Ecampus SYLLABUS

Course and instructor information

Course Name:	**CS 352 – Introduction to Usability Engineering**
Credits:	4
Instructor Name:	Philipp Jordan, Ph.D.
Instructor Email:	philipp.jordan@oregonstate.edu
Instructor Office:	No on-campus office (message for zoom meetings)
Graduate Teaching Assistant:	Arash Shahbaz Badr | shahbaar@oregonstate.edu
Undergraduate Learning Assistants (ULAs):	Neha Sharma | sharman@oregonstate.edu Scott Hudson | hudsonsc@oregonstate.edu
Course Syllabus & Schedule:	https://canvas.oregonstate.edu/courses/1784221/assignments/syllabus
Piazza Space:	piazza.com/oregonstate/fall2020/cs_352_400_f2020
Slack Space:	class-cs352-400-f20.slack.com/

OSU catalog course description: Basic principles of usability engineering methods for the design and evaluation of software systems. Includes the study of human-machine interactions, user interface characteristics and design strategies, software evaluation methods, and related guidelines and standards.

Prerequisites: CS 161 or CS 295 or CS 151 or ECE 151

Course overview

Overall goals: This class will give you hands-on experience with usability evaluation and user-centered design. In this class, you will not learn how to implement user interfaces, but rather *how to design these based on the needs of users*, which you will determine, and learn how to evaluate your designs rigorously. This is a class for those who wish to know more about usability, human-computer interaction, the psychological aspects of computing, evaluation, and/or experimentation.

Course content:

- Requirements gathering and interpretation
- Prototyping and iterative design
- Usability testing methods, and legal and ethical requirements
- Evolution of Interfaces

Your project: Much of your work will be done collaboratively (online) on group projects (~4-5 person groups). A significant portion of your grade (38%) will be based on that team project, where you will propose, prototype, and evaluate your own solutions. There will be no programming.

Readings: It is best to do the reading before viewing the videos or participating in the discussions. The lectures will be used to elaborate or discuss the material's implications or usage. This does not mean the assigned reading is not important, or will not be covered in a test.

Textbooks: Get yourself one of the recent editions of Interaction Design by Preece as well as an optional copy of Norman's Design of Everyday Things. I *highly recommend* that you get these books, however, I am not going to say that you *need them* to successfully pass this class.

Required: *(one of them)*

ISBN/SKU 978-1119547259, Author Preece, Jenny, Yvonne Rogers, and Helen Sharp., Title Interaction Design: Beyond Human-Computer Interaction, Year 2019, **Edition 5**, Publisher Wiley

ISBN/SKU 978-1119020752, Author Preece, Jenny, Yvonne Rogers, and Helen Sharp, Title Interaction Design: Beyond Human-Computer Interaction, Year 2015, **Edition 4**, Publisher Wiley

ISBN/SKU 978-0470665763, Author Preece, Jenny, Yvonne Rogers, and Helen Sharp, Title Interaction Design: Beyond Human-Computer Interaction, Year 2011, **Edition 3**, Publisher Wiley

Optional: ISBN/SKU 978-0465050659, Author Norman, Donald, Title The Design of Everyday Things, Year 2013, Edition Revised and Expanded edition

Canvas: This course will be delivered via Canvas, your online learning community, where you will interact with your classmates and with me. Within the course Canvas site, you will access the learning materials, tutorials, and syllabus; participate in the discussions; submit assignments; take quizzes; email other students and the instructor; and display your projects.

- To preview how an online course works, visit the Ecampus Course Demo.
- For technical assistance, Canvas and otherwise, see: http://ecampus.oregonstate.edu/services/technical-help.htm.

Learning objectives: At the completion of this course, students will be able to:

- Describe the human-centered design process and usability engineering process and their roles in system design and development.
- Discuss usability design guidelines, their foundations, assumptions, advantages, and weaknesses.
- Describe the basics of human subject's research.
- Complete a basic human subjects research certification form.
- Design a user interface based on an analysis of human needs and prepare a prototype system.
- Assess user interfaces using different usability engineering techniques.
- Make a final report that justifies design decisions.

