Course Code: CIS*6320	Course Title: Image Processing Algorithms and Applications	Date of Offering: Winter 2017
Instructor: Michael Wirth	**Office:** n/a **Email:** mwirth@uoguelph.ca	

Synopsis:

This is a graduate level course that provides an insight into the principles of image processing. A study of methods for enhancing, analyzing, interpreting and visualizing information from two- dimensional images obtained from a variety of real-world applications.

Class Information: 11.30am-12.50pm Tues/Thurs

Text (not required):

Solem, J.E., Programming Computer Vision with Python, O'Reilly and Associates, 2012
Available as an e-book.
Gonzalez, R.C., Woods, R.E. Digital Image Processing, Prentice Hall. (Any edition is okay).

Method of Evaluation:

Course Work	Date	Weight
Assignment 1	Feb. 3rd, 2017	25%
Assignment 2	Mar. 3rd, 2017	25%
Project (individual)	Apr. 5th, 2017	40%
In-class presentation	Last two weeks of class.	10%

Website:

The course has a Courselink site which is used for accessing all course content, lectures, assignments, case studies, lab information, assignment submission etc.

Learning Outcomes:

By the end of this course, students will be able to:
- Appreciate the role of image processing and computer vision in the real world.
- Establish an understanding of the principle concepts and algorithms associated with image processing and computer vision.
- Apply image processing and computer vision algorithms to real world problems.
- Design and implement image processing and computer vision algorithms, and extend existing algorithms from the literature.

ACADEMIC INTEGRITY

The University of Guelph is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards, and must abide by the applicable policies (see Section II of the Graduate Calendar on "General Regulations -> Academic Misconduct"). For educational purposes, instructors impose conditions on assignments that may limit students' permission to collaborate with others or to utilize external sources (including, but not limited to, software, data, images, text, etc.). Any permitted utilization must be done with proper references. Instructors may use automated tools to detect possible cases of plagiarism. Work that shows significant unnatural similarity or that appears to be copied from unacknowledged sources, will be investigated as potential academic misconduct. "Aiding and abetting" is also a punishable offense, and students must be careful not to help others commit offenses by giving our their files or allowing others to access their computer accounts. Consider yourself warned.

ACCEPTABLE USE POLICY

Please read the complete policy which can be found on the web page: http://www.uoguelph.ca/web/aupg/

THE GRADING SYSTEM

During the term, your marks will be accumulated out of 100%, as indicated in the "Method of Evaluation" table.

ASSIGNMENTS

There are three assignments and a presentation for this class. To receive full grades, assignments (as well as all other course work) must represent your own personal efforts. The submission of assessment material on the due date is the responsibility solely of the student. Students should not leave assignment preparation until the last minute and must plan their workloads so as to be able to meet advertised or notified deadlines.

SUBMISSION: Assignments must be handed in online by 11:55pm on the due date, using the appropriate drop box in Courselink.

EXTENSIONS: All assignments have a built-in extension of 72-hours. This means that you have an additional 72 hours after the due date and time of the assignment, and no penalty will be applied until the extension has expired. The penalty after this time is 1% per day.

REGRADING POLICY: Assignments will be regraded up until seven (7) days from when the mark is released. It is your responsibility to check that the marks are correct and to notify me of any errors or missing marks.

NOTE: Let's face it, you have to assume that technology will fail you at some point. Computers crash, transfers time out, flash drives become corrupt. The list goes on and on. These are not considered emergencies. They are part of the normal process of work. An issue you may have with technology is no excuse for late work. Protect yourself by managing your time and backing up your work.