2024-2025

cogsci_mcgill   SACSMcGill   Linktree

COGNITIVE SCIENCE RESOURCE GUIDE

STUDENT ASSOCIATION OF COGNITIVE SCIENCE

a compilation of course reviews and advice

cogsci_mcgill   SACSMcGill   Linktree

cogsci_mcgill   http://cogsci-mcgill.com/

TABLE OF CONTENTS

LAND ACKNOWLEDGMENT

SACS acknowledges that McGill University is on the traditional territory of the Indigenous People, Kanien'keha:ka (Ga-niyen-ge-haa-ga). The Kanien'keha:ka are the keepers of the Eastern Door of the Haudenosaunee Confederacy. This island known as Montreal is known as Tio'tia:ke (Gio-Jaw-Gé) in the language of the Kanien'kehá:ka, and has historically served as a meeting place for other Indigenous nations.

It is not enough to just acknowledge the keepers of this land and McGill's status as a settler-colonial institution. Silence and inaction will only contribute to erasing the history, the culture, and the realities of Indigenous people. As such, it is important that individuals educate themselves on Indigenous matters and that they apply that knowledge to support Indigenous communities. SACS should actively resist (neo)-colonialism in the many forms it takes, and in the diversity of forms that resistance can take.

Considering that our readers may be scattered across the globe, we encourage you to find out whose land you are occupying at Native Land Digital.

INTRODUCTION

Welcome to the Cognitive Science Resource Guide! While Cognitive Science is an extremely diverse program, this can make it difficult to navigate. For this reason, SACS has created this compilation of resources: an annotated course requirements checklist, course reviews, and general McGill life hacks.
Enjoy!

DISCLAIMER

This guide was written by members of the SACS Academic Committee during Winter 2024. While the writers and contributors attempted to provide accurate information, we do not guarantee the guide's accuracy. Additionally, these reviews are inherently subjective. Therefore, the information in this guide should be assessed at your own risk and SACS will not hold any responsibility for missing or wrong information.

Moreover, this guide should NOT replace appointments with your advisors!
- For inquiries about your BASC degree or foundation/freshman program, contact your BASC degree advisor, Tania Raggo.
- For inquiries about the CogSci program, contact your Cognitive Science advisor, Liana Hall DuMond.
- For department-specific inquiries, check the science program advisors or the arts program advisors.

ACKNOWLEDGMENTS

We would like to thank past SACS members, as this guide was based on the Cognitive Science Resource Guide 2020-2021. We would also like to thank present SACS members and members of the Cognitive Science community for their contributions to course input. Lastly, we would like to thank Liana Hall DuMond, the Cognitive Science program advisor, for her updated Cognitive Science Checklist and assistance in planning this handbook.

AUTHORS

Max Tweedale
Maria Lagakos
Gabriella Medeiros
Naya Wardeh

Rate My Professor Ratings

⭐⭐⭐⭐⭐

We are aware that many students base their course selections on Rate My Professor ratings. Therefore, for your convenience, we have included hyperlinks to the Rate my Prof page of professors that typically instruct the included courses. Simply click on the professor's name, and you will be directed to their page!

However, it is important to keep in mind that one student's experience with a professor will not necessarily determine your own experience! It is better to select courses based on their syllabi and if the course content itself interests you rather than others' opinions on the professor.

NOTE: SACS is not responsible and therefore does not take credit for whatever is said in these Rate my Prof reviews: we are simply providing them for convenience!

