Instructor: Professor S. Sivathayalan (3450 ME; siva_sivathayalan@carleton.ca)
Lectures: 3 hrs/week. Thurs 1800-2100 (ME 3174)

Additional references provided in class when topic discussed is not adequately covered in the Reference.

Ch. Topics
1, 2, 3 Preliminary Topics
Geological factors, Classification, effective stress, stresses and strains, constitutive relations

4 Pore Pressure Parameters
Skempton, Henkel’s equations, Generalized stress conditions

5 Permeability & Seepage
Measurements, Flow nets, Anisotropy

6 Consolidation
Terzaghi’s theory, Secondary consolidation, 3D effects, Consolidation tests

7 Shear strength
Cohesive soils, Granular soils, failure criteria, laboratory tests
Soils & Dynamic loads
liquefaction & post liquefaction
Critical state soil mechanics
textbook and real behaviour

Evaluation:
Satisfactory completion of assignments is required to obtain a passing grade in the course, even though assignments do not carry any weight toward the final grade.

Final Grade: Term paper: 20%; Mid-term: 20%; Final Exam 60%
Academic Accommodation

Students requiring special arrangements to meet the academic obligations during the term because of disability, pregnancy or religious obligations should write to me during the first two weeks of class, or as soon as the need for accommodation is known to exist.

Students with disabilities requiring academic accommodation in this course must register with the Paul Menton Centre for Students with Disabilities (PMC, ☎ 613 520 6608) for a formal evaluation of disability-related needs. Registered PMC students are required to contact the PMC every term to ensure that your Instructor receives your Letter of Accommodation, no later than two weeks before the first assignment is due or the first in-class test/midterm requiring accommodations. If you only require accommodations for your formally scheduled exam(s) in this course, please submit your request for accommodations to PMC by the last official day to withdraw from classes in each term.

Final Examination:

Final examination is for evaluation purposes only and students will not have access to their marked exam.