COURSE CALENDAR DESCRIPTION

The project will include significant elements of design and implementation. The format is intended to resemble engineering projects in practice, including specifications, background research, innovative solutions, analysis, testing and communication. 2 terms. Prerequisite(s): 21 3000-level science or engineering credits in the Engineering Program, exclusive of LE/ENG 3000 3.00. Prerequisite or corequisite: LE/ENG 3000 3.00. Course credit exclusions: LE/CIVL 4000, LE/ESSE 4000. Prereq not mounted as it can also be taken concurrently.

INSTRUCTOR(S)

<table>
<thead>
<tr>
<th>Name</th>
<th>Section / Format / Term</th>
<th>Contact Email</th>
<th>Contact Phone</th>
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<tbody>
<tr>
<td>Newland, Franz T.</td>
<td>Sec. A / SEMR / Y</td>
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ADDITIONAL INFORMATION

COURSE OBJECTIVES

This course:
- Applies engineering knowledge gained over the rest of your studies to a real-world problem or need.
- Gives you an open-ended design project requiring both technical knowledge and engagement with non-engineering communities (users, customers, etc.) interested in the problem or need you are trying to meet.
- Requires application of professional engineering practices, project management and systems engineering practices to complete a complex problem
- Requires teamwork, communication skills and understanding of the role of engineering in meeting societal need to achieve a successful, useful project

COURSE LEARNING OUTCOMES

1. Effectively design a complex product, service or process using the engineering design cycle
2. Implement engineering solutions that are functional, of high quality meet the design intent.
3. Demonstrate purposeful, methodical and analytical testing and/or evaluation methods
4. Identify any safety risks and apply necessary mitigation measures
5. Communicate and document effectively the engineering designs in a clear and organized matter in various forms including written reports and formal presentation
6. Demonstrate professional skills in all aspects of the course including responsibility, conduct and competence
7. Demonstrate ability to work effectively in a multi-disciplinary team

COURSE TEXT / READINGS

1. The Engineering Capstone Course: Link: https://www.library.yorku.ca/find/Record/3427894
Additional readings may be assigned or recommended during the course.

**ACADEMIC INTEGRITY LINKS**

- Senate Policy on Academic Honesty - [http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/](http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/)
- Academic Integrity - [http://lassonde.yorku.ca/academic-integrity](http://lassonde.yorku.ca/academic-integrity)

**STUDENT LINKS**

- Student Rights and Responsibilities - [http://oscr.students.uit.yorku.ca/student-conduct](http://oscr.students.uit.yorku.ca/student-conduct)
- Religious Observance - [https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs](https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs)
- Counselling and Disability Services - [http://cds.info.yorku.ca/](http://cds.info.yorku.ca/)
- York University’s Policies on Gender/LGBTQ*/Positive Space - [http://rights.info.yorku.ca/lgbtq/](http://rights.info.yorku.ca/lgbtq/)

**LAND ACKNOWLEDGEMENT**

- We acknowledge our presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, the Huron-Wendat, and the Métis. It is now home to many Indigenous Peoples. We acknowledge the current treaty holders, the Mississaugas of the New Credit First Nation. This territory is subject of the Dish With One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes region.

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Many courses utilize Moodle, York University’s course website system. If your course is using Moodle, click here to access it.

*Moodle @ York University*