Course Schedule & Topics

Schedule: You can find here the latest, up-to-date full course schedule. The schedule gives you a nice overview of the work, due dates, and grading rubric for this course. Keep in mind, I will release the course materials on a weekly basis, usually Sundays at midnight. So you will not see the full class from week 1. The materials will be released week-by-week.

Instructions: Most assignments are due Sundays, quizzes are due Sunday and there are instances where you have to submit something in the middle of the week. The due dates are assigned in Canvas and can be viewed on the schedule.

Grading rubric: Below is the grading rubric for this class. Understand that the group project will account for 38% of your total and final grade, so I recommend you to put a lot of focus and effort on this! The group project will be an on-going, iterative research and design project during the course of the full term.

Group	Weight	
Activities	10%	
Participation	20%	
Quizzes	10%	
Project - Proposal	3%	38%
Project - Formative Research	8%	
Project - Prototype	10%	
Project - Evaluation Plan	5%	
Project - Evaluation	6%	
Project - Final Prototype	6%	
Final exam	22%	
Total	**100%**	

Grading scale: The grading scale for this class is demonstrated in the below table.

Grade	Percentage
A	>= 92.5
A-	>= 90
B+	>= 87.5
B	>= 82.5
B-	>= 80
C+	>= 77.5
C	>= 72.5
C-	>= 70
D+	>= 67.5
D	>= 62.5
D-	>= 60
F	less than 60

EECS department policy is that grades less than a C are not considered a passing grade towards a CS degree or a prerequisite for a CS course.

Specific grading policies:

- There will be a policies quiz with regards to the syllabus in week 1. You can take it, as many times as you need, but you MUST have a score of 100% to continue with the course.
- There will also be an Activity 1 in week 1, a training for research with human participants you must do. You must, even after the due date, submit us a certificate of participation. If you fail to do so, you cannot continue this class (as you have not been certified in conducting ethical research).

Extra credit: As a general rule, there are no extra credit opportunities offered in this class. Offering an extra credit opportunity is solely under the discretion of the instructor.

Late submission policy/deadlines: As a general rule, I do not accept late submissions after the deadline. Exceptions are *higher circumstances* (family emergencies, sicknesses, accidents, or personal issues),

which have to be communicated and/or documented well before (in case of a foreseeable event) or immediately, in case of an emergency. If you have personal predicaments that affect your performance in the class, please sent me an email as early as possible. The earlier I know, the earlier we can work together toward a solution. Higher circumstances are not :

- *"I had to babysit/take an extra shift at work/help XYZ out";*
- *"I forgot the assignment/submission deadline.";*
- *"the Wi-Fi did not work";*
- *"my computer had a virus and did not work."*

Any requests for exceptions/acceptance of late work past the deadline have to be communicated to me, clearly and via email or a private message. I will decide, on a case-by-case basis, if I allow late submissions or work considering the situation, including penalties for late submissions. In order to altogether avoid late submissions, pay attention to the weekly announcements, which will give you an overview of the to-dos and deliverable for the specific week and module. Also, do not submit work exactly at the deadline (e.g. Sunday at 23:59 PM). Submit the work 10 minutes before instead.

Final exam: The Final Exam (worth 22% of your final grade) is an open book exam and it is not proctored. It covers all materials in this class (e.g. lectures, readings, activities, discussions, individual and group). Everything we will / have discussed in the class is testable material in essence. The Final Exam consists of a set of open-ended questions that you will respond to in a short essay style. Your answers will be evaluated on the accuracy and completeness. I will release information and a study guide on the Final Exam 7-14 days in advance.

Academic Dishonesty: In general, I have a zero-tolerance policy for academic dishonesty or misconduct.

- You **MAY** discuss (verbally) the meaning of assignments, general approaches, and strategies with other students in the course.
- You **MAY** show your assignment to the TAs or instructor for feedback and help.
- You **MAY NOT** share assignments or documentation of any kind with any other student in the course unless permitted as part of the design shares.
- You **MAY NOT** show your assignments with any student who is not in your group for any reason unless permitted as part of the design shares.
- You **MAY NOT** plagiarize documents from any other source, including the Internet or past classes and you **MUST** submit your own documents, reports and your own final exam.

