

# **CIS\*6660 01 Pervasive Computing**

Fall 2006

**Advisor:** Qusay H. Mahmoud, qmahmoud@uoguelph.ca

**Co-Examiner:** Judi McCuaig, judi@uoguelph.ca

**Class Time and Place:** Thursday, 2:00-5:00pm.

## **Objectives**

The objectives of the course are to provide the students with a comprehensive survey of the important work and results published in the area of pervasive computing. Students will learn how to read and present seminars, and develop research ideas and write them down. In addition, students will learn about independent, creative, and critical thinking, and will come to appreciate the global issues that surround pervasive computing.

## **Material**

The following resources will be used for this course:

- **Journals:** Several IEEE/ACM journals and magazines (e.g. IEEE Pervasive Computing Magazine) feature papers on pervasive and ubiquitous computing. Students will have online access to these journals through the University of Guelph's subscription.
- **Conference Proceedings:** papers from conferences related to pervasive and ubiquitous computing
- **Online Resources:** Many research papers are available online.
- **Pervasive and Ubiquitous Systems:** Students will be asked to investigate several pervasive and ubiquitous systems, and tools for developing them.

## **The topics to be covered in this course:**

- Mark Weiser's vision of ubiquitous computing (the Computer of the 21<sup>st</sup> Century)
- Context-awareness
- Standards for service discovery and delivery
- Intelligent services (computational intelligence)
- Social implications (security, privacy, and human values)
- Networks and infrastructures for ad hoc devices
- Tools and environments for pervasive computing
- Research challenges

## **Method of Presentation**

Students will be given specific research topics to work on. The instructor and students will meet on a weekly basis to discuss the progress of the assigned work.

## Method of Evaluation

The following grading scheme will be used:

1. Two Major Written Assignments: 20% each
2. Project:
  - a. Design/Implementation/Simulation: %30
  - b. Report: 20%
3. Seminar: 10%

**Please note that** every student enrolled in this course is required to brief the co-examiner (Prof. Judi McCuaig) on the activities and progress in the course. This can be done via email.