

2. Course Overview

Course Description

Laboratory Projects I (CHEE 218) is the first course in a series of three engineering laboratory courses provided by the Department of Chemical Engineering at Queen's University. This course is offered to second year Chemical Engineering Students only.

The projects provide a practical introduction to processes that occur in chemical engineering operations. Bench-scale and pilot plant equipment are used. Students plan and carry out the experiments, analyze the data and prepare written reports. (0/0/10/20/0)

PREREQUISITES: APSC 100, CHEE 209, or permission of the department

Goals

The objectives of Laboratory Projects I are as follows:

- Develop skills in the use of process and analytical equipment.
- Develop an appreciation of the strengths, weaknesses and limitations of the current theory through testing correlation, hypotheses and theories presented in the lecture courses.
- Develop engineering judgment and an awareness of the nature and magnitude of physical and chemical effects and factors.
- Develop the ability to analyze and control processes.
- Improve collection and data interpretation skills in order to draw meaningful and correct conclusions based on relevant theory.
- Demonstrate the value of planning experiments.
- Develop strong oral and written communication skills. Students will practice writing the essential components of a laboratory report including structure, spelling and grammar.
- Encourage students to write comprehensive and professional reports with special emphasis on format, clarity and accuracy.
- Foster the writing of clear and well defined laboratory purposes and objectives.
- Promote the development of initiative, originality and creativity.

Please Note:

- Concepts learned in the first year Laboratory Skills Course, such as statistical evaluation and appropriate presentation of results, such as tables, graphs and significant figures are assumed as course prerequisites.

- Students are expected to complete experimental work with minimal supervision and therefore, students need to be diligent in their own preparation, planning and execution.
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Accommodation for Disabilities

Queen's University is committed to achieving full accessibility for people with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact the Queen's Student Accessibility Services (QSAS) and register as early as possible. For more information, including important deadlines, please visit the QSAS website at: <http://www.queensu.ca/studentwellness/accessibility-services/>

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