

# **CIS\*3250 – Software Design III**

## **Course Outline – Fall 2016**

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**Teaching Assistants:** TBA

### **Timetable**

**Lecture:** Monday, Wednesday, Friday, 11:30-12:20, MCKN 029.

**Labs:** Monday, 08:30AM - 11:20AM, Reynolds 114.

Tuesday, 11:30AM - 02:20PM, Reynolds 114.

Friday, 02:30PM - 05:20PM, Reynolds 114.

### **Text Books**

- Code Complete, 2nd ed., by Steve McConnell, Microsoft Press, 2004. ISBN-10: 0735619670  
ISBN-13: 978-0735619678
- The Design of Future Things, by Donald A. Norman, Basic Books, 2007. ISBN-10: 0465002285  
ISBN-13: 978-0465002283

### **Course Web Page:**

[courselink.uoguelph.ca](http://courselink.uoguelph.ca)

## **Marking Scheme**

1. Assignments: 40% (20% for the design component and 20% for the implementation component)
2. Lab Assignments: 10%
3. Quizzes: 30%
4. Final Examination: 20%

## **The Schedule of Quizzes, Assignments and Final Exam**

**Quiz #1:** Wednesday, Sep. 21, “The Design of Future Things” (Chapters 1-3) and lecture material

**Quiz #2:** Wednesday, Oct. 5, “The Design of Future Things” (Chapters 4-5) and lecture material

**Quiz #3:** Wednesday, Oct. 19, “The Design of Future Things” (Chapters 6-7) and lecture material

**Assignment #1:** Due by Monday, Oct. 10

**Assignment #2:** Due by Monday, Nov. 7

**Final Exam:** Monday (2016/12/05), 07:00PM - 09:00PM Room TBA

Weekly labs start Sept. 16. The labs are worth 1-2% each. There will be no labs the week of Oct. 10.

**Notes:**

- All assignments will be posted on the course web page.
- The course is divided into two sections, the first is the (Quizzes + Final Exam) and the second is the (Assignments + Lab Assignments). You must achieve a passing grade in each of the sections to pass the course. A failing total in either of the above two sections will result in a final grade in the course equal to that failing total. The highest grade you can achieve if you fail either section is 45%.
- It is academic misconduct to collaborate on assignments which do not explicitly allow for group work. It is also misconduct to represent other student's work as your own. There are penalties for doing this. All parties to misconduct will be reported to the Director of the School of Computer Science as participants in academic misconduct. See Academic Misconduct in Section VIII of the Undergraduate Calendar for the causes and penalties of misconduct.
- Failure to submit assignments correctly will result in a substantial loss of marks.
- The term project in this course involves experience with large groups. There are two parts to the term project. A design component and an implementation component. Groups will not be allowed to submit an implementation until they have submitted a design document which receives a passing grade. Groups can resubmit their designs once a week until they receive a passing grade on the design. If a group never achieves a passing grade on their design then they will receive a mark of zero for the implementation component of the project.

## Lecture Topics

This course will examine the historical development of design methodologies and working with legacy systems. It will include an examination of programming paradigms and trends in software design from the past and present.

This course covers the traditional software development lifecycles. A group project involving a large team design and development experience will be the focus of the course.

The course will focus on:

1. problem solving
2. traditional lifecycles for software design are examined including Waterfall and Iterative.
3. project management in this course will involve larger team experiences
4. writing and presentation of larger requirements and design reports will be required.
5. automated testing tools