Course Descriptions
Science Stream

The following are descriptions of the courses available to ESP and IESP students in the 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).
  - First-year IESP students enroll in FYSM 1900 K.
- All ESP/IESP students must register in two Elective Courses (see descriptions below in Section B)
  - Students registered in the Science stream have set electives; according to requirements for this program (see your Course Selection Form).
  - Each elective will be supported by an ESP/IESP 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:

First-Year Enriched Support Program Students should choose from these Seminars:

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 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.

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

FYSM 1900 H (1.0 Credit) Fall/Win
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: Globalized Contexts for Communication and Culture**  
**FYSM 1900 I (1.0 Credit) Fall/Winter**  
**Instructor: Alisa Zavialova**

What does it mean to be a global citizen? What skills does one need for establishing efficient and appropriate intercultural interactions? How can we avoid cross-cultural miscommunications in globalized contexts when interacting with multilingual speakers? In a culturally and linguistically diverse country such as Canada it is no longer a choice whether to live and communicate with people from various cultures; your only choice is whether you will learn how to do it well. Since our world has become extremely globalized and interconnected, intercultural competence is commonly listed as one of the most in-demand soft skills for professionals in the 21st century.

In this course, will work on developing awareness, knowledge, and skills that will enhance intercultural sensitivity and develop intercultural competence. In the Fall term, we will learn about the relationship between language and culture and how it impacts communication through a series of engaging and intriguing readings. You will also build your own cultural profile and critically reflect on your linguistic and cultural identity. In the Winter term, we will participate in an experiential learning project interacting with international students at Carleton. During this project, you will have an opportunity to share your perspectives on Canadian culture with an international student assigned to work with you, while at the same time, you will learn about their cultural and linguistic identity and motivation to learn English as an additional language. You will also learn about challenges this international student might be experiencing in their acculturation journey on Canadian campus. If you are an international student yourself, you will be paired with a student who was born and/or raised in Canada for your project. To document your learning, you will keep a reflective journal and share your findings with your peers by participating in weekly online and in-class discussions.

Weekly assignments include reflections, weekly reading reports, case study analyses, keeping a reflective journal, oral presentations, and writing a report based on the findings of your experiential learning project. The academic reading, writing, research and communication skills you gain from this course will enhance your learning as you continue through university.

If you are thinking of going into International Affairs, Sociology or Social Work, Psychology, Anthropology, Indigenous and Canadian studies, Applied Language Studies, Global and International Studies, or going on an exchange semester abroad as part of your chosen program, this course will equip you with both knowledge and skills needed to not only survive but also thrive in a global multicultural context. I look forward to seeing you in my class and to working with each and every of you this year!

**Selected Topic: Delusional, Deviant, or Dangerous? An Introduction to Abnormal and Forensic Psychology**  
**FYSM 1900 J (1.0 Credit) Fall/Winter**  
**Instructor: Kate Pardoel**

Do you watch a lot of psychodramas or crime shows? Are you fascinated by bizarre, deviant, or pathological behaviour? Have you ever wondered why some people suffer with debilitating mental illness or why others commit horrible crimes? If you’re anything like me, you’ve probably been told that you should stop spending so much time reading about dark, deviant, and otherwise depressing things, and that you should look into more cheerful and uplifting pursuits. If you can relate to this experience in any way, then this seminar may be the right choice for you!
The purpose of this course is to introduce you to the study of abnormal behaviour and forensic psychology in an academic context (as opposed to what you see on HBO) while also giving you the opportunity to learn and practice foundational academic skills. The course covers a variety of topics including how society has defined abnormal behavior in times past and present, how mental illness is diagnosed and treated, and how psychology contributes to the criminal justice system. This will include a lot of discussion surrounding risk factors for criminal behaviour, different types of offenders, and what happens to offenders after they are caught. The course also touches on related topics including police selection, profiling and interrogation techniques, evidence-based risk assessment, and eyewitness testimony, to name a few.

Lastly, it is only fair that you should know a bit more about what will be expected of you if you take this course before you commit. Class time will involve a combination of interactive lecturing, discussion, and in-class activities designed to give you the opportunity to develop academic skills in a low-stakes environment. The ultimate goal for this course is to help you acquire the foundational skills needed for university while hopefully teaching you something interesting. You should expect to spend time studying for tests as well as practicing your reading, writing, research, and presentation skills. Your final grade in this seminar will be based on a combination of tests, short written assignments, a criminal profile, and a mini-presentation.

Good luck this year!

**First-Year IESP Students choose:**

**Selected Topic: IESP First Year Seminar**
**FYSM 1900 K (1.0 Credit) Fall/Winter**
**Instructor: Kanatase Horn**

An Indigenous Studies first year seminar taught by an Indigenous instructor. The instructor teaches and mentors first-year Indigenous students as they make the transition into university life. Indigenous peer mentors who are successful former IESP students attend every class. Instructors incorporate their own academic expertise into the course material, enriching the experience for both the instructor and the student. Our instructor this year is Kanatase Horn, with an academic background in Law and Legal Studies as well as Indigenous Studies.

**Section B: Elective Courses**

All elective courses listed below will be accompanied by a two hour/week ESP/IESP 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 (Fall)  
*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.

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


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

Linear Algebra I (Winter)  
*MATH 1107 A [0.5 credit]  
Prof. Brett Stevens

Systems of linear equations; vector space of n-tuples, subspaces, bases; matrix transformations, kernel, range; matrix algebra and determinants. Dot product. Complex numbers (including de Moivre's Theorem, and n-th roots). Eigenvalues, diagonalization and applications.

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