ANNOTATED CHECKLIST

The Cognitive Science Checklist is a very helpful tool for planning your program! However, it can get a bit confusing. We have annotated the checklist to explain how it works and hopefully clear up any questions. **Beware that this checklist may change, so make sure you're using <u>the most updated version</u>!**

CORE COMPLEMENTARY CLASSES

Required Course (3 credits)
- [ ] NSCI 201   Introduction to Neuroscience 2

Logic Course (3 credits)
- [ ] COMP 230   Logic and Computability
- [ ] MATH 318   Mathematical Logic
- [ ] PHIL 210   Introduction to Deductive Logic 1

Computer Science Course (3 credits)
- [ ] COMP 202   Foundations of Programming
- [ ] COMP 204   Computer Programming for Life Sciences
- [ ] COMP 250   Introduction to Computer Science

Statistics Course (3 credits)
- [ ] PSYC 204   Intro to Psychological Statistics
- [ ] MATH 203   Principles of Statistics 1
- [ ] MATH 323   Probability

Linguistics Course (3 credits)
- [ ] LING 201   Introduction to Linguistics
- [ ] LING 210   Introduction to Speech Science
- [ ] LING 260   Meaning in Language

Philosophy Course (3 credits)
- [ ] PHIL 200   Introduction to Philosophy 1
- [ ] PHIL 201   Introduction to Philosophy 2
- [ ] PHIL 221   Intro to the History and Philosopy of Science 2

Neuroscience Course (3 credits)
- [ ] NSCI 200   Introduction to Neuroscience 1
- [ ] PSYC 211   Introductory Behavioural Neuroscience

Psychology Course (3 credits)
- [ ] PSYC 212   Perception
- [ ] PSYC 213   Cognition

- Pick one class from each section

COMPLEMENTARY CLASSES

Complementary Courses (30 credits, of which 15 credits must be 400+ level)
18 credits in one area: _____ _____ _____ _____ _____ _____
12 credits from any area: _____ _____ _____ _____

- 30 credits of complementary courses *(15 of which must be 400+ level classes)* distributed this way:
  - 18 credits (6 classes from one stream*); this is your **stream**
  - 12 credits (4 classes from any stream**)

---

*a stream is one of the 5 areas of Cognitive Science: computer science, linguistics, philosophy, psychology, and neuroscience
**this can be from any combination of streams

ANNOTATED CHECKLIST

Beware that this checklist may change, so make sure you're using <u>the most updated version</u>!

MINOR REQUIREMENTS

> **Minor (18 credits)**

- 18 credits (6 classes) in an <u>approved BASC minor</u>!
- Keep in mind that the department of a class overrides the department of your minor. *This is important when calculating your ArtSci credits (more in the next page).*
  - For example, if you take **MATH 318** for your <u>Linguistics Minor</u>, that class will count towards your Science credits even though it's under your Linguistics (Arts) minor, so always double check your ArtSci credits with your <u>BASC degree advisor</u>!

DEGREE REQUIREMENTS

> **B.A. & Sc. Degree Requirements**
> Minimum Arts and Science cr. in CogSci + Minor combined: ☐ **21 credits in Arts** ☐ **21 credits in Science**
> **Freshman Requirements**
> ☐ **3 Freshman Science courses:** ☐ **2 Freshman Math courses:** ☐ **3 Freshman Arts courses (in 2 categories):**
> H / SS / L _____
> H / SS / L _____
> H / SS / L _____
> *(form edited 2023-07-27)*

- You must complete a minimum of 21 credits in Arts and 21 credits in Science in total between your major and minor. **More info on this in the next page!**
- **BASC 201** is no longer required for Interfaculty or Honours programs within the B.A. & Sc., which includes Cognitive Science, but it is still recommended!*
- You must complete the <u>foundation/freshman requirements</u>, even if you started in U1 (exception: CEGEP students).**

*It can be used to fulfill 3 required credits in Humanities in the Foundation Program
**You don't have to do this strictly in your first year, but it's good to get them out of the way as they're often prerequisites for a lot of the classes you'll be taking!

ANNOTATED CHECKLIST

Beware that this checklist may change, so make sure you're using <u>the most updated version</u>!

21 CREDIT RULE

Students in any B.A. & Sc. interfaculty program, such as Cognitive Science, need to ensure that they meet a minimum of **21 Arts credits** and **21 Science credits in total,** coming from their **major and minor ONLY**! Foundation program classes and electives do **NOT** count towards the 21 credit rule!

