

COMS 402C

Computer Science Senior Project

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COM S 402C: Computer Science Senior Project: Project in Computer Science

(0-6) Cr. 2-3. Repeatable, maximum of 6 credits. F.S.

Prereq: COM S 309, COM S 311, COM S 321, and COM S 331, Senior Classification

Students work as individuals and teams to complete the planning, design, and implementation of a significant project in the topic area. Oral and written reports. No more than 6 credits of 402A, 402B, and 402C may be used toward graduation.

Background

- The capstone project has been proposed so as to meet ABET guidelines (*). The course description states:

(0-6) Cr. 2-3. Repeatable, maximum of 6 credits.

Prereq: Permission of instructor

Students work as individuals and teams to complete the planning, design, and implementation of a significant project in the topic area. Oral and written reports. No more than 6 credits of 402A, 402B, and 402C may be used toward graduation.

Background

Note that typically capstone projects do not have significant amount of new content being taught (i.e. like a class). Instead, students pull together their knowledge and skills from different courses to implement/solve when working on their project.

The work is meant to be challenging and interesting and should be something that students can show off (as a poster/paper/demo) to potential employers or colleges.

Background

- This is the first time this course is being offered and will be used to build a more robust template for future offerings.

Students will need to

1. Actively flesh out details of project.
2. Student(s) need to plan and execute plan.
3. Student(s) need to submit biweekly reports on work done.
4. Make design decisions or solve problems and explain them.
5. Deliver Oral and Written Reports.

Gradable Items

DEVELOPMENT ARTIFACTS

- (1) screen sketches
- (2) high-level requirements
- (3) design doc
- (4) code artifacts
 - > git
 - > ci/cd
- (5) espresso/webmvctests/mockito tests
- (6) Reflection document(s)
- (7) DS-report
- (8) Maintain Project Website

PRESENTATION RELATED ARTIFACTS

- (1) About Team videos/writeups etc
- (2) Project Proposal
- (3) Demo Presentations / video-snippets

GRADING

Soft Skills

- Professionalism
- Enthusiasm and Attitude
- TeamWork

Hard Skills

- Development Artifacts
- Presentation Artifacts
- Deliverable Project (reasonable)

MID-SEMESTER EVALS (30%)

END-OF-SEMESTER EVALS (60%)

Tentative grading policy-1

Grading Scale (we first give letter grade and THEN number grade)

1. Excellent: ≥ 90 **A-** ≥ 93 **A**
2. Good: ≥ 80 **B-** ≥ 83 **B** ≥ 87 **B+**
3. Average: ≥ 70 **C-** ≥ 73 **C** ≥ 77 **C+**
4. Poor: ≥ 60 **D-** ≥ 63 **D** ≥ 67 **D+**
5. **F: 0 to < 60**

COVID

Onsite Seating

- When entering the class, do so following safe social distancing practices.
- Do note that AFTER the first day of class we will create a seating chart. Students will have to sit in the same place on rest of the semester.
- This will be helpful for contact tracing if ever needed.

COVID-19 health and safety requirements Students are responsible for abiding by the university's COVID-19 health and safety expectations. All students attending this class in-person

are required to follow

university policy regarding health, safety, and face coverings.

RULES

- **wear a cloth face covering in all university classrooms**, laboratories, studios, and other in-person instructional settings and learning spaces. **Cloth face coverings are additionally required to be worn indoors** in all university buildings, and outdoors when other people are or may be present where physical distancing of at least 6 feet from others is not possible. Students with a documented health or medical condition that prevents them from wearing a cloth face covering should consult with Student Accessibility Services in the Dean of Students Office.
- **ensure that the cloth face covering completely covers the nose and mouth and fits snugly against the side of the face.**
- **practice physical distancing to the extent possible.**
- assist in maintaining a clean and sanitary environment.
- not attend class if you are sick or experiencing symptoms of COVID-19.
- not attend class if you have been told to self-isolate or quarantine by a health official.
- follow the instructor's guidance with respect to these requirements. **Failure to comply constitutes disruptive classroom conduct. Faculty and teaching assistants have the authority to deny a non-compliant student entry into a classroom, laboratory, studio, conference room, office, or other learning space.**

- These requirements extend outside of scheduled class time, including coursework in laboratories, studios, and other learning spaces, and to field trips. These requirements may be revised by the university at any time during the semester.
- In accordance with university policy, instructors may use a face shield while they are teaching as long as they are able to maintain 8 feet of physical distance between themselves and students during the entire instructional period. Some form of face covering must be worn at all times in learning spaces regardless of the amount of physical distancing.
- Faculty may refer matters of non-compliance to the Dean of Students Office for disciplinary action, which can include restrictions on access to, or use of, university facilities; removal from university housing; required transition to remote-only instruction; involuntary disenrollment from one or more in-person courses; and other such measures as necessary to promote the health and safety of campus.

Cyclones Care Campaign

- **It is important for students to recognize their responsibility in promoting the health and safety of the Iowa State University community,** through actions both on- and off-campus.
- The university's faculty asks that you personally demonstrate a commitment to our Cyclones Care campaign. Iowa State University's faculty support the Cyclones Care campaign and ask you personally to demonstrate a commitment to our campaign. Your dedication and contribution to the campaign will also protect your family, classmates, and friends, as well as their friends and families. Our best opportunity for a successful fall semester with in-person learning and extramural activities requires all of us to collaborate and fully participate in the Cyclones Care campaign.

Academic Dishonesty

- The class will follow Iowa State University's policy on academic dishonesty. Anyone suspected of academic dishonesty will be reported to the Dean of Students Office.
- Code/documents that you submit as your own – must have been created by you.
- <http://www.dso.iastate.edu/ja/academic/misconduct.html>

Project Code

- Your team must implement your project from scratch. If you use ANY libraries and frameworks, you must get it approved by us AHEAD of time.
- When you show code to TA – make sure it is code that YOU wrote (and not libraries or what others wrote). No credit for non-code work (like css, html, image creation etc)

Disability Accommodation

- Iowa State University complies with the Americans with Disabilities Act and Sect 504 of the Rehabilitation Act. If you have a disability and anticipate needing accommodations in this course, please contact me to set up a meeting within the first two weeks of the semester or as soon as you become aware of your need. Before meeting with (instructor name), you will need to obtain a SAAR form with recommendations for accommodations from the [Disability Resources Office](#), located in Room 1076 on the main floor of the Student Services Building. Their telephone number is 515-294-7220 or email disabilityresources@iastate.edu . Retroactive requests for accommodations will not be honored.

Dead Week

- This class follows the Iowa State University Dead Week policy as noted in section 10.6.4 of the Faculty Handbook
<http://www.provost.iastate.edu/resources/faculty-handbook> .

Harassment and Discrimination

- Iowa State University strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon race, ethnicity, sex (including sexual assault), pregnancy, color, religion, national origin, physical or mental disability, age, marital status, sexual orientation, gender identity, genetic information, or status as a U.S. veteran. Any student who has concerns about such behavior should contact his/her instructor, [Student Assistance](#) at 515-294-1020 or email dso-sas@iastate.edu, or the [Office of Equal Opportunity and Compliance](#) at 515-294-7612.

Religious Accommodation

- If an academic or work requirement conflicts with your religious practices and/or observances, you may request reasonable accommodations. Your request must be in writing, and your instructor or supervisor will review the request. You or your instructor may also seek assistance from the [Dean of Students Office](#) or the [Office of Equal Opportunity and Compliance](#).