1. 4005-89[31] MS Project/Thesis Seminar

Feb/2005
2. General Information

Course Title:
    MS Project/Thesis Seminar

Instructor:

Office:

Telephone:
    (585) 475-5568

Office Hours:
    Monday: 14:00-15:00, Wednesday: 14:00-15:00,
    and by appointment
2.1. Syllabus
In this course the student will develop his Master’s Project or Thesis topic. It will be necessary for the student to make presentations in the class, form his committee and write a Master’s Proposal. This course must be completed prior to registering.

Course organization
• lectures
• student presentation

2.2. Expectations
Every student has to hand in a written progress report at the end of each lecture.

2.3. Procedure
• Grad students who started in the fall have to take the 2 hour credit Graduate Project/Thesis Seminar New Program (4005-891). A grade will be assigned for this class.

2.4. Schedule
In the first two weeks the instructor will explain
— different faculty member will give a talk about their area of interest
— explain in which areas other faculty members are interested in
— explain what a proposal contains
— explain how a proposal should look like

The students have to give progress reports during the 8 week period. It is expected that each student presents at least three times during the 8 week period.

2.5. Grades
There are only four possible grades: A, B, I, and F.

A: A student finishes his/her proposal during the 10 week period.

The student does not have to come to class after she/he has a signed off project proposal (advisor/reader/person who runs the seminar) and is registered for the project. The A will be assigned to good and very good proposals. The advisor will be consulted to determine the quality of the proposal.

B: A student finishes his/her proposal during the 10 week period.

The student does not have to come to class after she/he has a signed off project proposal (advisor/reader/person who runs the seminar) and is registered for the project. The B will be assigned to not good or not very good proposals. The advisor will be consulted to determine the quality. It is expected that the advisor does not sign a ‘lousy’ proposal.

I: The student could not complete a proposal, but made a serious effort to complete the proposal. The effort part will be documented by a letter from the advisor. A possible version of this letter will be provided. It is expected that the student finish his proposal in the following quarter.
The students will sign a document which describes how the grades will be assigned (read below). This document will be filed in their folder.

### 2.6. Withdrawing and Registering for the Course

A student needs the graduate coordinators approval if [s]he would like to register more than 2 times. I.e. a student needs the faculties approval if [s]he would like to register for the third, fourth, etc time.
2.7. Agreement
A electronic version of the signed paper can be found

3. Structure of the Course
- Faculty Interest
- Proposal
- Student Presentation
- Grading

3.1. Pre Reqs
- Credit hours: ???
- GPA >= 3.0
4. Proposal
Stolen and modified from:
A couple of examples can be found at:

4.1. Process
- talk to faculty members
- find a faculty chair person
- define a topic
- write pre proposal
- submit pre proposal to faculty chair person
- pre proposal gets accepted or send back for modifications
- write proposal
- proposal gets accepted or send back for modifications
- set up a web site
- work/talk to faculty chair person on a regular basis
- Update your web site at least every two weeks
- defend your project/thesis

4.2. What Defines a Project/Thesis?
Like any project, essay, or dissertation, there is no complete, precise definition possible of a Masters thesis or project that guarantees acceptance. However, in this document I attempt to describe these works with examples, counter-examples, and components.

4.3. Goal of a Project or Thesis
The student has to demonstrate that she/he can apply the major aspects of the current graduate program in computer science at RIT.

4.4. Learning Outcomes
When finished, the student will have a solid understanding of how to describe and solve a large, non-trivial computer science problem and how to write a technical report.

4.5. Masters Project Definition
A project should result in a report presenting
- an investigation of a theoretical hypothesis or
- a discussion of a software development effort undertaken by the student.

The project report is expected to be a scientific paper, describing background and relevant results in the area, detailing the work carried out, discussing the significance of the deliverables of the endeavor, avenues for future work, and providing appropriate reference citations.

