

# CIS\*3760 Software Engineering Fall 2021



School of Computer Science

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## 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*3750
Credit Weight:	0.75

### Course format

#### *Lectures and 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 noted, the lab times will be used for advising with the instructor. Additional office hours will be scheduled as necessary. Details will be announced on the course website.

#### *Assessment*

This is a project-based course and will be evaluated primarily through a series of project milestones. Additional evaluation components will include regular activity-based deliverables as well as online quizzes.

### Topics

- Software design and software development methodologies.
- Project management.
- Design patterns.
- UML
- Formal specifications
- Software metrics.
- Software quality and SQ assurance.
- Verification and validation
- Secure Software.

### Calendar Description

This course is an examination of the software engineering process, the production of reliable systems and techniques for the design and development of complex software. Topics include object-oriented analysis, design and modeling, software architectures, software reviews, software quality, software engineering, ethics, maintenance and formal specifications.