## Syllabus: CS 320 User Interface Design - Spring 2025

Class Time:	Section 01: MWF 2pm – 2:50pm in Taylor 200
	Section 02: MWF 3pm – 3:50pm in Taylor 200
Website:	http://csweb.wooster.edu/dguarnera/cs320/
Professor:	Drew Guarnera ( <u>dguarnera@wooster.edu</u> )
Office:	Taylor 313
Office Hours:	Tues 10:00am-11:00am, Weds and Fri 4:00pm - 5:00pm by appointment

## Textbooks:

- GUI Bloopers 2.0, Second Edition (ISBN: 9780080552149), Jeff Johnson Available free from O'Reilly Online
- Designing with the Mind in Mind, Second Edition (ISBN: 9780124115569), Jeff Johnson Available free from O'Reilly Online
- Rocket Surgery Made Easy (ISBN: 9780321657299), Steve Krug Available free from O'Reilly Online
- Tracy Osborn, Hello Web Design (ISBN: 1718501382), Available free from O'Reilly Online
- The Design of Everyday Things, Revised and Expanded Edition (ISBN: 9780465050659), Don Norman

Other resources will be made available as needed.

**Course Description:** This course explores human-computer interaction theory within the design framework of the user interface (UI). The material includes user-centered design principles, prototyping and evaluation techniques, and the implementation of user interfaces. Human capabilities (including the human information processor model, perception, motor skills, color, attention, and errors) are discussed. Since design is a method of communication, part of this class is learning how to present information visually and organizationally to an audience. As such, students will engage with the content with presentations by the professor and groups of their peers. Small and medium-scale user interfaces are developed during the semester, along with several team projects. A group-based capstone project will run throughout the semester and continuously evolve as teams explore interface design theory and the process of collaborative software development.

**Course Goals:** Upon completion of this course, a successful student will be able to:

- Understand fundamental principles of design
- Design effective informative presentations
- Practice presentation skills
- Execute a usability study for a graphical user interface design
- Apprise the quality of a product design or graphical user interface
- Apply design principles to a graphical user interface
- Develop a software prototype with a graphical user interface
- Report on project design and rationale behind design implementation decisions

Prerequisites: C or better in CS 120. Offered biennially in fall.

Grading: Your final grade will be calculated as follows.

15% *Peer Presentations.* Peer presentations will be a non-trivial part of the course. This is an opportunity to practice design and content organization skills to enhance communication skills. Presentations may be assigned individually or as a group presentation. Presentations will be 25 minutes in length and summarize key concepts of readings along with new examples and insights. **Presentations are to be reviewed with the professor before or after the class session prior to the presentation date.** 

For example:

- Your presentation is scheduled Wednesday, you must meet with the professor no later than Monday of that week.
- You presentation falls on Monday, you must meet with your professor on the Friday of the previous week.

The schedule for readings and the individual(s) assigned to present that material is found on the <u>website</u>. Presenter(s) must schedule a meeting with the professor on or before the class session <u>preceding</u> their scheduled presentation date. As the semester progresses, this requirement may be laxed at the discretion of the professor.

All members of the group are expected to take equal share in the creation and presentation of the material. Presentations must be submitted the day before the scheduled presentation so a copy may be posted on the course website for the class.

10% *Participation*. You are expected to attend class, answer questions, participate in group discussion, and peer evaluate presentations. You will also be expected to have a list of **at least** three questions **NOT** answered directly by the reading (submitted to Moodle before class on the scheduled presentation day). E.g. "What is an affordance?" would not be an acceptable question if the reading defines an affordance.

Daily class attendance is a possible 3 points each class:

- Attending class **ON TIME** 1 point
- Getting the Plicker Question Correct 1 point
- Participating in class discussion 1 point

## If you are late or absent you will NOT receive any of the daily class attendance points.

Attendance and participation will be performed via Plicker. If you lose your Plicker card or forget to bring it to class, you will not earn any attendance and participation points for that day. If your card is lost, you can come to my office and I'll print you out another one, but I will not bring replacement Plicker cards to class for you. You can also download a replacement Plicker card but you will need to know your Plicker number.