4.6. Masters Thesis Definition
A thesis should deal with a significant question and involve some original insight. It should produce a result that could be published in peer reviewed literature. The thesis report is expected to be a scientific paper, describing background and relevant results in the area, detailing the work carried out, discussing the significance of the deliverables of the endeavor, avenues for future work, and providing appropriate reference citations.
4.7. Counterexamples
Here are some endeavors that would not be considered Masters projects or theses:

- a large programming assignment, comparable to what might have be assigned in a course
- a study of concepts that should have been learned in one of the courses available to our students
- "From scratch" work that ignores previous published results in the area
- duplication of someone else’s known work

4.8. Deliverables
Thesis and project reports are to be submitted in electronic form and paper copy. The electronic form will be submitted via a web form so that it will be available online. The submission should include everything that is required to continue work in the area covered by the project/thesis (source code, make files, documentation, etc).

- Proposal
- Summary
- The final written report
- If there is software:
  - Source code
  - Installation instructions
  - User’s guide

4.9. Structure of a Proposal: Cover Page
- The cover page should contain the thesis title, the name of the thesis faculty advisor, and the names of the faculty members that participate in the thesis committee. Committee members indicate their approval of the thesis topic by signing the cover page.

4.10. Structure of a Proposal: Statement of Thesis Objectives
A brief description of the project and a clear statement of the thesis objectives and the project deliverables

4.11. Structure of a Proposal: Literature Search
An annotated bibliography of the major related work in the field and how each of these works will be used to develop the theory section and how it relates to this project.

An outline of the proposed thesis document with major headings, e.g. chapters, sections, etc.

4.13. Structure of a Proposal: Timetable
A timetable of project activities until completion

A description of all resources, including hardware, software and space required to complete this project and a statement about their availability

4.15. Committee Signatures
The thesis proposal should be signed by the principal thesis advisor and the reader members of the committee and submitted to the Department Head.
5. Time Line

5.1. Registering

- Registering for project/thesis this or next quarter.
- Registering for continuation of project/thesis
  - This is a 0 credit course
  - You have to pay one credit if you register more than one

5.2. One Year Time Limit

Dear Graduate Student,

This is an important message from the graduate coordinator. Please read thoroughly.

Chapter 6 of the graduate handbook states:

Additionally, by signing your proposal the committee members agree to serve on your committee for one year. After one year they can resign from the committee if they feel the student is not making adequate progress.

The signing of a proposal constitutes a working arrangement between the thesis/project committee and the student for one year. If the thesis/project is not completed within one year after the proposal is signed, the initial committee is automatically disbanded, and a new proposal must be approved by a new committee.

Exceptional situations may arise, however, when the initial committee may decide to continue with the student’s current work for some limited additional time. This extension would have to be agreed to by the student and the members of his or her committee.

What does this mean for you?

You have to contact your committee asap, if you have been working on a project/thesis for more than 1 year.

What can happen?

The committee may stay on your committee, if they deem you have made adequate progress, or if you can finish and defend your project in a short period of time.

If the committees decide that you did not make adequate progress and chooses to resign, you have to start with a new proposal and a new committee.
6. Faculty Interest

See

6.1. Theory
- Crypto
- Algorithms
- Security
- ...

6.2. Applied
- Networking
- Security
- Compiler
- Database
- Data Mining
- Distributed Computing
- ...

7. Faculty Presentation - TBA
8.
9.
11.
12. Evaluation
A few questions about the presentation. The answer will not be used to determine a grade.

- Name of the student: _____________________
- Overall, how was the presentation?
  ○ (A) poor  ○ (B) ok  ○ (C) good  ○ (C) excellent; ○ (C) outstanding
- Do you understand what she/he is doing?
  ○ (A) yes  ○ (B) no
- The slides were:
  ○ (A) poor  ○ (B) ok  ○ (C) good  ○ (C) excellent; ○ (C) outstanding
- The oral presentation was:
  ○ (A) poor  ○ (B) ok  ○ (C) good  ○ (C) excellent; ○ (C) outstanding
- The scientific value was?
  ○ (A) poor  ○ (B) ok  ○ (C) good  ○ (C) excellent; ○ (C) outstanding
- The scientific value was?
  ○ (A) poor  ○ (B) ok  ○ (C) good  ○ (C) excellent; ○ (C) outstanding

What was good? (please use the back side, if you are running out of space)?

What could be improved? (please use the back side, if you are running out of space)?