Here's a summary of which credits each class code counts for, but check the ones not listed here with your advisors if you need to!

Science	Arts
PSYC	LING
COMP + MATH	PHIL
NSCI + all the classes under the Neuroscience Stream (ANAT, BIOL, CHEM, NEUR, PHGY, PSYT)	ANTH
COGS (Wildcard! This can count towards either Arts credits or Science credits!)	

Just like with your minor, the department of a class overrides the department of your stream. This is very important when calculating your ArtSci credits. For example, NSCI 300 might be under the Philosophy (Arts) stream, but the class will count towards your Science credits!

Tips to balance your ArtSci credits:

1. If you find yourself taking a lot of Science classes, take **PHIL 210** from the logic courses in the core complementary classes, as it counts towards your Arts credits! *This will give you 9 Arts credits from the core complementary classes instead of just 6.*
2. Remember that COGS classes (**COGS 401/444** (6 credits)) can count as either Arts or Science (your pick)!

COURSE REVIEWS

REQUIRED COURSES

NSCI 201
Introduction to Neuroscience 2
Cognitive Science Program Requirement

COURSE OVERVIEW

An introduction to how the nervous system acquires and integrates information and uses it to produce behaviour.

THOUGHTS FROM COG SCI STUDENTS

- This is a very content-heavy course, so make sure you stay up to date with the material and understand the concepts presented in class.
- Draw diagrams of the pathways so you can visually see where information is integrated/segregated.
- Think about how the different aspects of the sensory systems are analogous to one another:
  - Ex 1: receptive fields in the somatosensory system vs. the auditory system vs. the visual system.
  - Ex 2: retinotopic organization in the visual system vs. tonotopic organization in the auditory system.
- Other study tips:
  - Ask yourself what would happen to the flow of information processing if a certain part of the pathway was no longer functioning.
  - Talk through the material out loud and pretend you're teaching it to someone else.
  - Make summaries of each unit with a friend while discussing content.

RECOMMENDED YEAR

U1 or **U2**

PREREQUISITES

NSCI 200 or **PSYC 211**

WHAT TO TAKE NEXT

Almost any class in the neuroscience stream of cognitive science! This class lays the foundation for virtually every upper-level neuroscience class.

PROFESSOR(S)

Dr. Mohammad Darainy
Dr. Fernanda Pérez-Gay Juárez

CORE COMPLEMENTARY COURSES

COMP 230
Logic and Computability
core complementary course: logic

COURSE OVERVIEW

Propositional Logic, predicate calculus, proof systems, computability Turing machines, Church-Turing thesis, unsolvable problems, completeness, incompleteness, Tarski semantics, uses and misuses of Gödel's theorem.

THOUGHTS FROM COG SCI STUDENTS

- The course is very fast-paced and the content is challenging.
- There is a lot of vocabulary.
  - ***TIP*** Make flashcards and frequently quiz yourself!
- The quizzes are well-structured and the grading is lenient.

RECOMMENDED YEAR

U1 or **U2**

PREREQUISITES

CEGEP/High school level Math

WHAT TO TAKE NEXT

PHIL 310 — Intermediate Logic
COMP 330 — Theory of Computation

PROFESSOR(S)

Dr. Dirk Schlimm

MATH 318
Mathematical Logic
core complementary course: logic

COURSE OVERVIEW

Propositional logic: truth-tables, formal proof systems, completeness and compactness theorems, Boolean algebras; first-order logic: formal proofs, Gödel's completeness theorem; axiomatic theories; set theory; Cantor's theorem, axiom of choice and Zorn's lemma, Peano arithmetic; Gödel's incompleteness theorem.

