General Information

Instructor: Matthew Fluet
E-mail: mtf@cs.rit.edu
Virtual Office Hours
https://rit.zoom.us/my/mtfvcs
Mon. 3:00pm–4:00pm
Wed. 10:00am–11:00am
Wed. 3:00pm–4:00pm
Fri. 10:00am–11:00am
or by appointment

Lectures/Presentations: Section 01 MoWeFr 11:15am – 12:05pm; GOL-1445 / Synchronous Zoom

Website:
https://www.cs.rit.edu/~mtf/teaching/20201/msp
https://mycourses.rit.edu/d2l/home/847145

Course Description

Project capstone of the master’s degree program. Students select from a set of possible projects and confirm that they have a project adviser. Students enroll in a required colloquium component that meets weekly, during which they present information, related to their projects. Projects culminate with delivery of a final report and participation in a poster session evaluated by faculty of the Department of Computer Science.

Note: Students without a confirmed project topic and faculty advisor by August 25 (Tuesday of Week 2) will be withdrawn from the course.

Enrollment Requirements

Restricted to students in COMPSCI-MS and COMPSCI-BS/MS programs.

Course Goals

The MS project offers students an opportunity to investigate a selected topic within Computer Science and to learn presentation and visualization skills for planning and communicating their project ideas and results.

Students select a project from among those posted as available by members of the Computer Science faculty. Students confirm with the faculty member who posted the project that the faculty member is available to serve as the faculty advisor for the students project.

A required colloquium component is associated with this course. The colloquium is intended to help students “stay on track” to complete their projects and to orient students to some of
the main activities associated with completing and reporting upon a project, such as:

- Designing and critiquing presentations
- Writing and evaluating scientific reports
- Creating effective posters and presentations

The colloquium is managed by one instructor who provides some lectures, and who oversees student presentations during the term. The colloquium component culminates with a poster session open to the public. Computer Science faculty attend and provide an assessment of some subset of the posters on display. A student's overall grade on their project is determined by their faculty advisor in consultation with the colloquium instructor and is based on deliverable assessments made by the faculty advisor and the colloquium instructor, along with input provided by faculty poster assessments.

Topics

- Introduction to the project capstone
- Effective presentations
- Peer reviews and critiques
- Writing style for computer science
- Experimentation and documentation
- Describing and visualizing the results of experiments
- Documenting mathematics and algorithms
- Ethics (plagiarism, confidentiality, and conflicts of interest)

Note: The order in which topics are discussed in lectures will likely differ from that given above. Furthermore, not all topics will receive equal (or, possibly, any) time.

Course and Program Outcomes

Course learning outcomes:

- The student will successfully select a topic to investigate and obtain a faculty advisor.
  Program outcome(s): 3
  Evaluation: Assessed by obtaining appropriate permissions.

- The students will successfully complete the project that they proposed to do.
  Program outcome(s): 2
  Evaluation: Assessed by presentations in the colloquium component, final report, and final poster.

- The student will successfully summarize the work that was accomplished.
  Program outcome(s): 2, 3
  Evaluation: Assessed by presentations in the colloquium component, final report, and final poster.

Program Outcomes:
• (CS Graduate Program Outcome 2) Demonstrate a depth of knowledge in a selected area in the discipline.

• (CS Graduate Program Outcome 2) Communicate effectively in a professional environment.

Grades

Grades will be assigned based on the following grading scheme:

• 45% — Final Report (by faculty advisor)
• 15% — Poster Session (by CS faculty feedback)
• 20% — Milestone Deliverables (× 3; by faculty advisor)
• 20% — Colloquium (by course instructor)
  - 60% — Presentations (× 4)
    * 25% — Project Description
    * 25% — Milestone 1
    * 25% — Milestone 2
    * 25% — Milestone 3
  - 20% — Participation and Feedback (in class)
  - 20% — Homeworks
    * 5% — Capstone Project (w/ brief description)
    * 10% — Paper Review
    * 20% — Final Report - Introduction (draft) and Outline (tentative)
    * 25% — Final Report - Additional Section (draft)
    * 10% — Poster - Outline
    * 15% — Poster (draft)
    * 15% — Poster - Transcript (draft)

Unexcused absences will be reported to the Graduate Coordinator and may result in a grade penalty.

Final letter grades will be assigned based on the following grading scale:
<table>
<thead>
<tr>
<th>Letter grade</th>
<th>Numeric grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>(93, ∞)</td>
</tr>
<tr>
<td>A−</td>
<td>(90, 93)</td>
</tr>
<tr>
<td>B+</td>
<td>(87, 90)</td>
</tr>
<tr>
<td>B</td>
<td>(83, 87)</td>
</tr>
<tr>
<td>B−</td>
<td>(80, 83)</td>
</tr>
<tr>
<td>C+</td>
<td>(77, 80)</td>
</tr>
<tr>
<td>C</td>
<td>(73, 77)</td>
</tr>
<tr>
<td>C−</td>
<td>(70, 73)</td>
</tr>
<tr>
<td>D</td>
<td>(60, 70)</td>
</tr>
<tr>
<td>F</td>
<td>[0, 60)</td>
</tr>
</tbody>
</table>

**Important Dates**

- **August 25** (Tue.): Project Topic and Faculty Advisor
- **September 11** (Fri.): Milestone 1 Deliverables
- **October 10** (Fri.): Milestone 2 Deliverables
- **November 6** (Fri.): Milestone 3 Deliverables
- **December 1** (Tue.): Final Report and Poster

**Text Books**

**Required:**

- **Title:** Writing for Computer Science (3rd edition)
- **Author:** Justin Zobel
- **Publisher:** Springer
- **ISBN:** 978-1-4471-6638-2
- **RIT Library e-book:** [https://albert.rit.edu/record=b3372474-S3](https://albert.rit.edu/record=b3372474-S3)

**Course Policies**

**Attendance & Participation**

Students are required to attend (either in person or via Zoom) and expected to participate in the course and provide meaningful feedback to peers. Participation means being an engaged student: asking and answering questions (in person, via Zoom), not simply attending class. Unexcused absences will be reported to the Graduate Coordinator and may result in a grade penalty.

