Course Descriptions
Engineering Stream

The following are descriptions of the courses available to ESP students in the Engineering stream for the 2021-2022 academic year. Please read the descriptions carefully before selecting your course preferences on your *Course Selection Form*. Please note: All courses are subject to cancellation and/or change.

- All ESP students must register for one credit in a first-year seminar (see Section A below).
- All ESP students must register in two Elective Courses (see descriptions below in Section B)
  - Students registered in the Engineering stream have set electives; according to requirements for this program (see your *Course Selection Form*).
  - Each elective will be supported by an ESP Workshop. See the *Course Schedule* for times.

Half-credit courses are marked with an asterisk (*) and are worth 0.5 credits and run during either the Fall or Winter semester. Full-credit courses are worth 1.0 credits and run during the entire Fall/Winter session.

**Section A: First Year Seminars**

*All First Year Seminars are titled: “Selected Topics in the Study of Academic Discourse” but have different selected topics. See the descriptions below:*

**Selected Topic: Kiss a Frog, Get a Prince: Introduction to Folk and Fairy Tales**

*FYSM 1900 A (1.0 Credit) Fall/Win*

*I Instrucor: Danielle Taylor*

When Tiana kissed Naveen in The Princess and The Frog, she was relying upon a popular fairy tale trope which can be found in stories that have been passed down for generations. The fact that Tiana herself undergoes a transformation and becomes a frog is a twist on a traditional motif. Modern pop culture loves to take familiar and well-known plots and twist them, engaging their audiences through the deviation from the expected. Examples of this are seen in movies such as Shrek and video games such as The Witcher. In order for these deviations to be both interesting and effective we must have a traditional and well-known format for the fairy or folk tale. The more familiar the motifs, themes, characters, and plots are, the more captivating the remakes are for modern audiences.

In the “Folk and Fairy Tales” first year seminar, you will engage with critical questions such as: What makes a story a fairy tale? What makes it a folktale? What are the common themes, ideas, and images found in these stories? Why do these themes span both centuries and geographic locations? Why do we continue to tell these stories over and over again? How do modern adaptations (such as the Disney films) relate to earlier versions of the tales? What can we learn about a culture from folk and fairy tales? What is their purpose?

Each week we will develop our analytical, close reading, and interpretation skills as well as our discussion and writing skills. Tuesday classes will be spent discussing that week's reading in class while Thursday classes will utilize those readings as practical examples in activities which will focus on improving your writing, researching, and presentation skills. While this course will involve occasional lectures, the emphasis will be on your ideas. There will be several opportunities for you to set and achieve goals in order to develop your ability to do university level work.
There will be several small assignments which focus on different aspects of writing a university essay, including how to form topic ideas, how to find and incorporate appropriate secondary research, how to craft a thesis statement, and how to use citation methods and structures. Each assignment will make up a portion of your final grade, and extensive feedback on each will help improve the final product before it is submitted for grading. Course assignments are designed to reward progress and growth over the year. You will have opportunities to receive feedback on and to improve your assignments before they are submitted for final grading.

This course will provide you with a strong foundation for not only the academic study of English literature but for university level courses in general. As we examine folk and fairy tales, both traditional and modern, you will gain enhanced communication skills and study habits which will be applicable across the various courses you will take in the future.

Grab your red cloaks and glass slippers and let’s venture into the woods together!

**Selected Topic: Understanding Indigenous Worldview**  
**FYSM 1900 B (1.0 Credit) Fall/Win**  
**Instructor: Sarah Blackwell**

This course is for students open to learning about Canada’s Indigenous peoples, specifically the Anishinaabe. This course is taught by an Anishinaabe-kwe (Indigenous woman) with guest speakers and Elders brought into the classroom to complement various topics. Readings, scholarly writing and self-reflective writing, will focus on understanding an Indigenous worldview through exploration of historical and current issues, Indigenous culture, key policies, and Indigenous cultural texts. The students will understand how their own worldview, values and belief systems effect their interactions with Indigenous peoples in a professional setting. This course is conducted online, and will include a weekly greeting from the Instructor to introduce each module. Students will be expected to participate weekly by logging into Brightspace, and/or Zoom and other platforms to be determined, during class-time to engage in weekly readings, discussion topics and online group work.

**Selected Topic: Power, Social Change, and Communication**  
**FYSM 1900 C (1.0 Credit) Fall/Win**  
**Instructor: Beth Hughes**

The world is in a lot of trouble when you consider issues of power, privilege, and difference in our society and how individuals and groups are oppressed. You participate in an unjust society and social structures that you did not create. Prominent cultural icons, such as politicians, musicians, journalists, advertisers, and other influencers, bombard you constantly with conflicting messages about what the world is, what it should be, and how you should participate in it.

How can you make sense of these conflicting messages? How can you have an informed understanding of social issues? What can you do to contribute to meaningful social change? Part of the answer lies in understanding the dynamics of power. To do this, our class will use examples from politics, pop culture, research, and social media. Topics covered include slang, identity, memes, persuasion, argumentation, privilege, equity, and inclusiveness. We will deconstruct the communication of racism, sexism, genderism, and ableism to consider how the use of power may create and promote inequality and oppression. Lastly, based on an issue of your choice, you will analyze the potential power of individual action and social movements to communicate and create meaningful social change.

Assignments include essays, reflections, short tests, readings, and in-class tasks. Throughout the year, our class will use gamification, “meaningful play,” to learn new ideas in a creative way using games. Participating fully in this course will give you opportunities to develop stronger academic skills: reading, listening, debating, researching, and writing. This course is beneficial for any of the ESP streams to build skills that are valuable for university studies and future employment.
Section B: Elective Courses

All elective courses listed below will be accompanied by a two hour/week ESP Workshop (this will appear on your schedule as ESPW 1000). Please see the Class and Workshop Schedule for day and time information; and read the Student Guide for a description of workshops.

General Chemistry I (Fall)
*CHEM 1001 A [0.5 credit]
Prof. David Brock

This math-intensive course covers an introduction to solution chemistry, acids and bases, thermodynamics, and kinetics. Specialist course for students intending to take second year chemistry.

- Lectures/tutorials four hours a week, laboratory three hours every other week.
*Students who select CHEM 1001 A in the Fall term must select CHEM 1002 A in the Winter term.

General Chemistry II (Winter)
*CHEM 1002 A [0.5 credit]
Prof. David Brock

This math-intensive course covers introduction to periodicity, gas laws, equilibrium, bonding, electrochemistry, and organic chemistry. This is a specialist course for students intending to take second year chemistry.

- Lectures/tutorials four hours a week, laboratory three hours every other week.
*Students who select CHEM 1002 A in the Winter term must select CHEM 1001 A in the Fall term.

Calculus for Engineering or Physics (Fall)
*MATH 1004 C [0.5 credit]
Prof. TBA


- Lectures three hours a week, tutorial one hour a week.

Linear Algebra for Engineering or Science (Winter)
*MATH 1104 C [0.5 credit]
Prof. Colin Ingalls


- Lectures three hours a week, tutorial one hour a week.