CIS*4720 Image Processing and Vision
Winter 2021

UNIVERSITY of GUELPH

School of Computer Science

1 INSTRUCTIONAL SUPPORT

Instructor:	Dr. Denis Nikitenko
Office:	N/A - online instruction only
Office hours:	Online, by appointment only. Details will be posted on the course website.

Pre-requisites:	CIS*2750, CIS*3110, (CIS*2460 or STAT*2040)
Credit Weight:	0.5

Course format

Lectures ands labs

The course will be offered online, in a synchronous format. The course notes will be delivered online during scheduled times, recorded by the instructor, and posted on the course website.

Unless otherwise stated, lab times will be used for advising and consulting with the Teaching Assistants. Details will be announced on the course website.

Assessment

The course will be evaluated using programming assignments and a programming project.

Topics

- Introduction to image processing
- Fundamental image processing algorithms: contrast enhancement, denoising, sharpening
- Performance evaluation in image processing
- Working with colour
- Image segmentation and edge detection
- Image morphology
- Image warping
- Combining multiple images