Course Descriptions

Computer Science Stream

The following are descriptions of the courses available to ESP students in the Computer Science 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 Computer Science stream have set electives; according to requirements for this program (see the Course Selection Form).
  - Each elective will be supported by an ESP Workshop. See the Class and Workshop 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/Winter
Instructor: 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: 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.

**Selected Topic: Power of Persuasion**

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

**Instructor:** Jennifer Gilbert

What do you think of when you hear the word ‘argument’? People yelling at each other? Personal attacks online? It’s true that arguments involve emotions, and those emotions can get out of hand. But that’s not what makes something an argument.

One of the things I want you to learn from this course is that an effective argument – a **persuasive** argument – will always involve an appeal to emotions; however, ‘argument’ does not necessarily mean people yelling at each other and calling each other names. An argument, at its core, consists of a claim. A claim is a position taken up by a speaker, which they then may attempt to advance and defend.

Understanding arguments critically means understanding what arguments are, how to break them down, how they work, and what makes an argument persuasive.

In this course, you will:
• analyze ordinary bits of language, and everyday visuals such as memes, ads, and videos, in order to identify what claim is being made and the appeals that are incorporated
• learn how to map out argument structure in order to look at the reasons underlying an argument’s claim, as well as the warrant for making the claim in the first place, and the evidence – if any is provided – that supports the reasons and warrant.
• work in teams to debate issues
• develop and present your own arguments

The knowledge and skills you gain from this course can make you a better and more persuasive speaker and writer. Most importantly, you can become a more analytical and critical thinker.

Arguments are all around us all the time, shaping our opinions and beliefs, our social structures, and everyday decisions in our lives. Learning how to engage with arguments and how to disagree productively with others has many benefits, from assisting our own decisions about how we live, to broadening our understanding of the world and other people, and even – sometimes – changing our minds or changing the minds of others.

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.

Introduction to Computer Science I (Fall)
*COMP 1005 B [0.5 credit]
Prof. Farah Chanchary

A first course in programming, emphasizing problem solving and computational thinking. Topics include pseudocode, variables, conditionals, iteration, arrays, objects, functions, sorting, searching, and simulation.

• Course outline can be found here when available: [http://service.scs.carleton.ca/cu-course-outline](http://service.scs.carleton.ca/cu-course-outline)
• Lectures three hours a week, tutorial one and a half hours a week.
*Students who select COMP 1005 B in the Fall term must select COMP 1006 B in the Winter term.*

Introduction to Computer Science II (Fall)
*COMP 1006 B [0.5 credit]
Prof. Michael Jason Hinek

A second course in programming emphasizing problem solving and computational thinking in an object-oriented language. Topics include abstraction, mutable data structures, methods, inheritance, polymorphism, recursion, program efficiency, testing and debugging.

• Course outline can be found here when available: [http://service.scs.carleton.ca/cu-course-outline](http://service.scs.carleton.ca/cu-course-outline)
• Lectures three hours a week, tutorial one and a half hours a week.
*Students who select COMP 1006 B in the Winter term must select COMP 1005 B in the Fall term.*

Elementary Calculus I (Fall)
*MATH 1007 D [0.5 credit]
Prof. Paul Mezo

Limits. Differentiation of the elementary functions, including trigonometric functions. Rules of differentiation. Applications of differentiation: max-min problems, curve sketching, approximations. Introduction to integration: definite
and indefinite integrals, areas under curves, fundamental theorem of calculus.
  • 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.