University of Lethbridge Department of Mathematics and Computer Science

Computer Science 3720 – Software Engineering Course Outline – Spring 2013

LECTURES: MWF 15:00 – 15:50 **ROOM:** B730

INSTRUCTOR: Robert Benkoczi (office C556)

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TEXTS: Software Engineering 9, Sommerville, Addison-Wesley

(recommended) Specifying Software: A Hands-On Introduction, R.D. Tennent, Cam-

bridge University Press, 2002

GRADING Presentations / reports 6% SCHEME: Assignments (3) (3% each) 9%

 $\begin{array}{ccc} \text{Project} & 25\% \\ \text{Midterm exam} & 20\% \\ \text{Final exam} & 40\% \end{array}$

GRADE DISTRIBUTION: This information is provided as a guideline only and may be revised in this offering.

SCHEDULE:

(as time permits):

- 1) Project management, requirements engineering, object oriented design, quality assurance.
- 2) Specifying requirements, design, project plans, etc.
- 3) Software metrics.
- 4) Formal verification methods.

COMMENTS:

• Course organization and presentations:

The course has two main parts. Part 1 overviews some of the techniques used in industry during the software development phases. Additional reading will be assigned and discussed in class. The discussions are led by students and focus on how these ideas can be directly applied to the class projects. You are expected to think about all the class projects and not only about the project you are actually writing code for.

Before each class discussion, you are encouraged to write a report where you clearly sketch your solutions for the class projects. The presentations & reports component of your grade will be based on your presentation in front of the class and your reports. It is possible that not everyone has a chance to present in the class, in which case the grade will be assigned based on the reports only.

Part 2 of the course looks at formal specification and verification of software systems. Learning about software specification and verification will help us think about our code and, eventually, it will improve the quality of the code we write.

• Course webpage:

The course resources are on Moodle. There you will find the outline, the lecture notes, reading resources, the assignment questions, initial project descriptions, and your grades.

• Exams and assignments

- The final exam covers all the topics in the course.
- The midterm must be written at the scheduled time; no provision is made for make-up tests or late assignments, except for medical reasons or emergencies. Missed exams and assignments receive 0 points.
- Requests for remarking tests and assignments are accepted only in writing no later than
 one week from the date your graded work was returned. On the request: identify the
 assignment or midterm, briefly explain why you believe the mark is incorrect, date
 and sign. Note that if your work is remarked, your grade may go up, down, or remain
 unchanged.
- Copying is strictly prohibited. Plagiarism can lead to severe penalties consult the calendar.
- Please be considerate to your classmates: try not to be late in class, limit your discussion to class discussion during the lecture, and turn off the sound on any electronic device (laptop, cell phone, etc).

LINKS

- Moodle: http://moodle.uleth.ca/
- Instructor's page including office hours: http://www.cs.uleth.ca/~benkoczi/