General Information

Instructor: Matthew Fluet
E-mail: mtf@cs.rit.edu
Office hours: Tu 11:00am – 12:00pm; GOL-3555
              We 11:00am – 12:00pm; GOL-3555
              Th 11:00am – 12:00pm; GOL-3555
              or by appointment

Lectures:    Section 05  TuTh 3:30pm – 4:45pm; GOL-3560

Website: http://www.cs.rit.edu/~mtf/teaching/20165/msp
          http://mycourses.rit.edu

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 advisor. Students enroll in a required colloquium com-
ponent 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 open to
the public.

Note: Students without a confirmed project topic and faculty advisor by January 27 (Friday
of Week 1) will be withdrawn from the course.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:

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Report (by faculty advisor):</td>
<td>45%</td>
</tr>
<tr>
<td>Poster Session (by CS faculty feedback):</td>
<td>15%</td>
</tr>
<tr>
<td>Milestone Deliverables (× 3; by faculty advisor):</td>
<td>20%</td>
</tr>
<tr>
<td>Presentations (by course instructor):</td>
<td>12%</td>
</tr>
<tr>
<td>Pre-class Activities (by course instructor):</td>
<td>4%</td>
</tr>
<tr>
<td>Attendance &amp; Participation (by course instructor):</td>
<td>4%</td>
</tr>
</tbody>
</table>

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

- **January 27 (Fri.):** Project Topic and Faculty Advisor
- **February 17 (Fri.):** Milestone 1 Deliverables
- **March 24 (Fri.):** Milestone 2 Deliverables
- **April 21 (Fri.):** Milestone 3 Deliverables
- **May 12 (Fri.):** Final Report and Poster
- **May 16 (Tue.):** Poster Session (1:00pm – 3:00pm; GOL atrium)
Text Books

Required:
Title: Writing for Computer Science (3rd edition)
Author: Justin Zobel
Publisher: Springer
RIT Library e-book: [http://albert.rit.edu/record=b3372474-s3](http://albert.rit.edu/record=b3372474-s3)

Course Policies

Attendance & Participation

Students are required to attend and expected to participate in class. Participation means being an engaged student: asking and answering questions, not simply attending class.

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. Persistent use of a laptop for other activities will result in 0 credit for your Attendance & Participation grade.

Assigned readings should be completed before the lecture section. You are responsible for the material in assigned readings, whether covered during lecture or not.

Late Policy

Assignments that are submitted electronically (most assignments) will generally be due at noon (12:00PM) on the due date. Assignments that are submitted in person will generally be due at the beginning of a class period.

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

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.

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 Joe Geigel, Reynold Bailey, Minseok Kwon, Leon Reznik, and Richard Zanibbi.