THOUGHTS FROM COG SCI STUDENTS

- This is not a very popular course that cognitive science students take, and is more geared towards people interested in the computer science stream. It's also the toughest out of the logic trio, so beware! But it's definitely doable!
- It also has some tough prerequisites! For example, taking MATH 240 before learning logic could make the first part of the class a bit tough!
- If you feel like a topic is too unfamiliar, practice with sample solutions! See how you should be answering, and then mimic them until you can do them on your own!
- Compile all the proofs and propositions seen in class!
- The prof tends to curve (class gets curved by a letter grade, for example)!

RECOMMENDED YEAR

U1 or **U2**

PREREQUISITES

MATH 235 or MATH 240 or MATH 242

WHAT TO TAKE NEXT

PHIL 310 — Intermediate Logic
COMP 330 — Theory of Computation

PROFESSOR(S)

Dr. Anush Tserunyan

PHIL 210
Introduction to Deductive Logic
core complementary course: logic

COURSE OVERVIEW

An introduction to propositional and predicate logic; formalization of arguments, truth tables, systems of deduction, elementary metaresults, and related topics.

THOUGHTS FROM COG SCI STUDENTS

- The large majority of the class is about solving formal proofs using symbols and rules. It's hard to wrap your head around the material at first because everything is quite abstract.
- The material builds on itself so make sure you stay up to date with the course and reach out to the TAs or the professor for help if needed. Make sure to practice, practice, PRACTICE!
- Go to the TA sessions! The TAs will often review practice problems that are similar to the ones seen on the assignments.
- This is kind of like a math course where you need to do practice problems to succeed. You can't succeed by just passively reading your lecture notes.
- Use the textbook! Do extra practice problems from the book.

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

N/A

WHAT TO TAKE NEXT

PHIL 310 — Intermediate Logic

PROFESSOR(S)

Dr. Michael Hallett

COMP 202
Foundations of Programming
core complementary course: computer science

COURSE OVERVIEW

Introduction to computer programming in a high level language (python). You will learn how to use variables, expressions, primitive types, methods, conditionals, loops. Introduction to algorithms, data structures (arrays, strings), modular software design, libraries, file input/output, debugging, exception handling.

THOUGHTS FROM COG SCI STUDENTS

- Start your assignments early! If you don't understand a concept, get help ASAP, as the content builds on itself rapidly.
  - You can get help by going to office hours with your Professors or TAs, going to tutorials, or by visiting the CSUS Helpdesk.
- Practice, practice, practice!
  - When studying, keep track of the variables at each line so that you know what is happening during each part of the line of code. This is especially important for answering short answer questions.
- The course contains assignments, the midterm, and a final exam. The exams were a combination of multiple choice, short answer and long answer.
  - *TIPS for Long Answers*
    - All long answers were written by hand. Practice writing your code out!
    - Try your best to use appropriate syntax. However, graders are more lenient so don't fret if you forget a semicolon!
    - You can also write "skeletons" of your code in "regular English" – you can get partial credit for this as it shows the graders that you understand the logic behind the solution.

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

CEGEP/High school level math course; cannot be taken after COMP 250

WHAT TO TAKE NEXT

COMP 206 — Introduction to Software Science
COMP 250 — Introduction to Computer Science

PROFESSOR(S)

Faten M'hiri

Deven Parekh

Jonathan Campbell

COMP 204
Computer Programming for Life Sciences
core complementary course: computer science

Click Here!
Syllabus

COURSE OVERVIEW

Computer programming in a high level language (python): variables, expressions, types, functions, conditionals, loops, objects and classes. Introduction to algorithms, modular software design, libraries, file input/output, debugging. Emphasis on applications in the life sciences.

THOUGHTS FROM COG SCI STUDENTS

- This course emphasizes real-world applications of programming in health care settings.
- The course moves very quickly, so it is important that you learn the basics well in order to have a solid foundation.
- Grading structure includes assignments, quizzes, a midterm and final.
- ***TIP*** Some students found that taking this class over the summer is beneficial as it gives them a chance to digest and apply the information!
- Note that you can't take this class before or at the same time as COMP 202, COMP 208, GEOG 333, COMP 206 or COMP 250.