We use plagiarism-detection software to check your assignments against the submissions from other students as well as online sources. It is quite sophisticated and can easily see through minor changes and formatting differences. If you are found in violation of any of the above policies, whether you are the giver or receiver of help, you will receive a zero on the assignment or fail the course (Instructor's discretion). The academic dishonesty charge will be documented and sent to your school's dean and the Office of Student Conduct. The first offense results in a warning; the second offense results in an academic dishonesty charge on your transcript, a disciplinary hearing, and possible expulsion. Please, read the undergraduate student manual dishonesty policy, as well as Section 0020 from the Academic or Scholarly Dishonesty Conduct Code

Students with disabilities: Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at http://ds.oregonstate.edu. DAS notifies students and faculty members of approved academic accommodations and coordinates the implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

Equity, inclusion & diversity statement: Welcome class! My name is Philipp Jordan and you can call me simply Phil (or Dr. Jordan if you prefer a more formal way to address me). I am happy to be your online instructor for this class! My primary goal as your instructor is to make you feel welcome and safe by providing you with an equal, fair, and inclusive classroom environment throughout the term. While all of us might have differing points-of-view, beliefs, identities, experiences, and values, we all have one thing in common at the same time - we are human beings. As such, I ask all of you to treat each other with respect, kindness, empathy, and dignity at all times and strive toward a respectful class atmosphere throughout the term - may it be in your discussions, assignments or your conversations on slack or Canvas. If you ever feel this is not the case, please do not hesitate to contact me anytime.

Student assistance

Getting assistance:

- Your first line of assistance should be to take a break, skim through the book, lectures, notes, and Internet.
- If you cannot find the answer yourself after some searching, you should then communicate with your fellow classmates. Remember that I want you to learn the basics in whatever way works best for you!
- Please contact your TA or me via email to bring your question to our intention if you remain stuck on finding a solution.
- Remember to form study groups.
- We have several methods of communicating, but I would prefer we use a discussion board so that we can refer back to our previous discussions and citations.

Technical assistance: If you experience computer difficulties, need help downloading a browser or plug-in, assistance logging into the course, or if you experience any errors or problems while in your online course, contact the OSU Help Desk for assistance. You can call (541) 737-3474, email osuhelpdesk@oregonstate.edu or visit the OSU Computer Helpdesk online.

Ground rules for online communication & participation:

- *Online threaded discussions* are public messages, and all writings in this area will be viewable by the entire class or assigned group members. If you prefer that only the instructor sees your communication, send it to me by email, and be sure to identify yourself and the class. Posting personal contact information is discouraged (e.g. telephone numbers, address, personal website address).
- *Online Instructor Response Policy*: I will check email somewhat frequently and will respond to course-related questions within 24 hours on Monday-Fridays, if possible. I will also be available on slack for direct messages Monday-Friday. Expect a 48 hour response times on the weekends. That means, if you sent me a message on Saturday morning, expect an answer by Monday morning.
- *Observation of "Netiquette"*: All your online communications need to be composed with fairness, honesty, and tact. Spelling and grammar are very important in an online course. What you put into an online course reflects on your level of professionalism. Here is a reference: http://www.albion.com/netiquette/corerules.html and here another one: https://www.utep.edu/extendeduniversity/utepconnect/blog/october-2017/10-rules-of-netiquette-for-students.html
- *Please check the Announcements* and the course syllabus before you ask general course "housekeeping" questions (i.e. how do I submit assignment 3?). If you don't see your answer there, then please contact someone through chat or discussion boards.

Guidelines for a productive and effective online classroom: The discussion board is your space to interact with your colleagues related to current topics or responses to your colleague's statements. It is expected that each student will participate in a mature and respectful fashion. Participate actively in the

discussions, having completed the readings and thought about the issues. Pay close attention to what your classmates write in their online comments. Ask clarifying questions, when appropriate. These questions are meant to probe and shed new light, not to minimize or devalue comments.Think through and reread your comments before you post them. Assume the best of others in the class and expect the best from them. Value the diversity of the class. Recognize and value the experiences, abilities, and knowledge each person brings to class. Disagree with ideas, but do not make personal attacks. Do not demean or embarrass others. Do not make sexist, racist, homophobic, or victim-blaming comments at all. Be open to being challenged or confronted on your ideas or prejudices.

End
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