemail (*email preferred*)
> **Office**: BIC 1544B (Division Office TEC1034)
> **Mailbox**: BIC 1E01
> **Office Hours**: see https://www.cod.edu/faculty/websites/england/index.aspx
> **Email**: england@cod.edu
> An honest effort for all email responses will be made within 24 hours, except for holidays and weekends. Please include **CIS1410-001** in the email subject line for timely response.

Course Description

Introduction to basic concepts in theory and practice of (HCI) Human Computer Interaction, a discipline concerned with design, implementation, and evaluation of interactive computing systems for human use. Emphasis is on the structure of communication between consumers and computers, capabilities of people to use computers, and concerns that arise in the process of designing and building interfaces between humans and computers. Particular focus is placed on practical design and usability between people and computing systems.

Repeatable for credit: No

Prerequisites:

> CIS 1400 Programming Logic & Technique with a grade of "C" or better, or Consent of Instructor.

Course Objectives

Upon successful completion of the course the student should be able to do the following:

1. Introduce concepts and history of (HCI) Human Computer Interaction
2. Explain importance of HCI for interactive computing system design
3. Summarize a variety of user research and evaluation techniques in HCI
4. Discuss principles of user centered design
5. Recognize role of human factors in system usability
6. Apply HCI principles to (UI) User Interface design
7. Explain methods for evaluating UI effectiveness

Topical Outline

1. History and importance of (HCI) Human Computer Interaction
   a. User centered design
   b. Human factors
2. Ongoing research studies in HCI
3. Interaction of hardware and software in HCI
4. User differences in design
   a. Physical limitations
   b. Age
   c. Cultural
   d. Social
5. UI (User Interface) metaphors
   a. Direct manipulation
   b. Immersive environments
   c. Navigation and organization
   d. Language and speech
   e. Devices
6. Interface mockups
   a. Paper
   b. Wireframe designs
   c. Storyboarding
   d. Prototyping
7. Evaluating user experience
   a. UI design
   b. Expectations and consistency
   c. Response times
   d. Acceptance testing

Textbook

- **Designing the User Interface: Strategies for Effective Human-Computer Interaction** by Ben Schneiderman, Publisher: Pearson Education, 6th Edition, ISBN-13: 978-0-13-438038-4.

Tentative Course Outline

Any modifications to the outline below are up to the discretion of the instructor and will be discussed during class time and/or announced on Blackboard:

Week(s)	Topic(s)
1	Course Introduction and Overview
2	1 → Introduction to HCI
3	2 → Universal Usability
4	3 → Guidelines, Principles, and Theories
5	4 → Design
6	5 → Evaluation and the User Experience
7	6 → Direct Manipulation and Immersive Environments
8-9	Team Design Project 1
10	Spring Break
11-12	7 → Fluid Navigation
13	8 → Expressive Human and Command Languages
14	9 → Data Visualization
15-16	Team Design Project 2
17	Course Final Summary and Feedback

See Blackboard for details on specific topic objectives, readings, lectures, supplemental material, postings, assignments, projects, and quiz due dates/times. Please email the instructor if you have any questions, concerns or suggestions regarding course material and delivery. Assistance is also available free of charge through **Tutoring & Academic Support Center**: https://www.cod.edu/academics/tasc/

Please refer to the **Tutoring & Academic Support Center** under the **Institution Page** (*in Blackboard*) for more information about tutoring.

Methods of Evaluation

Category	Approx. % of Total
Discussions	10
Assignments	46
Quizzes	35
Projects	9

Grading Scale

Grade	% of Total
A	>= 90%
B	80% to 89%
C	70 to 79%
D	60 to 69%
F	< 60%

Course Policies

Academic Integrity

The CIS Department believes personal honesty and integrity are as important in the computer field as technical skill. We want our degrees and certificates to reflect this belief. To help students understand what constitutes dishonesty in a CIS course, we have developed the following policy:

1. A student should complete all assignments, projects, quizzes, and tests individually unless the instructor gives permission to work with a partner or a group.
2. If an instructor requests the source files or data files used to produce the output, a student should be able to submit storage media that contains his/her individual work.
3. A student must not intentionally use, or attempt to use, another student's work.
4. A student must not knowingly assist another student in the dishonest use of course materials.
5. A student must not copy material from the Internet, books, magazines, newspapers, or any other source without acknowledgment.
6. A student must not copy material from the course for the purpose of providing to other students and/or posting on Internet site(s).