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

A CEGEP level math course. BIOL 112 Co-requisite.
Not open to students who have taken or are taking COMP 202, COMP 208, GEOG 333, COMP 206 or COMP 250.

WHAT TO TAKE NEXT

COMP 206 — Introduction to Software Science
COMP 250 — Introduction to Computer Science

PROFESSOR(S)

David Becerra

Mathieu Blanchette

Yue Li

COMP 250
Intro to Computer Science
core complementary course: computer science

COURSE OVERVIEW

Mathematical tools (binary numbers, induction, recurrence relations, asymptotic complexity, establishing correctness of programs), Data structures (arrays, stacks, queues, linked lists, trees, binary trees, binary search trees, heaps, hash tables), Recursive and non-recursive algorithms (searching and sorting, tree and graph traversal). Abstract data types, inheritance, selected topics.

THOUGHTS FROM COG SCI STUDENTS

- This course uses Java, is content-heavy, and covers a broad range of topics.
- Be sure to start assignments early as they can be very laborious and time-intensive!
- Try to do the practice questions for each course module as exam study prep.
- Practice calculating time complexities!
- Try to have conceptual knowledge on the algorithms and data structures seen in class.
- Grading structure: assignments, midterms, a choice between a presentation (mock interview with TAs) or a quiz, and a final project.
- Students with limited programming experience should take COMP 202 or equivalent before this class. Familiarity with a high level programming language is required, but this is not necessary if you're already familiar with programming!

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

CEGEP level Math

WHAT TO TAKE NEXT

COMP 251 — Algorithms & Data Structures
COMP 206 — Introduction to Software Science
COMP 350 — Numerical Computing

PROFESSOR(S)

Giulia Alberini

PSYC 204
Introduction to Psychological Statistics
core complementary course: statistics

COURSE OVERVIEW

The statistical analysis of research data; frequency distributions; graphic representation; measures of central tendency and variability; elementary sampling theory and tests of significance.

THOUGHTS FROM COG SCI STUDENTS

- This course is relatively easy as long as you pay attention, watch the lectures, and review the slides.
- It provides an introduction to basic statistical concepts including measures of central tendency, correlation, and hypothesis testing.
- On assignments, you will be asked to do the calculations by hand. This can be very tedious, so it is important to go slowly and check your work for simple mistakes. The assignments are the most challenging part of this class, but they are very manageable if you spend some time on them.
- The textbook is not mandatory, since a lot of the information and concepts being taught are pretty straightforward and widely accessible to learn about online.

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

N/A

WHAT TO TAKE NEXT

PSYC 305 — Statistics for Experimental Design

PROFESSOR(S)

Jessica Flake
Jens Kreitewolf

MATH 203
Principles of Statistics 1
core complementary course: statistics

COURSE OVERVIEW

Examples of statistical data and the use of graphical means to summarize the data. Basic distributions arising in the natural and behavioural sciences. The logical meaning of a test of significance and a confidence interval. Tests of significance and confidence intervals in the one and two sample setting (means, variances and proportions).

THOUGHTS FROM COG SCI STUDENTS

- This class covers more abstract concepts than PSYC 204, and the math required is more advanced.
- If possible, take the class with Dr. David Wolfson — he is an excellent professor with very straightforward assignments and exams that have similar questions to those shown in class.
- The best way to study for the final exam is to do as many practice problems as you can and to study the reasoning behind the formulas.

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

N/A

WHAT TO TAKE NEXT

MATH 323 — Probability
PSYC 305 — Statistics for Experimental Design

PROFESSOR(S)

Jens Kreitewolf

Oliver Russell

Alia Sajjad

MATH 323
Probability
core complementary course: statistics

COURSE OVERVIEW

Sample space, events, conditional probability, independence of events, Bayes' Theorem. Basic combinatorial probability, random variables, discrete and continuous univariate and multivariate distributions. Independence of random variables. Inequalities, weak law of large numbers, central limit theorem.

