CS 420/620 Human-Computer Interaction (Section 1001)
Fall, 2019

Course Information

Instructor Information:

Instructor: Sergiu Dascalu
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Office Hours: Tuesday 10:00 – 11:30 am (all students) Tuesday 11:30 am – 12:00 pm (CS 620)

Course Description:

Lecture + Lab: 3 + 0; Credit(s): 3

Usability goals, design principles, design processes, prototyping, interface metaphors, interaction styles, interaction devices, software tools, evaluation paradigms and techniques, user manuals, collaborative work, information visualization.

Course Pre/Co-requisites:

Prerequisite: CS 302 Data Structures

Required texts, course materials:

Required textbooks:

- Ben Schneiderman, Catherine Plaisant, Maxine Cohen, Steven Jacobs, Niklas Emquist, Nicholas Diakopoulos, *Designing the User Interface: Strategies for Effective Human-Computer Interaction*, 6th Edition, Addison-Wesley, 2017, ISBN 978-0134380384 **[DTUI]**
- Don Norman, The Design of Everyday Things: Revised and Expanded Edition, Basic Books, 2013, ISBN 978-0465050659 **[DOET]**

Unique class procedures /structures:

Class presentations by all students (on textbook chapters and/or other HCI materials); Course project by all students; Course paper based on project by CS 620 students only.

Student Learning Outcomes:

CS 420:

Upon completion of this course, students will be able to:
SLO #3. Communicate effectively in a variety of professional contexts, with a range of audiences.
SLO #4. Recognize professional responsibilities and make informed judgments in engineering and computing practice based on legal and ethical principles, considering the impact of solutions in global, economic, environmental, and societal contexts.
SLO #6. Apply computer science theory and software development fundamentals to produce computing-based solutions.

CS 620:

Our graduates will have:

G-SLO #1. An ability to apply engineering and computer science research and theory to advance the art, science, and practice of the discipline.

Course Requirements:

Grading scheme for *CS 420 students* (tentative, subject to small modifications)

- Assignments 20%
- Presentations 7%
- Midterm tests 35%
- Project 35%
- Class participation 3%
  - TOTAL 100%

Grading scheme for *CS 620 students* (tentative, subject to small modifications)

- Assignments 15%
- Presentations 7%
- Midterm tests 32%
- Project & paper 43%
- Class participation 3%
  - TOTAL 100%

In summary, students enrolled in CS 620 will have extra work (as compared to CS 420) as follows:

- A project-based course paper
- Longer class presentations
- Lower weight assignments
- An additional question in each midterm exam

Grading Criteria, Scale, Policies, and Standards:

Grading scale (both CS 420 and CS 620)

- A 90 -100 [maximum 100]
- A- 87 - 89
- B+ 84 - 86
- B 80 - 83
- B- 77 - 79
- C+ 74 - 76
- C 70 - 73
- C- 67 - 69
- D+ 64 - 66
- D 60 - 63
- D- 50 - 59
- F < 50

Passing conditions (all must be met):

- At least 50% overall &
- At least 50% in tests &
- At least 50% in project [and, for CS 620 students, paper] &
- At least 50% in assignments, presentations, and class participation
- For grade A: at least 90% overall, at least 90% in class participation, and at least 60% in tests
- There are no make-up tests or homework in this course
- Note that poor class participation can significantly affect your grade [well beyond 3%]. Valid excuses for absences include being sick, major family/personal problems, and participation to conferences or other professional events approved by the CS 420/620 instructor. Such excuses DO NOT include being busy at your paid or volunteer job work, or for preparing for or attending other courses.

Late submission policy:

- Maximum 2 late days per assignment/project deliverable
- Each late day penalized with 10%
- No subdivision of late days
- No late days for presentations and tests
- Example: a 90/100 worth assignment gets 81/100 if one day late (90*0.9 = 81) or 72/100 if two days late (90*0.8 = 72)

Course Calendar or Topics Outline:

Tentative schedule (subject to small modifications):