If you contact me via email prior to class with an excused absence, you can post to the UI Design forum on Moodle with a **unique** example of "good" or "bad" UI design. The post must include screenshots (or gifs) from an application or a link for a website and a brief explanation three to four sentences of what makes the design good or bad in your opinion. This will be due by the end of the date of absence at 11:59 pm.

- Project Milestones. While most of the assignments in the class are group work. If an assignment does not explicitly
  mention working in groups, assume the assignment is to be completed individually. When working in groups it is essential that all members provide equitable contributions to the assignment. If I am aware of members failing to support the group, those members will receive point deductions on the assignment.
- 30% *Exams.* Two exams will be given. Each exam is worth 15% of the total grade
- 25% *Final Project.* The final project will consist of a software application with a strong graphical user interface component, customer feedback, and an individual project reflection.

This class uses the standard grading scale:		A-	B+	В	B-	C+	С	C-	D	F
										below

Note that homework assignments are primarily intended to give students opportunities to practice what they learn. Much of your learning is expected to come from practice! I hope you understand this work's value and do not regard it solely as a grading source. With this in mind, the instructor will grade a subset of homework assignments. The remaining subset may be graded partially or based on whether the work was submitted.

**Pass/Fail option.** Students can elect the equivalent of four courses (in addition to Senior Independent Study) graded S/NC out of 32 courses required for graduation [excluding courses taken S/NC in Spring 2020, Fall 2020, and Spring 2021]. The minimum equivalent grade to earn an S in courses graded S/NC is C-. The deadline for electing a Pass-Fail grading option is one week after final grades are posted.

**Course Drop.** Students may drop any course without petition by **Tuesday, Feb 25, 2025**. Students may drop a course with a petition by **Tuesday, April 22, 2025**. The minimum enrollment of 3.0 credits remains in effect. Requests to drop enrollment below 3.0 credits require additional documentation via <u>Other academic petitions</u>.

Attendance: We work best as a learning community when everyone participates. As such, it is expected that you will attend class at scheduled times and in accordance with health and safety protocols. If you cannot attend, I encourage you to check the course website and get notes from a classmate to catch up on missed materials. I will communicate any changes to this schedule to you in a timely manner.

Technology: Our class works best using our devices to further our learning. I encourage you to use technology during class time to enable, rather than distract from, our learning and community building. During class, we'll write code and critiques. Bring your laptop every day.

Communication: Communication is the key to success. <u>Contact me as soon as possible if you are struggling with material or</u> <u>if a conflict arises</u>. The best way to contact me outside of class is by coming to my office hours or asking a question via email. If you have a private concern, such as a question about your grade, we will discuss it privately in my office or over email. You should allow at least 24 hours of response time for any communication. I usually respond faster than that, but you should not count on it. Please remember this when contacting me late at night or over the weekend.

Late Policy: I will do my best to quickly grade and return assignments to you. Late submissions make timely grading and scaffolded coursework much more difficult. Many assignments support additional coursework or content. As such,

late assignments are not accepted.

Accommodations: Your success in this class is important to me. We all need accommodations to learn effectively. If aspects of this course prevent you from learning or exclude you, please let me know as soon as possible. You do not need to share specifics, but we can work together to develop strategies to meet both your needs and the course requirements, and to identify specific resources that may assist you.

Names and Pronouns. All people have the right to be addressed and referred to in accordance with their personal identity. We include pronoun introductions to avoid gender-based assumptions and ensure the correct pronoun is used when referring to you. I will do my best to address and refer to all students by the names and pronouns shared in class, regardless of what is listed on the roster, and I support classmates doing so as well. In this class, we will have the chance to indicate the name that you would like to be called and, if we choose, to identify pronouns with which we would like to be addressed. The name and pronoun(s) you use may change, and if they do, please let us know that you want us to change how we address you. You can find additional information <u>here</u> to change your chosen name and pronoun(s) in the College of Wooster system.

