

# **CIS\*1250 – Software Design I**

## **Course Outline – Fall 2014**

**Instructor:** David Calvert

**Office :** Reynolds Building, Room 201

**phone:** 824-4120 ext. 53085

**email:** dcalvert@uoguelph.ca

**Teaching Assistants:** Abdullah Abdullah, Jamileh Yousefi, Eric Nyakundi

### **Timetable**

**Lecture:** Monday, Wednesday, Friday, 10:30-11:20, Landscape Architecture 204.

#### **Labs:**

Monday, 11:30-1:20, Reynolds 114.

Wednesday, 11:30-1:20, Reynolds 114.

Wednesday, 2:30-4:20, Reynolds 114.

Friday, 11:30-1:20, Reynolds 114.

### **Text Books**

- Subject to Change by Peter Merholz, Todd Wilkens, Brandon Schauer, and David Verba, O'Reilly Media, Inc., 2008. ISBN 978-0596516833.
- Universal Principles of Design, second edition, by William Lidwell, Kritina Holden, and Jill Butler, Rockport Publishers, 2010. ISBN 978-1592535873.

### **Course Web Page:**

<http://courselink.uoguelph.ca>

## **Marking Scheme**

1. Assignments: 20%
2. Lab Assignments: 30%
3. Quizzes: 30%
4. Final Examination: 20%

### **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 level of difficulty for assignments will be set based upon the semester level of the students. Students in later semesters will receive more challenging assignments. The organization of groups for labs and assignments will also be based upon semester level of the students. Students with higher semester levels will be placed in the same group or may instead be required to complete individual assignments instead of group assignments.

## Lecture Topics

1. A general history of design.
2. The brief life of software design.
3. The process of design.
4. Design and programming.
5. Design reviews.
6. Software design methodologies.
7. Evaluating the quality of design.
8. Software tools.
9. Communications practices for the designer.
10. Problem solving.
11. Group dynamics.
12. Ethical implications of software.
13. Intuitive paper prototyping.