CS3043 – Software Engineering II COURSE OUTLINE Section 01B - Winter 2011-12

| | Class Times: Class Room: Tutorial: Lab: | TTh 8:30-10:00an ITC317 Th 4:00-6:20 (EO\ | | | |
|------------------|--|---|------------------------------|--|--|
| Instructor: | Dr Maclsaac | | Dr Song | | |
| Office: | ITD 418 | | ITD 419 | | |
| Office Hours: | T 10am-11:30a | m | Th10:30am-12pm, F9am-11am | | |
| Email Hours: | Th 2:30pm-4:00pm | | | | |
| Email: | <u>dmac@unb.ca</u> | (tag: {CS3043}) | wsong@unb.ca (tag: {CS3043}) | | |
| Course Web Site: | http://www.ece.unb.ca/Courses/CMPE3213/DM/ | | | | |

Course Description

The content of this course examines methods and tools of the software development process. Major topics include:

- Software development methodologies RUP, Agile
- Software modeling use case, activity, and class diagrams with UML
- ▶ Software design decisions design principles and patterns, clean code
- Software testing and verification including test-driven development
- Project, configuration and rationale management

A software development project will be used to provide practical opportunities to apply the content of this course within an object-oriented context. Students will be expected to work in teams.

Attending Lectures, Labs and Tutorials

Students are responsible for all material presented and all announcements made in lectures. If you have to miss a lecture for any reason, it is your responsibility to obtain any information missed. This is especially important since significant decisions about the projects can be made during any lecture, and these decisions affect everyone in the class. Students who miss classes regularly may be asked to withdraw from the course.

Use of mobile devices (cell phones, lap tops etc.) during lectures is normally not permitted.

In order to obtain full credit for project work, students <u>must attend Lab 5</u> and any 3 out of the 4 remaining labs. To get credit for work demonstrated during a missed lab, you must submit a completed *Acknowledgement of Contribution* form, found on our course web site.

Marking Scheme

Numerical grade conversion is as follows:

| A+ | 90-100 | B+ | 76-79 | C+ | 60-69 | D 40-49 | F <40 |
|----|--------|----|-------|----|-------|---------|-------|
| А | 85-89 | В | 73-75 | С | 50-60 | | |
| A- | 80-84 | B- | 70-72 | | | | |

| Term Project (Teams of 3-4) | | 50% |
|-------------------------------------|---------|---------|
| Seminar Report/Presentation (Pairs) | | 10% |
| Midterm Examination | (up to) | 15% |
| Final Examination | | 25%-40% |
| logbook | (up to) | -10% |

- plan (5%), 3 iterations (5% each), release (15%), report (15%)
- choose how to distribute work and grade
- Thursday Feb 02nd, 2011
- depending on worth of midterm

Both the midterm exam and the final exam will be closed-book. A midterm missed for legitimate reasons (illness, bereavement etc.) must be reconciled through extra weighting on the final examination. Since the term project is a team effort, normally no reconciliation accommodations will be provided for missed or late submissions for these components. In extreme legitimate cases (extended illness, multiple bereavements etc.) these grade components must be reconciled through extra weighting on the final examination. Penalties for all other missed or late submissions will be delineated on the instruction sheet for the component in question.

A failing grade (< 50%) on the term project may result in failure of the course.

Working in Teams

When working in teams, work submitted for grading may be distributed as agreed upon by all team members, but all members of a team are expected to contribute equitably and grades will be altered accordingly when evidence suggests sizeable discrepancies in contributions. Inequitable distribution of workload must be reported to the instructor before work commences, so that intervention can occur.

When submitting written work as a member of a team, you are responsible for the full contents of the submission. If you are uncertain about the quality and/or referencing standards used by team members, check the work and encourage revision when necessary. In the event that you are uncertain about standards of submitted work even after revisions are encouraged, you must report your uncertainty to the instructor before submission. Failure to do this will hold all team members equally accountable for the submission.

It is the responsibility of each student to understand and abide by regulations regarding general conduct as outlined in the UNB undergraduate calendar. In this class, exploitation of a team member in any way, including inequitable distribution of work load, will be considered an infringement of your team member's right to respect.

Plagiarism

Details regarding plagiarism can be found **in the Appendix** of this document. As a student in a senior level university course, it is your responsibility to ensure that you understand these details. If you do not, use resources provided by UNB Library to develop your understanding (see <u>http://www.lib.unb.ca/research/Plagiarism.html</u>) and/or seek assistance from your instructor.

Reference Materials

A Shalloway, JR Trott, **Design Patterns Explained:** A New Perspective on Object-oriented Design, Addison-Wesley, USA, 2005. - *recommended*