Topic objectives are based upon **content in the course textbook, lectures, and supporting online resources as indicated with each topic's material in Blackboard**. Improper use of

generative AI and/or without acknowledgement tools to complete topic requirements will adversely affect students' assessment of course learning objectives.

Coursework submitted by the student that is either found online, significantly similar to other submitted work, or violates any of the above conditions, is subject to one or more of the following:

- Grade of 0 for the assignment

- Failing grade for the course

- Formal report filed with the Associate Vice President for Student Affairs. The student(s) will have the opportunity to meet with the Associate Vice President and/or appear before a Judicial Review Board to contest this report. Suspension, expulsion, or a record of the event on the student's transcript may result.

Learn more about the **Code of Academic Conduct** at College of DuPage.

Attendance

Class attendance and active participation are essential if a student wishes to receive maximum benefit from this class. Students are expected to attend scheduled class sessions, check their COD email and Blackboard courses regularly for course announcements, due dates, and updated course material. Any student questions or concerns about course material and requirements should be directed to the instructor via email as soon as possible to ensure resolution in a timely manner.

Discussions and hands-on class exercises will be practiced during scheduled class time to assist in understanding and application of course concepts. Any discussions and hands-on exercises completed during class time are dynamically created and **only available during class time**. Students unable to attend class should contact a fellow student for any course material completed during class time.

Although attendance does help one's final grade, **perfect attendance alone does not guarantee a passing grade.**

Course Commitment and Student Responsibilities

This course involves lecture, reading, online research, discussions, assignments, and quizzes. All courses require a **regular weekly** time commitment from the student to be successful. Recommendations estimate that **for each credit hour**, students should expect to spend an additional **2-3 hours** doing homework, readings, and discussions. For example, a **3-credit** hour

class would require **3 hours** of class/lecture time, plus **6-9 hours** of study, resulting in **9-12 hours total weekly investment**.

Students having difficulty with course material have the following available options for extra assistance:

- request instructor assistance through email or an appointment during scheduled office hours. Every attempt will be made to answer e-mail on a 24-hour turnaround basis (during the Monday through Friday week; messages sent during weekend/holiday times will be responded to during the next scheduled office hour). When sending an e-mail please indicate **your name**, in which **course you are currently enrolled**, the problem you are having, and how best to contact you with a resolution.
- utilize assistance and tutoring resources available through the **Institution Page** upon Blackboard login and through the **Tutoring & Academic Support Center** menu link in Blackboard.

Generative AI

Students are **not** allowed to use advanced automated tools (*artificial intelligence or machine learning tools such as ChatGPT, Gemini, Claude, GitHub Copilot, Microsoft CoPilot, etc.*) on assignments/quizzes in this course **unless indicated on posting/assignment/quiz instructions**. Each student is expected to complete each assignment/quiz without substantive assistance from others, including automated tools. Failure to do so may adversely affect assessment of student topic objectives and final course grade.

Topic Requirements

Due dates/times for all topic requirements (i.e. discussions, assignments, quizzes, projects) are included in the Blackboard course. Be sure to complete all material and submit before the required due date/time. **Submission links for all topic requirements are removed from Blackboard after their due dates/times.** Allow a minimum of two-week turnaround for topic requirement grading.

Do not wait until the last minute to do your topic requirements. Technology can sometimes be unpredictable. Technology problems cannot be used as an excuse for late work. You are responsible for backing up your work. If your computer crashes, you are still required to turn in your work on-time.

If you have technical issues, you may request a laptop from the **COD Library** to use for the entire semester by contacting the library using this form on the Library website.

