

Course Syllabus

 Edit

CSC 442/642: Human-Computer Interface Development

COURSE INFORMATION

For Whom Planned:

- CSC 442: Upper level undergraduate students
- CSC 642: Computer Science MS students

Credits: 3

Prerequisites:

For undergraduates: Grade of C or better in CSC340. For graduate students: satisfaction of all provisional admission requirements for CSC130/230/330.

All students are expected to have basic object-oriented programming language skills and to learn on their own any new computer skills needed to implement the course project.

Regular course, in-person lectures, required attendance

TuTh 11:00-12:15

INSTRUCTOR INFORMATION:

Name: Dr. Regis Kopper

Office Location: Petty 160

Email: kopper@uncg.edu (<mailto:kopper@uncg.edu>)

Office Hours: Tuesdays 2:00-3:45pm

Pronouns: he, him, his

TEXTBOOK:

Required textbook:

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, 2017. (Digital: ISBN-13: 978-0-13-438083-4. Print: ISBN-13: 978-0-13-438038-4.) (Web site: <https://www.pearson.com/us/higher-education/program/Shneiderman-Designing-the-User-Interface-Strategies-for-Effective-Human-Computer-Interaction-6th-Edition/PGM327860.html>)

<https://www.pearson.com/us/higher-education/program/Shneiderman-Designing-the-User-Interface-Strategies-for-Effective-Human-Computer-Interaction-6th-Edition/PGM327860.html>.)

REFERENCES:

Free on-line JavaScript, HTML, CSS tutorials and reference manuals:

<https://www.w3schools.com/default.asp> [_ \(https://www.w3schools.com/default.asp\)](https://www.w3schools.com/default.asp)

COURSE DESCRIPTION AND LEARNING OUTCOMES:

A survey of concepts and techniques for human-computer interface development.

Student Learning Outcomes: Upon completion of the course students should be able to:

1. Demonstrate knowledge of foundations and terminology of the field of Human-Computer Interaction
2. Demonstrate knowledge of methods for user-centered design of human computer interfaces
3. Demonstrate knowledge of methods for evaluating human-computer interfaces
4. Apply knowledge outlined above in 1-3 to the requirements analysis, design, implementation, and evaluation of a graphical user interface in a course project; and present project deliverables in written and/or oral form
5. Apply knowledge outlined above in 1-3 to analyze the design and evaluate the usability of real-world human-computer interfaces; and communicate the analysis and evaluation in written and oral form.
6. (graduate students only): Summarize and evaluate evidence-based HCI literature.

TEACHING STRATEGIES:

In-person lectures; in-class discussions; book readings; slide decks; regular assignments and exercises

ATTENDANCE POLICY: (thanks to Prof. Armstrong!)

- Attendance is a key component in learning. You must attend during your scheduled class section time.
- Attendance will be taken. You will be marked absent: if you do not attend the lectures; if you leave the classroom for a significant portion of the time; or if it is observed that you are attending but are not actually paying attention to the class.
- There will be graded in-class assignments, and if you miss a lecture, you won't be able to make up the missed assignment.
- The instructor reserves the right to drop any student who misses three class meetings/tests without prior approval.
- The university allows for a limited number of excused absences for religious observances --- students who plan to take such an absence should notify the instructor two weeks in advance so that accommodations can be made.
- It is your responsibility to obtain notes from another student if you miss a lecture. The instructor will not give private instruction for missed lectures nor will the instructor provide personal lecture notes.

Get the notes from another student, review the material, and then seek assistance for topics that are not clear.

COURSE STRUCTURE:

- Weekly Modules
 - Textbook readings
 - In-person lectures (TH 11:00-12:15)
 - Discussion
 - Exercises/quizzes
- Homework assignments
 - Focus on demonstrating gained knowledge / preparing for exams
- 5-phase individual class project
 - Focus on practicing HCI and design concepts
- Exams
 - Demonstrating gained knowledge. 2 non-cumulative exams

EVALUATION METHODS AND GUIDELINES FOR ASSIGNMENTS:

1. Weekly Exercises

There will be exercises to consolidate knowledge gained during the weekly modules. These exercises will include quizzes, design practices and tutorials that students should complete in order to put to practice or consolidate the knowledge gained in each module. These exercises should be completed individually, and student may refer to course notes.

