

**THE UNIVERSITY OF WESTERN ONTARIO
DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING**

**Course Outline 2016-FT
CEE9621A – Landslides and Slope Stability**

COURSE INFORMATION: Study principles of slope stability analysis, evaluate stability of earth slopes and investigate landslides and other slope failures from engineering perspectives. The theory, techniques and methodologies for the assessment, recognition, investigation, analyses and mitigation of landslides and slope failures will be discussed.

PREREQUISITE: Completion of an undergraduate degree in civil engineering or permission of the instructor. Unless you have either the requisites for this course or written special permission from the course instructor to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

INSTRUCTOR: Professor Julie Q. Shang, PhD, P.Eng. SEB3082.
jqshang@uwo.ca

COURSE SYLLABUS: (1) Principles, definitions, triggering mechanisms and processes of landslides and slope failures, (2) Review of soil mechanics principles: shear strengths and stability conditions, (3) Slope stability analysis by limit equilibrium method, (4) Monitoring of slope stability and investigation of slope failures, and (5) Slope stabilization, repair and preliminary design. Computer software Slope-W will be used as the numerical modelling tool, along with spreadsheets and hand calculations to verify numerical modelling results.

CONTACT

HOURS: Weekly lectures, discussions and presentations; Final project report due on December 12, 2016.

COURSE MATERIALS:

1. Course notes and other references posted on the course Web site.
2. *Soil Strength and Slope Stability*, Duncan, J.M. and Wright, S.G. 2005 Wiley (2 hour reserve in Taylor library).
3. *Landslides: Investigation and Mitigation*. 1997. Special Report 247, TRB, NRC (2 hour reserve in Taylor library)

EVALUATION:	Class attendance	10%
	Assignments (3)	30%

Presentation	(1)	10%
Project	(1)	50%
Total		100%

- Conditions**
- (i) Minimum attendance of lectures: 6
 - (ii) Minimum required grades on the final project: 50%.

Non-medical late submissions of assignments and final projects are not accepted unless a special permission from the course instructor is granted.

Accommodation for Medical Illness:

<https://studentservices.uwo.ca/secure/index.cfm>

COMMUNICATIONS: It is students' responsibility to check the course Web site for announcement, posted course materials and other information.

ACADEMIC OFFENCES: Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

Assignments and final project report may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All submissions for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).