Introduction to Software Engineering

An introduction to basic software development infrastructure; requirements elicitation and tracking; estimation and prioritization; teamwork skills; basic UML; design patterns and refactoring; security, discussion of ethical issues, and professional responsibility.

Texts:

**Recommended Textbook**

**Recommended Reading**

Evaluation:

**Assignment**

There is one assignment divided into 6 exercises due approximately every other week. Initially the work on the exercises is individual work. Part way through the course the instructor will assign students to groups. If a team member drops the course, he or she must inform fellow team members, the TA and instructor immediately. Team members are not allowed to switch teams. If teams become lopsided the instructor may reassign team members. Each student will submit their solution to the individual exercises. Each team will submit a single solution for the team exercises. All team members will receive the same mark for the exercises, except in exceptional circumstances at the discretion of the instructor.

Each team member will be evaluated by and will evaluate the other members of their team.

Detailed instructions on the content of the assignment and the exercises will be provided on the course Website.

Due dates and hand in details will be posted on the website. There will be a 10% deduction for late assignments for each day of delay, to a maximum of 7 days; assignments will not be accepted after that point. Saturdays, Sundays and holidays count when calculating late days.

Extensions to assignments will only be granted in the case of documented medical emergencies. See http://www.utoronto.ca/health/forms/forms.html

Note that the TA and instructor will not answer any questions relating to the assignment within 24 hours prior to a deadline. If you have questions about the grade for your assignment ask your TA. All requests for remarking will be handled by the instructor.
The assignments in CSC 301 involve a substantial amount of writing. Dr. Margaret Proctor is the University’s Coordinator for Writing Support. There are numerous resources at her web site www.utoronto.ca/writing. At UTM the Academic Skills Centre has resources to help with writing.

**In Class Reports**

Each student must research and present a couple of topic. There are three different types of topics. Students will be asked to find and research a software engineering failure. The “Just in case you wanted to know” box on page five of the text provides some examples. Describe the project and what part of the software engineering process caused the failure.

Students will be asked to research a software engineering tool. Show where it fits in the software engineering process. A demonstration of the tool would be good. The text has a chapter named “Tools of the trade” that provides general categories.

Students will be asked to sumarize some of the course material.

Watch the course Website for the schedule of presenters.

The presentation should be between 10 and 15 minutes. Visual aids are welcome. Post your presentation on a public bulletin board and put the URL in the course discussion page.

**Plagiarism**

Dr. Margaret Proctor also has a document “How Not to Plagiarize” (www.utoronto.ca/writing/plagsep.html). Plagiarism is a serious offence, and will be dealt with accordingly, if detected.

All of the work you submit must be done by you or your team, and your work must not be submitted by anyone else. Plagiarism is academic fraud and is taken very seriously. The department uses software that compares programs for evidence of similar submissions. Please read the Rules and Regulations from the UTM Calendar (especially the Code of Behaviour on Academic Matters):

http://www.utm.utoronto.ca/regcal/WEBGEN120.html

It is also an academic offence to aid someone in committing plagiarism.

For team projects, with team assignments, plagiarism shall be interpreted as any situation in which one team knowingly submits work that was carried out by another team, without explicitly declaring that this is the case. This will include collusion, i.e. any situation in which two or more teams work together to complete an assignment such that it is not possible to determine what each team did separately. Hence, if you use ideas or work of others as part of completing your assignments, you should be very careful to distinguish the work of your team from the work of others.

**Evaluation**

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<thead>
<tr>
<th>Item</th>
<th>Weight</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Report</td>
<td>10%</td>
<td>During class time</td>
</tr>
<tr>
<td>Six Exercises</td>
<td>10% each</td>
<td>Check the assignment description for the dates</td>
</tr>
<tr>
<td>Exam</td>
<td>30%</td>
<td>Exam period</td>
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The final exam constitutes 30% of the final mark. You must achieve a mark of at least 30% on the final exam to pass the course.

If you are unable to write the final examination due to illness or other circumstance, contact your Registrar as soon as possible.