Course Descriptions
Computer Science Stream

The following are descriptions of the courses available to ESP/IESP students in Computer Science stream for the 2019-2020 academic year.

Please read the descriptions carefully before selecting your Seminar preferences on the Course Selection Form.

Please note: courses are subject to change.

- All ESP/IESP students must register for one First Year Seminar (Section A, below)
- All ESP/IESP 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/IESP 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:

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

Selected Topic: Power, Culture and Communication
FYSM 1900 B (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 you participate in a society 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.

What can you do to have the potential to effect meaningful change? Part of the answer lies in understanding communication, privilege, power and difference. The class draws examples from politics, pop culture, research and social media to analyze. Topics covered include slang, identity, memes, persuasion, argumentation, privilege, equity and inclusiveness. We will analyze racism, sexism, ageism and ableism, and others, in texts to consider how the use of power also creates and promotes inequality and oppression. Throughout the year, we will use gamification, “meaningful play,” for learning to explore these ideas. Lastly, class activities include strategies for creating meaningful social change.

This course draws on sociology, communications, linguistics and other disciplines. This content aims to help you develop a deeper understanding of culture and power, as well as provide opportunities to develop strong academic tools: reading, listening, arguing, researching, analysis and writing. This course is useful for any of the ESP streams, encouraging skills that are valuable for university and well beyond.
Selected Topic: A Global History of the Second World War  
FYSM 1900 G (1.0 Credit) Fall/Winter  
Instructor: Hal Goldman

In 1939 when World War II began, many nations still fielded horse-mounted cavalry. By the time it was over six years later, the first jet-powered fighters streaked through the air, the first ballistic missiles had entered space, and the first atomic bombs had been detonated over cities. Sixty million people had been killed and all the world had been changed.

This full-year course will take a comprehensive global history approach to this the greatest conflict in human history. We will examine the origins of the war in the failed post-World War I peace settlement and the rise of mass political movements in Italy, Germany, and Japan before moving on to the diplomatic and military run-up to the war. We will study the tactical, strategic, and diplomatic prosecution of the war in both the Pacific and European theatres from the perspectives of both the Allies and the Axis powers. We will focus in particular on the experience of the war for ordinary men and women—those on the front line, those fighting behind the lines as partisans and resistance fighters, those in the rear, and those who remained back home, including those who faced repression, internment, and genocide at the hands of their own and other governments. The course will end by examining the post-war settlement and on-going controversies concerning the memorializing of the war and those who fought in it, including debates over the morality of dropping the atomic bomb, renewed controversy over allied bombing of German cities, and controversial exhibits at the Smithsonian’s Air and Space Museum and the Canadian War Museum.

Students will study all this material through brief lectures, small and large group exercises, diverse reading assignments, film, poetry, photographs and other cultural sources. Coursework includes in-class activities, quizzes, and informal and formal writing assignments. First-year students completing the course will not only have a comprehensive understanding of one of the most important episodes in human history, they will also have an opportunity to develop strong reading, analysis, research, and writing skills applicable to all future university study.

Selected Topic: The Psychology of Motivation, Self-control, Memory, Learning and Other Things Related to Academic Success (and Dealing with Procrastination)  
FYSM 1900 J (1.0 Credit) Fall/Winter  
Instructor: Allan Blunt

Welcome to Carleton University and congrats on becoming a Raven! You have officially taken a first step toward achieving your academic and career goals. In order to help you reach those goals this course explores lots of research aimed at understanding and improving memory, learning, motivation, self-regulation, emotion regulation, career management, and more. Although we will be discussing lots of theory and research, there is a very practical purpose to this course — to help you achieve your academic goals. So, if you decide to take this class, embrace the ideas and practice the methods we discuss, you will be taking another step toward your goals. Along the way, you will also develop your research skills, writing skills, citation skills, test-taking skills and presentation skills — all essential for your continued success at university. Even though I can’t guarantee your success, I can definitely say that if you decide to take this seminar you will learn some very interesting and useful information — and that’s not a bad thing.

One last thing - you should know a bit about the grading before you commit. Your final grade will be most likely based on the following three core elements:

1) attendance & participation (15% of the overall grade);
2) testing (50% of the overall grade, consisting of four tests & one exam, you will be given all of the questions for each test and exam); and
3) research (35% of the overall grade, you will pick a psychology-based topic, find and summarize several research articles, write a review paper based on the summaries, and give a 3-minute thesis presentation (based on your topic).

In closing, if you are a procrastinator, I know your “pain” because I am an inherent, recovering procrastinator who has and still does apply the ideas discussed in this course. Have a great frosh year. Best of luck, AKB.
First-Year IESP Students choose:

Selected Topic: Indigenous Studies
FYSM 1900 E (1.0 Credit) Fall/Win
Instructor: Sheila Grantham

Aanii Kinawiya! (Hello Everyone!)

This seminar prioritizes narration and storytelling. Storytelling in an Indigenous context emphasizes the oral nature of language and speaks to many areas from which Indigenous knowledge systems are drawn, including stories of tricksters, the land, ceremonies, relationships, and clan systems. Storytelling can also be relayed through fiction and comics. Stories can take the form of a personal narrative and reveal personal and communal experiences that speak to the Indian Act, gender, education and child welfare. Within this course, we will draw upon a variety of literature, as well as oral teachings that privileges storytelling as a medium to relay Indigenous lived experiences, knowledge, research methods, and theories.

This course is a requirement for students in the Indigenous Enriched Support Program and is therefore reserved for IESP students.

Section B: Elective Courses

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

Computer Science: Introduction to Computer Science I (Fall)
*COMP 1005 A [0.5 credit]
Prof. TBA

A first course in programming, emphasizing problem solving and computational thinking. Topics include pseudocode, variables, conditionals, iteration, arrays, objects, functions, sorting, searching, and simulation.
- The course outline below is an example from a previous year. Note: outline will be different this year: https://service.scs.carleton.ca/sites/default/files/course_outlines/Course%20Outline%20-%20Fall%202017%20-%20COMP1005%20-20Updated.pdf
- Course outline for this year will be posted here when available: http://service.scs.carleton.ca/cu-course-outline
- Lecture three hours/week plus a tutorial 1.5 hours/week.

Computer Science: Introduction to Computer Science II (Winter)
*COMP 1006 B [0.5 credit]
Prof. Louis Nel

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.
- The course outline below is an example from a previous year. Note: outline will be different this year: https://service.scs.carleton.ca/sites/default/files/course_outlines/W18-1006-Course-Outline-Corrected.pdf
- Course outline for this year will be posted here when available: http://service.scs.carleton.ca/cu-course-outline
- Lecture three hours/week plus a tutorial 1.5 hours/week.
Math: Elementary Calculus I (Fall)
*MATH 1007 A [0.5 credit]
Prof. TBA


- The course outline below is an example from a previous year. Note: outline will be different this year: https://carleton.ca/math/wp-content/uploads/MATH-1007H-W15.pdf
- Lecture three hours/week plus tutorial one hour/week.

Math: Linear Algebra for Engineering or Science (Winter)
*MATH 1104 D [0.5 credit]
Prof. Mathieu Lemire


- The course outline below is an example from a previous year. Note: outline will be different this year: https://carleton.ca/math/wp-content/uploads/MATH-1104I-W17.pdf
- Lecture three hours/week plus tutorial one hour/week.