Discussions:

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Some course topics have discussions where students will further research course concepts and report results via graded discussion posts, in classroom discussions, and/or student created videos. **Student created videos must be uploaded to the College's YuJa webserver and the YuJa link made available with the assignment for grading**. Follow posting instructions to maximize potential points. Topic **discussion posts** are due **before lab assignments** to encourage timely scheduled completion of topic requirements. **Late discussion board postings and email discussion board postings are not accepted for grading.**

Assignments:

All course topics have a lab assignment. Lab assignments will have **two attempts** should students turn in an incorrect file or need to make a modification. The **last submission** will be used for grading and **must include** all necessary file(s) in the **proper format** for grading **before the due date/time**.

Topic **lab assignments** are due **before quizzes** to allow students any needed assistance before the weekend when these resources may not be available. **Late assignments and email assignments are not accepted for grading.**

Quizzes:

All course topics have a **timed** quiz. **Allow yourself enough time to complete the quiz in one sitting by the due date/time. All attempts in progress will be automatically submitted when the quiz time limit has elapsed, or the due date/time has passed.**

Topic **quizzes** are due **after lab assignments** to encourage timely scheduled completion of topic requirements. Topic quizzes require submission of a topic lab assignment before becoming available for completion. **Late quizzes are not accepted for grading.**

Projects:

Students complete **two** design projects demonstrating their cumulative knowledge of course concepts in a **team-based project environment**. Course projects will require **collaboration among the team members** as well as potential **team meetings with the instructor** on work progress. Students not attending team meetings (*in class or virtual*) **may lose a portion of their project participation points for non-attendance**. **Late projects and email projects are not accepted for grading.**

Students will also perform **peer reviews** of *other* submitted projects as part of their demonstrated course competency. Depending upon course instructional format, projects will include an in class or video presentation for peer and instructor viewing and grading.

Project teams will be identified and project assignments made available (*at least*) two weeks prior to their due dates. **Late peer reviews and email peer reviews are not accepted for grading.**

Incompletes

No Satisfactory/Fail/Incompletes will be given in this course.

The College policy on Satisfactory/Fail (S/F) Grade Option can be found in the College catalog under Academic Policies and Procedures, Earning College Credit:

https://catalog.cod.edu/academic-policies-procedures/

College Policies

Late Withdrawal Policy

The final day for a student to withdraw from any course will be equal to 75% of the time for the respective academic session (**access the Academic Calendar**) through **myACCESS** on the **COD Portal** or in person at the Office of Student Registration Services. More details on the withdrawal process, GPA, transcript, and financial implications can be found online at **Registration Information**.

Access and Accommodations

The College of DuPage is committed to the equitable access of educational opportunities for students with disabilities in accordance with The Americans with Disabilities Act, As Amended and Section 504 of the Rehabilitation Act of 1973. Any student who feels they may need an accommodation on the basis of an illness, injury, medical condition, or disability should contact the Center for Access and Accommodations to determine eligibility for accommodations and to obtain an official Letter of Accommodation. Connecting with the Center for Access and Accommodations is an important way to make sure that any student who has a need based on a disability, illness, injury, or medical condition is provided with appropriate accommodations.

The **Center for Access and Accommodations** can be reached via email at *AccessAccommodations@cod.edu*. Students may also initiate a request for services by going to **Center for Access and Accommodations** and clicking on the green box labeled "**Request Accommodations**". If you are already registered with the Center for Access and Accommodations, please email me your Letter of Accommodation within two weeks (14 calendar days) of the start of the semester or within one week (7 calendar days) of receipt of an official Letter of Accommodation to ensure proper course accommodations are in place. Please include the course and section number with your email so the proper accommodations can be made for the indicated course. For your own privacy, please **DO NOT** send any private health documentation or Doctor's notes to me.

Student Rights and Responsibilities

Students at the College of DuPage are expected to review and understand their **rights and responsibilities** as outlined in the Code of Student Conduct, Code of Academic Conduct, and the Student Non-academic Complaint Process.

Class Cancellation and College Closure Policy

Students are responsible for checking their COD email account for notices of class cancellation.

COD Alerts, powered by the Everbridge App, is the College of DuPage's automated system for notifying you of school closings, emergency situations, and other important information. You are automatically enrolled when you register for a class and remain in the system until you have not enrolled in classes for three consecutive terms.

COD Alerts can send notifications via text message, email, and even voice messages to your phone. To ensure you receive alerts, download the Everbridge app from your phone's app store *(Apple App Store or Google Play)*.