The use of cell phones and audio players is prohibited during class. If you must take a phone call, please leave the classroom immediately and do not return until you have ended the phone call.

The use of a laptop (or notebook or netbook) computer is permitted during class only for the purpose of taking notes or submitting feedback surveys.

Note: This course is being offered with both the Online Flex and Full Flex options. A student can choose to complete all course requirements online either for the entire semester (Online Flex) or as needed throughout the semester (Full Flex). The primary expectation is that flex students will attend class meetings (including giving presentations) synchronously using Zoom. Contact the instructor (at any time during the semester), if you wish to select one of these options.
Students who are required to quarantine or isolate should contact the instructor to select Full Flex for the duration of their absence. Again, the primary expectation is that flex students will attend class meetings (including giving presentations) synchronously using Zoom. For circumstances that go beyond standard quarantine or isolation, students should contact an appropriate administrative staff member (e.g., the Disability Services Office (DSO), assistant or associate dean for student success or academic services, or academic advisor) and ask that they contact the instructor, who will make special arrangements suited to the situation.

**Late Policy**

Assignments are to be submitted on time and **late submissions will receive zero credit**.

For extraordinary difficulties, contact an appropriate administrative staff member (e.g., the Disability Services Office (DSO), assistant or associate dean for student success or academic services, or academic advisor) and ask that they contact the instructor, who will make special arrangements suited to the situation.

**Regrading**

After a graded assignment or presentation as been returned and posted, you have **one week** to bring any questions about grading to the instructor’s attention. No grade adjustments will be made after this time.

**Note:** The above applies to grades assigned by the course instructor. Grades assigned by the faculty advisor may be adjusted at the discretion of the advisor.

**Academic Integrity**

As with all courses, the [RIT Honor Code](#) and the [Student Academic Integrity Policy](#) apply. See the Department of Computer Science’s statement on [Student Academic Integrity](#) for more details.

In this course, all submitted work must be your own work (i.e., written or programmed by you alone, unless explicitly stated otherwise) and must include acknowledgments of any collaborators or sources (other than course text books or handouts) used to produce your submission.

You are encouraged to discuss course material with other students. Discussion of assignments is also allowed, but sharing solutions or code is not allowed.

**Common Course Policies**

See the Department of Computer Science’s [Common Course Policies](#) for more details about rescheduling an exam, course withdrawal, disability services, and academic integrity.

**COVID-19 Addendum**

We are all aware of the unique circumstances of this fall semester resulting from the worldwide COVID-19 SARS-2 pandemic. RIT has consulted federal, state, and local guidelines and policies to implement a safe, yet educational environment for students, faculty and staff.
These guidelines, located at https://www.rit.edu/ready/ are routinely updated as conditions change.

What do these mean for this class? When we meet in person everyone will wear a mask that covers their mouth and nose at all times and have freshly washed or sanitized hands. In class, students will sit in assigned seats in the locations designated by faculty. We will not congregate in hallways, bathrooms or classrooms prior to or after class. Any presence of fever or other COVID-19 symptoms will be reported on the RIT Daily Health Screen Monitoring (https://www.rit.edu/news/rit-launches-daily-health-screen-monitoring-covid-19-symptoms); please notify myself (Matthew Fluet, mtf@cs.rit.edu) so that the best way to accommodate your learning can be planned.

The instruction mode for this course will be Blended A/B with the ABA-S format. The registrar will assign each student to either Group A or Group B for the course. For class meetings with lectures or presentations, one group will attend in person and the other group will participate synchronously via Zoom. The course will not meet every scheduled class meeting; consult the course schedule for details.

This course is being offered with both the Online Flex and Full Flex options. A student can choose to complete all course requirements online either for the entire semester (Online Flex) or as needed throughout the semester (Full Flex). The primary expectation is that flex students will attend class meetings (including giving presentations) synchronously using Zoom. Contact the instructor (at any time during the semester), if you wish to select one of these options.

Students who are required to quarantine or isolate should contact the instructor to select Full Flex for the duration of their absence. Again, the primary expectation is that flex students will attend class meetings (including giving presentations) synchronously using Zoom. For circumstances that go beyond standard quarantine or isolation, students should contact an appropriate administrative staff member (e.g., the Disability Services Office (DSO), assistant or associate dean for student success or academic services, or academic advisor) and ask that they contact the instructor, who will make special arrangements suited to the situation.

In the event that RIT moves to fully online instruction for the fall semester (or the instructor is required to quarantine or isolate), class meetings with lectures or presentations will move to synchronous participation via Zoom for all students.

We will talk in class about these expectations to ensure that we all are comfortable with what is happening during class. I encourage your communication about any special needs or concerns. Together we will complete MS Capstone Project in a safe and productive format!

Disclaimer

The instructor reserves the right to make any changes to the syllabus deemed necessary throughout the course. Minor changes, such as assignment due dates, will be announced orally during class and posted on the course mailing list and home page. Major changes, such as grading percentages, will additionally be provided in writing.

Acknowledgements

Portions of this course material based upon Computer Science MS Project Colloquia offered by Reynold Bailey, Zack Butler, Joe Geigel, Minseok Kwon, Leon Reznik, and Richard Zanibbi.