Other Class Policies & Academic Integrity: You must know and abide by the institution's rules described in The Scot's Key and the Handbook of Selected College Policies (found <u>here</u>). Dishonesty in any of your academic work is a serious breach of the Code of Academic Integrity and is grounds for an F in this course. Such violations include but are not limited to turning in another person's work as your own, sharing code, copying from any source without proper citation, and violating expectations for a group project. You may discuss ideas with your peers. However, sharing your code or accepting code from other students is not allowed.

In this course, my expectation is that you will not use any artificial intelligence (AI) powered programs (e.g., ChatGPT, DALL-E, etc.) to help you with your assignments. Using AI-generated work to outline, write, create, or edit your assignments will be considered an academic integrity violation. These programs may provide inaccurate or biased information, but more importantly, they do not serve your development as a student. In this course you will learn valuable skills from outlining, generating, and editing <u>your own</u> work. If you have any questions about this policy or are unsure if a resource you found will violate this policy, please ask.

You must be an active learner for this class to be effective and enjoyable. You are expected to contribute to each class session. This includes arriving on time, actively working on the in-class activity, asking questions, and answering others' questions. Students who are successful in this course are responsible for their preparation. This means reading the assigned chapters, checking the course website for updates and upcoming deadlines, and completing assignments on time.

Behavior that is discouraged includes but is not limited to disrespectful interactions such as yelling/cursing, intolerant language, tardiness, and misuse of technology for purposes unrelated to the class. Students who don't abide by my standards of classroom interaction and who engage in behaviors that disrupt and distract in the learning environment will be subject to the procedures laid out in Scot's Key.

**Conflicts with Academic Responsibilities:** When conflicts arise between academic commitments and complementary programs (including athletic, cultural, educational, and volunteer activities), students, faculty, staff, and administrators all share the responsibility of minimizing and resolving them. The College expects students to give the highest priority to their academic responsibilities. As a student, you have the responsibility to inform me of potential conflicts as soon as you are aware of them and to discuss and work with me to identify alternative ways to fulfill your academic commitments without sacrificing the academic integrity and rigor of the course.

**Title IX:** The College is committed to fostering a campus community based on respect and nonviolence. To this end, we recognize that all Wooster community members are responsible for ensuring that our community is free from discrimination, gender bias, sexual harassment, and sexual assault. In accordance with Title IX, Wooster is legally obligated to investigate incidents of sexual harassment and sexual assault that occur on our campus. Faculty who become aware of an incident of sexual violence, including harassment, rape, sexual assault, relationship violence, or stalking, are required by law to notify Wooster's Title IX Coordinator. The purpose of this disclosure is to ensure that students are made aware of their reporting options and resources for support. For more information about your rights and reporting options at Wooster, including confidential and anonymous reporting options, please visit <u>here</u>.

**MCS Department:** The College of Wooster is committed to inclusive excellence in undergraduate education, and our department seeks to actively foster a welcoming learning environment in which diversity and individual differences are valued, respected, and celebrated. Diversity comes in many forms, including but not limited to, race, color, national origin, ancestry, sex, gender identity and expression, sexual orientation, socioeconomic status, religion, age, and physical and/or mental abilities. The diversity that students and staff bring to the classroom is an invaluable resource, strength, and benefit to everyone at the College of Wooster. As such, we are vigilant and attentive about issues of diversity, equity, and inclusion in the classroom. Expressions or actions disparaging others are contrary to the mission of the department and will not be tolerated.

Additional Resources. Please view the course website for additional links and resources, including information on Moodle, the Academic Resource Center, Library Support, health and safety guidelines, Title IX, and discriminatory or bias-related harassment reporting.

**We're All Human.** Let's all practice empathy, kindness, and understanding - towards each other and ourselves. Although every effort has been made to make this syllabus as complete as possible, changes may occur regarding the course schedule, grading, assignments, and office hours. I reserve the right to change this syllabus and other course resources if necessary. Any changes will be communicated promptly.