Week #	Dates (M, W)	Contents
1	Aug 26, 28	Lecture, Students' introduction
2	Sep - , 04	Lecture, A#1 given
3	Sep 09, 11	Lectures Presentations draw, A#2 given A#1 due
4	Sep 16, 18	Lecture presentations by students (#1)
5	Sep 23, 25	Lecture presentations by students (#1), A#3 given A#2 due, Project teams formed by September 25
6	Sep 30, Oct 02	Lecture presentations by students (round #1) P#1 given, A#3 due
7	Oct 07, 09	Lectures
8	Oct 14, 16	Lecture presentations by students (round #1) P#1 due, P#2 given
9	Oct 21, 23	Lecture Midterm #1 (October 23)
10	Oct 28, 30	Lecture presentations by students (round #1), Lecture, P#3 given, P#2 due, Paper given [CS 620 only]
11	Nov 04, 06	Lectures
12	Nov -, 13	Lecture, P#4 given, P#3 due
13	Nov 18, 20	Lecture Midterm #2 (November 20)
14	Nov 25, 27	Presentations by students (round #2)
15	Dec 02, 04	Presentations by students (round #2)
16	Dec 09, -	P#4 due & demos (Dec 09 & 10), Paper due (Dec 16)

Topics covered in lectures include: usability of interactive systems, universal usability, HCI guidelines, principles and theories, design processes, evaluation and the user experience, interaction styles, information search, data visualization, human-centered design, the psychology of everyday actions, constraints, discoverability and feedback.

University Policies

Statement on Academic Dishonesty:

The University Academic Standards Policy defines academic dishonesty, and mandates specific sanctions for violations. See the University Academic Standards policy: UAM 6,502.

Statement of Disability Services:

Any student with a disability needing academic adjustments or accommodations is requested to speak with me or the Disability Resource Center (Pennington Achievement Center Suite 230) as soon as possible to arrange for appropriate accommodations.

This course may leverage 3rd party web/multimedia content, if you experience any issues accessing this content, please notify your instructor.

Statement on Audio and Video Recording:

Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may be videotaped or audio recorded only with the written permission of the instructor. In order to accommodate students with disabilities, some students may have been given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.

Statement on Equal Opportunity:

The University of Nevada, Reno is committed to providing a safe learning and work environment for all. If you believe you have experienced discrimination, sexual harassment, sexual assault, domestic/dating violence, or stalking, whether on or off campus, or need information related to immigration concerns, please contact the University's Equal Opportunity & Title IX office at 775-784-1547. Resources and interim measures are available to assist you. For more information, please visit the Equal Opportunity and Title IX page.

Statement on Academic Success Services:

Your student fees cover usage of the Math Center (775) 784-4433, Tutoring Center (775) 784-6801, and University Writing Center (775) 784-6030. These centers support your classroom learning; it is your responsibility to take advantage of their services. Keep in mind that seeking help outside of class is the sign of a responsible and successful student.

Statement on University Math Center:

The University Math Center (UMC) is focused on helping students with mathematical and statistical concepts. While mathematics is used extensively in engineering, *the UMC does not have the resources to help students with engineering courses*. Engineering students are encouraged to use the UMC for

help in their math classes, and they are welcome to use its computer lab and study area any time – regardless of course. However, UMC tutors cannot answer questions regarding engineering courses.

Statement on University Athletics

If you are involved with any ***university-sponsored*** athletic activities that will have an impact on your attendance, you must provide the course instructor with a letter from your coach and/or the UNR Athletic Department as soon as possible, but no later than the end of the second week of classes. This should include the official schedule of your activities which will impact your attendance throughout the semester. You must also advise the Instructor one week in advance of any absences related to the athletic activities.

Instructor Policies

Statement on Illness or Other Personal Issue:

If you are sick or have a health-related reason for not attending class, let the instructors know as soon as possible about this situation. Same, for a major family or personal issue.

Statement on Course/Policy Modification:

The instructor reserve the right to add to, and/or modify any of the above policies as needed to maintain an appropriate and effective educational atmosphere in the classroom and the laboratories. In the case that this occurs, all students will be notified in advance of implementation of the new and/or modified policy

Statement on Student Engagement:

There will be a good deal of interaction and class/group activity in this course. For that reason, students are expected to be engaged in, and focused on, the classroom discussion and/or activities. In addition, everyone involved in this class is expected to act in a professional manner, and interact with her or his peers with that same professional demeanor, which precludes rude or inappropriate behavior.