

PHYSICS
Civil Engineering Technology
Civil Engineering Physics II
203-923-DW (all sections)
Fall 2018

Teacher **Alex Pronine** 7A.14, local 4029, pro9physi cs@gmail . com

Pre-requisites Civil Engineering Physics I (203-912-DW)

Co-requisites None

Ponderation 2-1-1 (2 hours of lecture, 1 hour of labs, and 1 hour of work outside class per week)

Course objectives This course is designed to provide students in the Civil Engineering Technology Program with physics fundamentals to improve their chances of success in their program.
Detailed information regarding the objectives and standards for the competencies related to this course and the specific performance criteria is available at <https://www.dawsoncollege.qc.ca/oad/professional-development/mini-sterial-program-documents/>.

Course competencies This course will allow the student to partially achieve the competency:
O1XC: To analyze the structural reactions of engineering works.
1. To examine data on the work.
2. To establish the internal stresses of the structural elements.
3. To determine the strength of structural elements.
4. To determine any deformations in structural elements.
5. To have the analysis results approved.

Evaluation The Institutional Student Evaluation Policy (ISEP) is designed to promote equitable and effective evaluation of student learning and is therefore a crucial policy to read and understand. The policy describes the rights and obligations of students, faculty, departments, programs, and the College administration with regard to evaluation in all your courses, including grade reviews and resolution of academic grievance. ISEP is available on the Dawson website.

Term work	5%
Quizzes (6 @ 2.5%)	15%
Laboratory activities	20%
Class tests (2 @ 15%) ^y	30%
Final examination	30%

^yYour teacher will provide a tentative test schedule during the first week of class.

In order to pass the course, students must show a basic understanding of the course material at the level covered in the lectures and in the lab. This is achieved by attaining a final grade of at least 60%, calculated according to the evaluation scheme above. **Note: course work not submitted by the due date may be penalized at the teacher's discretion.**

Reference materials 1. **Statics & Strength of Materials**, 7th edition, by H.W. Morrow and R.P. Kokernak, Pearson.

Teaching methods The material will be presented using a mix of active learning activities, lectures, in-class problem solving, laboratory experiments and demonstrations. Laboratory periods will be used for experiments as well as class tests and lectures.

Attendance & participation

Although class attendance is not compulsory, students should make every effort to attend all classes. In the event that a class is missed, the student is responsible for all material covered or assigned during that class. **Attendance during laboratory experiments and for class tests is however compulsory.**

**Course
content**

The material to be covered is contained in the following chapters and sections of the text.

Weeks	Topics	Chapter & Section
1{4	Internal reactions: Stress for axial loads	Ch.10: 1{8 (9 optional)
5{7		