

DEPARTMENT OF SCIENCE

COURSE OUTLINE –Winter 2023

EG1000 (A3): Orientation to the Engineering Profession I – 1 (1-0-0) UT 15 Hours for 15 Weeks

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTOR: Braden Kelly
OFFICE: J218
OFFICE HOURS: TBA

PHONE: 780-539-2963
E-MAIL: bkelly@nwpolytech.ca

CALENDAR DESCRIPTION:

Definition, brief history, technical organization: formation and functions, qualifications for membership, ethics and obligations, branches and functions of engineering are presented.

PREREQUISITE(S)/COREQUISITE:

Restricted to students in Engineering. Must have passed all first term Engineering courses with a grade of at least C-.

REQUIRED TEXT/RESOURCE MATERIALS:

There is no required text. Some notes and resource material may be provided.

DELIVERY MODE(S):

- Lectures
- The course content may be supplemented by (i) presentations from practicing Engineers drawn from various disciplines of Engineering, and (ii) relevant articles from the PEG and other journals.
- Some industrial tours as opportunity arise. ESS functions/activities count for credit.

COURSE OBJECTIVES:

- You will learn about the history, development and regulation of the Engineering profession.
- You will be introduced to:
 - Engineering Profession
 - Branches of Engineering
 - Engineering Ethics
 - Provincial Engineering Act, Engineering Associations, and Self-Regulation.
- You will learn to communicate your ideas using various communication tools.
- You will be introduced to Engineering analysis.

LEARNING OUTCOMES:

After successful completion of this course:

- I. You should have the necessary information about the Engineering profession, and
- II. You should be able to make an informed decision regarding selection of your discipline within the profession of Engineering

TRANSFERABILITY:

University of Alberta, Augustana Faculty, Concordia University, Concordia University College, King's University College, Burman University.

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page <http://www.transferalberta.ca>.

**** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

EVALUATIONS:

Attendance	> 90% of classes
Individual presentation	20 points
Two business letters	20 points
Engineering literature search	20 points
Resume	20 points
Final Exam (Combined)	20 points (this may be replaced with a different option at the instructors discretion)

GRADING CRITERIA: (The following criteria may be changed to suite the particular course/instructor)

- This is a pass/fail course. The final grade will be based on written submissions, presentation, final examination (if the instructor chooses to pursue this option), attendance in class and relevant activities.
- All assignments must be type-written using a word processor. Late assignments will NOT receive any points.

- In order to pass the course, you must:
 - Receive minimum of 70% points in each of the five components individually.
 - Attend > 90% of the class sessions

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

Alpha Grade	4-point Equivalent	Percentage Guidelines		Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	90-100		C+	2.3	67-69
A	4.0	85-89		C	2.0	63-66
A-	3.7	80-84		C-	1.7	60-62
B+	3.3	77-79		D+	1.3	55-59
B	3.0	73-76		D	1.0	50-54
B-	2.7	70-72		F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

Thursdays, 1-1:50 pm in room J203.

STUDENT RESPONSIBILITIES:

Attendance is mandatory and assignments must be submitted on time.

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the Northwestern Polytechnic Calendar at <https://www.nwpolytech.ca/programs/calendar/> or the Student Rights and Responsibilities policy which can be found at <https://www.nwpolytech.ca/about/administration/policies/index.html>.

**Note: all Academic and Administrative policies are available on the same page.

Additional Information (Optional):

Engineers Rule The World (ERTW).