DEPARTMENT OF SCIENCE

COURSE OUTLINE – Fall 2025

PW 2320: Industrial Safety, Legislation, and Codes II– 2 (2-0-0) 30 Hours over 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.

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CALENDAR DESCRIPTION: This course covers topics focusing on safety, codes, and legislation in power engineering as well as code calculations, safety management systems, and fire protection systems.

PREREQUISITE(S)/COREQUISITE: 4th class power engineering certificate of competency.

REQUIRED TEXT/RESOURCE MATERIALS:

The following textbook and resource materials are required for the second year of the PET program, including courses PW 2301, PW 2320, TT 2301, PC 2301, PW 2302, PW 2330, and TT 2302. All books are from PanGlobal.org

- 3rd Class Part A Textbook Set [Ed. 3.0]
- 3rd Class Part B Textbook Set [Ed. 3.0]
- Academic Supplement [Ed. 2.0] – Students may have this from year one.
- 2018 ASME Academic Extract (Vol 1) – Students may have this from year one.
- 2018 ASME Academic Extract (Vol 2)

The 3rd Class books and the 2018 ASME Academic Extract (Vol 2) are available as a bundle:

https://mypower.panglobal.org/pshop/3rd-class/229-3rd-class-standard-collection.html

NOTE: Older editions of Power Engineering textbooks are not acceptable. The changes between editions are enough to impact the likelihood of passing the ABSA exams.

DELIVERY MODE(S): Lecture style presentation of material in person at the NWP Grande Prairie campus.

LEARNING OUTCOMES:
By taking this course, students will:

- Understand the purpose, content, and application of boiler and pressure vessel codes and regulations.
- Describe key codes, including ASME Section I, IV, V, VI, VII, IX, CSA B.51, CSA B.52, and the National Board Inspection Code.
- Perform code calculations related to ASME Section I, including thickness and allowable pressures.
- Calculate sizes and capacities of boiler safety valves using SI units.
- Familiarize with OH&S Acts and their relevance in industrial settings.
- Set up workplace OH&S programs and understand their components and responsibilities.
- Understand work permits, lock out and tag out, confined space entry, and hot work, and ground disturbance.
- Identify classes of fires and methods for extinguishing them.
- Comprehend industrial fire detection and alarm systems, sprinkler systems, and fixed fire systems.
- Develop knowledge of industrial fire response procedures and best practices.

TRANSFERABILITY: Nontransferable, there are no transfer agreements in place.

EVALUATIONS:

Assignments:	10%
Lab Assignments:	10%
Unit Exams:	30%
Final Exam:	50%

GRADING CRITERIA: Grades for this course will be assigned as a percentage. The minimum passing grade is 65%

COURSE SCHEDULE/TENTATIVE TIMELINE: 15 weeks. Unit exams will be held after chapters and units are completed.

STUDENT RESPONSIBILITIES:
Students must attend a minimum of 80% of all classes to successfully complete the course.

STATEMENT ON ACADEMIC MISCONDUCT:

Academic Misconduct will not be tolerated. For a more precise definition of academic misconduct and its consequences, refer to the Student Rights and Responsibilities policy available at https://www.nwpolytech.ca/about/administration/policies/index.html.

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