2. Project

The project will be a group project that will involve the design and implementation of a graphical user interface for a scenario yet to be determined. The project will follow the iterative design process and will be done in groups of 3 students. There will be 5 parts building on each other, and the final product will be a tested and validated GUI.

3. Exams

There will be two closed notes, closed books exams.

4. Late Policy

Assignments submitted after the deadline will be considered late. Assignments late up to 24h will receive 80% credit. Assignments submitted over one day late will not receive credit.

Grading Scheme

- Quizzes and exercises (20%)

- Homework assignments (10%)
- Class project (40%)
 - Five phases: 7%, 7%, 8%, 7%, 11%
- Midterm Exam (15%)
- Final Exam (15%)

Note: The project will involve a strong research component for graduate students.

GRADING SCALE:

Letter Grade	% points accumulated
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A	≥ 94.0
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A-	90.0-93.9
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B+	87.0-89.9
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B	84.0-86.9
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B-	80.0-83.9
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C+	77.0-79.9
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C	74.0-76.9
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C-	70.0-73.9
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D+	67.0-69.9
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D	60.0-66.9
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F	<60.0
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ACADEMIC INTEGRITY POLICY:

Each student is required to sign the Academic Integrity Policy on all major work submitted for the course.

Refer to the following URL: [Academic Integrity](https://osrr.uncg.edu/academic-integrity/)

[\(https://osrr.uncg.edu/academic-integrity/\)](https://osrr.uncg.edu/academic-integrity/).

Violations to academic integrity will be taken seriously. All and any violations will be reported at the departmental level and may be reported to the university. Please see the department [policy](https://compsci.uncg.edu/students/academic-integrity-policy/) [\(https://compsci.uncg.edu/students/academic-integrity-policy/\)](https://compsci.uncg.edu/students/academic-integrity-policy/) for details.

ACCOMMODATIONS:

UNCG seeks to comply fully with the Americans with Disabilities Act (ADA). Students requesting accommodations based on a disability must be registered with the Office of Accessibility Resources and Services (OARS) in 215 Elliott University Center, 334-5440, oars.uncg.edu [\(http://ods.uncg.edu/\)](http://ods.uncg.edu/).

COVID-19 STATEMENT:

As we return for fall 2021, the campus community must recognize and address continuing concerns about physical and emotional safety, especially as we will have many more students, faculty, and staff on campus than in the last academic year. As such, all students, faculty, and staff are required to uphold UNCG's culture of care by actively engaging in behaviors that limit the spread of COVID-19. Such actions include, but are not limited to, the following:

- [Following face-covering guidelines](https://update.uncg.edu/community-standards/) [\(https://update.uncg.edu/community-standards/\)](https://update.uncg.edu/community-standards/)
- Engaging in proper hand-washing hygiene when possible
- Self-monitoring for symptoms of COVID-19
- Staying home if you are ill
- Complying with directions from health care providers or public health officials to quarantine or isolate if ill or exposed to someone who is ill.

Instructors will have seating charts for their classes. These are important for facilitating contact tracing should there be a confirmed case of COVID-19. Students must sit in their assigned seats at every class meeting and must not move furniture. Students should not eat or drink during class time.

To make it easier for students to hear their instructor and/or read lips and if conditions permit, instructors who are fully vaccinated and who can maintain at least six feet of distance from students may remove their masks while actively teaching if they choose, but will wear a mask at all other times while in the classroom, including during the periods before and after class

A limited number of disposable masks will be available in classrooms for students who have forgotten theirs. Face coverings will also be available for purchase in the UNCG Campus Bookstore. Students who do not follow masking requirements will be asked to put on a face covering or leave the classroom to retrieve one and only return when they follow the basic requirements to uphold standards of safety and care for the UNCG community. Once students have a face covering, they are permitted to re-enter a class already in progress. Repeated issues may result in conduct action. The course policies regarding

attendance and academics remain in effect for partial or full absence from class due to lack of adherence with face covering and other requirements.

For instances where the Office of Accessibility Resources and Services (OARS) has granted accommodations regarding wearing face coverings, students should contact their instructors to develop appropriate alternatives to class participation and/or activities as needed. Instructors or the student may also contact OARS (336.334.5440) who, in consultation with Student Health Services, will review requests for accommodations.

If you need any help for this course, feel free to contact me during office hours, by appointment or by e-mail. I am more than happy to help you.