DEPARTMENT OF SCIENCE

COURSE OUTLINE – Winter 2026

PW 1499: Applied Research, Capstone Project – 3 (1-2-0) 45 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.

INSTRUCTOR:	**Curran Speager**	**PHONE:**	(780)539-2865
OFFICE:	J223	**E-MAIL:**	cspeager@nwpolytech.ca
OFFICE HOURS:			

CALENDAR DESCRIPTION: Research, design, test, analyze, conclude, and defend a Technology Report (Capstone Project) relating to a significant power engineering issue.

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

REQUIRED TEXT/RESOURCE MATERIALS:

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

LEARNING OUTCOMES:

- Determine a research area where practical technical investigation is warranted and define research goals and objectives.
- Compile and integrate a wide range of research resources, including

- professionally published or peer reviewed literature, online tools, and interviews.
- Integrate use of technologies specific to discipline, investigate procedures
- and analyze issues.
- Assemble, analyze, and appropriately apply technical data to create graphics, reports, and other documents.
- Integrate the processing, analysis, and interpretation of technical data to conclude project.
- Compile information effectively and accurately by analyzing, translating, and producing the report.
- Justify conclusions and make recommendations.
- Create the Technology Report in professional format using accepted principles of documentation, grammar, writing style, graphics, and design.
- Present the Technology Report and respond effectively to questions defending project conclusions.

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

EVALUATIONS:

Presentation:	40%
Report:	60%

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

COURSE SCHEDULE/TENTATIVE TIMELINE: 15 weeks.

STUDENT RESPONSIBILITIES:
Students must attend a minimum of 80% of all classes 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.