

# CS 791.1001 Special Topics (Human-Computer Interaction) FALL 2018

## Course Information

### Instructor Information

**Instructor:** Sergiu Dascalu

**Office:** SEM 236

**Email:** [dascalus@cse.unr.edu](mailto:dascalus@cse.unr.edu)

**Office Hours:** Thursdays 2:30 am to 3:30 pm or by appointment

**Teaching Assistants (volunteer):** Connor Scully-Allison, Vinh Le

**Office:** MIKC-423

**Email:** [cscully-allison@nevada.unr.edu](mailto:cscully-allison@nevada.unr.edu); [vdacle@gmail.com](mailto:vdacle@gmail.com)

**Office Hours:** Mondays 1:00 pm to 2:30 pm

### Class Time & Location

Tuesdays and Thursdays, 12:00 pm to 1:15 pm, in SEM-257

### Course Description

**Catalog description:** CS 791 Special Topics (Human-Computer Interaction)

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

Special topics in computer science. May be repeated when course content differs.

**Course Outline:** This course focuses on performing empirical and experimental research in Human-Computer Interaction. It ties general notions, principles, practices, and methods in HCI with solid scientific concepts and experimental procedures. Topics covered include the HCI historical context, human-factors, interaction elements, scientific foundations for HCI research, designing HCI experiments, hypothesis testing, and writing and publishing an HCI research paper. Several major HCI research papers will also be discussed.

### Course Pre-requisites

Very good CSE background, excellent communication skills, and very good programming skills.  
Instructor's approval.

### Required Texts, Course Materials

**Textbook:** I. Scott MacKenzie, *Human-Computer Interaction: An Empirical Research Perspective*, Morgan Kaufmann Publishers, 2013. ISBN: 978-0-12-405865

**Research papers** (journal, conference papers): as indicated or approved later by the instructors

## Unique Class Procedures / Structures

Designing and conducting a user study and analyzing data collected from it.

In-class student presentations on: HCI research papers, HCI tools, apps or approaches (“HCI nuggets”), and team project/experiment/user study.

## Student Learning Outcomes

ABET Graduate Student Learning Outcomes (G-SLOs)

Our graduates will have:

- a. An ability to apply engineering and computer science research and theory to advance the art, science, and practice of the discipline.
- b. An ability to design and conduct experiments as well as to analyze, interpret, apply, and disseminate the data.
- c. An understanding of research methodology.

## Course Requirements

### Course requirements and Grading scheme (tentative):

Tentative grading scheme (subject to modifications):

- |                                   |       |
|-----------------------------------|-------|
| • Assignments/project parts       | [45%] |
| • Midterm exams                   | [27%] |
| • Paper                           | [15%] |
| • Presentations/paper discussions | [10%] |
| • Class participation             | [ 3%] |

For grade A: at least 90% overall, at least 90% in class participation and at least 70% in tests

To pass the course: at least 50% overall, at least 50% in tests, and at least 50% in homework & presentations

There are no make-up tests or homework in this course

Note that poor class participation can significantly decrease your overall grade

## Grading Criteria, Scale, and Standards

See grading criteria above (Course requirements).

**Grading scale:**

- Numerical-letter grade correspondence
- |    |          |               |
|----|----------|---------------|
| A  | 90 - 100 | [maximum 100] |
| A- | 87 - 89  |               |
| B+ | 83 - 86  |               |
| B  | 78 - 82  |               |
| B- | 75 - 77  |               |
| C+ | 71 - 74  |               |
| C  | 66 - 70  |               |
| C- | 63 - 65  |               |
| D+ | 59 - 62  |               |
| D  | 54 - 58  |               |
| D- | 50 - 53  |               |
| F  | < 50     |               |

**Late submissions:** Late submissions of homework will be penalized with a deduction of 10% of the grade per late day, to a maximum of two late days for each submission. No material will be accepted after two days past the deadline. For example, an assignment that is worth 90/100 points will receive  $90 \cdot 0.9 = 81/100$  points if it is one day late. The same assignment will receive  $90 \cdot 0.8 = 72/100$  points if it is two late days and it will not be accepted if it is more than two days late. Late days are not divisible in subunits.

**Course Calendar or Topics Outline**

**Tentative schedule**

Week #	Dates (T, R)	Contents
1	Aug 28, 30	Course syllabus, Students' introduction
2	Sep 04, 06	Students' introduction, Lecture
3	Sep 11, 13	Lectures
4	Sep 18, 20	Lectures

5	Sep 25, 27	Lectures
6	Oct 02, 04	Student presentations (round 1)
7	Oct 09, 11	Lecture, Student presentations (round 1)
8	Oct 16, 18	Student presentations (round 1), Lecture
9	Oct 23, 25	Lecture, Midterm exam 1 on October 25, 2018
10	Oct 30, Nov 01	Lectures
11	Nov 06, 08	Lectures
12	Nov 13, 15	Student presentations (round 2)
13	Nov 20, --	Student presentations (round 2)
14	Nov 27, 29	Midterm exam 2 on November 27, 2018, Lecture
15	Dec 04, 06	Team presentations/project demos
16	Dec 11, --	Team presentations/project demos Final reports due December 14, Papers due December 19

**Topics:** Topics covered include the HCI historical context, human-factors, interaction elements, scientific foundations for HCI research, designing HCI experiments, hypothesis testing, and writing and publishing an HCI research paper. Several major HCI research papers will also be discussed.

## University Policies

### Statement on Academic Dishonesty

Cheating, plagiarism or otherwise obtaining grades under false pretenses constitute academic dishonesty according to the code of this university. Academic dishonesty will not be tolerated and penalties can include filing a final grade of "F"; reducing the student's final course grade one or two full grade points; awarding a failing mark on the coursework in question; or requiring the student to retake or resubmit the coursework. For more details, see the [University of Nevada, Reno General Catalog](#).

## 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 3<sup>rd</sup> party web/multimedia content, if you experience any issues accessing this content, please notify your instructor.**

## University Math Center (UMC)

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 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."

**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 for 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.

## Additional University Statement

**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.**

## Instructor Statement: 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.

## Instructor Statement: Illness and Change of Policy

**Illness:** If you are sick or have a health-related reason for not attending class, let the instructor know as soon as possible of this situation

**Course/Policy Modification:** The instructor reserves 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 the implementation of the new and/or modified policy.