

CS 530: Developing User Interfaces

Course Syllabus

General Information

Instructor: Dr. Dario Salvucci
Email: salvucci@drexel.edu

Student Learning Information

Course Description

This course discusses user interfaces within the context of interface design, implementation, and evaluation. The course includes lectures covering the basic topics, class discussions on special topics relevant to each lecture, and programming assignments in which students design and implement real-world user interfaces.

College/Department: CCI, Department of Computer Science

Repeat Status: Not repeatable for credit

Prerequisites: CS 571 [Min Grade: C] (Can be taken Concurrently), CS 520 [Min Grade: C], and CS 570 [Min Grade: C]

Credits: 3 hours of lecture (3 credits total)

Course Purpose within a Program of Study

This course serves primarily as an elective for the MS Computer Science, MS Software Engineering, and PhD Computer Science degree programs.

Statement of Expected Learning

The course objectives are to:

- Introduce the interface design-implementation cycle;
- Introduce full-stack web development;
- Practice interface development using several modern languages and frameworks;
- Discuss advanced topics including rapid prototyping, advanced interface technologies, interfaces for impaired users, and interface evaluation.

As learning outcomes, students completing this course should be able to:

- Understand the interface design-implementation cycle;
- Understand full-stack web development;
- Develop an interface implementation using several modern languages and frameworks;
- Understand advanced topics including rapid prototyping, advanced interface technologies, interfaces for impaired users, and interface evaluation.

Course Materials

Required and Recommended Texts, Readings, and Resources

There is no required textbook for this course; the lecture notes handed out in class will serve as the primary study resource, and we may hand out additional sources during the term. Readings will also be distributed as needed. Please also note that there are many freely available Web resources and these will be pointed out as appropriate.

Required and Supplemental Materials and Technologies

Additional materials and technologies (e.g., frameworks needed for implementation) will be distributed as needed.

Assignments, Assessments, and Evaluations

Graded Assignments and Learning Activities

The activities for this course primarily include homework assignments, a class presentation, and a final exam.

Homework assignments will involve programming to solidify and expand on topics presented in lectures. The assignments will primarily involve implementation of web-based interfaces using basic concepts of full-stack web development.

Each student will give an in-class or online presentation and lead a discussion on one of the special topic readings. Presentations will be done individually, and you will be asked to post slides about the reading, including your analysis and critique of the work, and then lead a discussion on its context in the course.

There is a planned final exam at the end of the course that covers the various conceptual topics discussed throughout the lectures.

All assignments, presentations, and exams are to be done individually. **Collaborative work and/or sharing of code of any kind is not permitted.**

Work submitted after the specified deadline will incur a penalty of 33% per day late. Plagiarism and other academic misconducts will be dealt with seriously: in the case of a violation, the assignment or exam in question will receive a grade of zero, the student may receive up to one letter grade penalty on their final course grade, and the violation will be reported to the department, college, and university.

Students are responsible for checking Blackboard Learn and Drexel email daily for course announcements. If you have any questions about any graded assessment, please email the instructor at least 24 hours before the deadline.

For more details, please refer to The Drexel University Student Handbook.

Grading Matrix

Grades will be assigned based on the following:

- Assignments: 60%
- Presentation: 10%
- Discussions: 10%
- Exam: 20%

Grade Scale

The following scale will be used to convert points to letter grades:

Points	Grade	Points	Grade	Points	Grade
Exceptional	A+	82-86.99	B	70-71.99	C-
92-99.99	A	80-81.99	B-	67-69.99	D+
90-91.99	A-	77-79.99	C+	60-66.99	D
87-89.99	B+	72-76.99	C	0-59.99	F

Note that the instructor may revise this conversion if/when necessary.

Course Schedule

[This schedule is tentative and may change during the course.]

Week	Notes
1	Interfaces & Users Design & Implementation
2	Web Development I Web Development II
3	Rapid Prototyping Web Development III
4	Interface Evaluation Theories & Guidelines
5	Advanced Input Web Development IV
6	Intelligent Interfaces Graphics Basics
7	Assistive Technology Java Swing
8	Interfaces on the Web
9	Interfaces off the Desktop
10	TBD

Academic Policies

This course follows university, college, and department policies, including but not limited to:

- Academic Integrity, Plagiarism, Dishonesty and Cheating Policy: http://www.drexel.edu/provost/policies/academic_dishonesty.asp
- Student Life Honesty Policy from Judicial Affairs: <http://www.drexel.edu/provost/policies/academic-integrity>
- Students with Disability Statement: <http://drexel.edu/oed/disabilityResources/students/>
- Course Add/Drop Policy: <http://www.drexel.edu/provost/policies/course-add-drop>
- Course Withdrawal Policy: <http://drexel.edu/provost/policies/course-withdrawal>

- Department Academic Integrity Policy: <http://drexel.edu/cci/resources/current-students/undergraduate/policies/cs-academic-integrity/>
- Drexel Student Learning Priorities: <http://drexel.edu/provost/assessment/outcomes/dslp/>
- Office of Disability Resources: http://www.drexel.edu/ods/student_reg.html

The instructor(s) may, at his/her/their discretion, change any part of the course before or during the term, including assignments, grade breakdowns, due dates, and schedule. Such changes will be communicated to students via the course web site. This web site should be checked regularly and frequently for such changes and announcements.

Students [requesting accommodations](#) due to a disability at Drexel University need to request a current Accommodations Verification Letter (AVL) in the [ClockWork database](#) before accommodations can be made. These requests are received by Disability Resources (DR), who then issues the AVL to the appropriate contacts. For additional information, visit the DR website at <http://drexel.edu/oed/disabilityResources/overview/> , or contact DR for more information by phone at 215.895.1401, or by email at disability@drexel.edu.