THOUGHTS FROM COG SCI STUDENTS

- This class has more advanced math than PSYC 204 or MATH 203, since it involves knowledge of calculus.
- The material can be overwhelming, so make sure to stay up to date with the content.
- Understanding the proofs is very important! Don't be afraid to get help if you need it!
- If possible, take this class with Dr. David Wolfson — he is an excellent professor with very straightforward assignments and exams that are similar to the problems shown in class.

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

MATH 141

WHAT TO TAKE NEXT

MATH 324 — Statistics

PROFESSOR(S)

Alia Sajjad

LING 201
Introduction to Linguistics
core complementary course: linguistics

COURSE OVERVIEW

General introduction to linguistics, the scientific study of human language. Covers the core theoretical subfields of linguistics: phonetics, phonology, morphology, syntax, and semantics. Also provides background on other subfields including sociolinguistics, pragmatics, historical linguistics, linguistic variation, and language acquisition.

THOUGHTS FROM COG SCI STUDENTS

- This course allows you to explore different fields of study within linguistics, which can help you determine which areas you might want to focus on. The knowledge from this class is also helpful in other, upper-year non-linguistics courses.
- The course content focuses on English, but also brings in examples from other languages.
- You can do assignments in small groups (just make sure you're in the same conference as the people you want to work with).
- Trees are fun! (When you get the hang of them)

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

N/A

WHAT TO TAKE NEXT

LING 371 — Syntax
LING 330 — Phonetics

PROFESSORS

Morgan Sonderegger

Andrei Munteanu

LING 210
Introduction to Speech Science
core complementary course: linguistics

COURSE OVERVIEW

The course covers key concepts of speech science, including phonetics (acoustics, speech perception and production), fundamentals in the study of speech processing, speech development, and speech disorders, and introduces some basic methodologies of the field.

THOUGHTS FROM COG SCI STUDENTS

- This course is interesting and explores how we produce sounds.
- This is a good survey course for someone without a background in linguistics.
- The professor is super nice and engaging!
- This class is not terribly difficult, as long as you pay attention in class!

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

N/A

WHAT TO TAKE NEXT

LING 330 — Phonetics

PROFESSORS

Different professors teach this course every year!

LING 260
Meaning in Language
core complementary course: linguistics

COURSE OVERVIEW

A hands-on introduction to the strategies that natural languages use to convey meaning. Requiring no previous background in linguistics, the course surveys fundamental properties of word and sentence meaning and their interdependence with context. It provides an overview of the grammatical mechanisms that languages employ to construct the literal meanings of sentences from word meanings, explores how meanings are anchored to real life situations, and analyzes how meanings are routinely enriched in context by language users to convey more than what is literally expressed.

THOUGHTS FROM COG SCI STUDENTS

- This is an interesting course that goes very in depth into specific topics in linguistics.
- It is a pretty straightforward linguistics course that focuses on the meaning of language and how it changes depending on the context it is used in.
- It uses many visual representations — Venn diagrams and tables — to show the semantic meaning of sentences and phrase.

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

N/A

WHAT TO TAKE NEXT

LING 360 — Introduction to Semantics

PROFESSOR(S)

Luis Alonso-Ovalle

Bernhard Schwarz

PHIL 200
Introduction to Philosophy 1
core complementary course: philosophy

COURSE OVERVIEW

A course treating some of the central problems of philosophy: the mind-body problem, freedom, skepticism and certainty, fate, time, and the existence of God.

THOUGHTS FROM COG SCI STUDENTS

- Professor Emily Carson is really great — with her, you learn the fundamentals of philosophy, as well as how to structure a philosophical argument.
- This class provides the foundation for any upper-year philosophy class.
- The grading scheme in previous years has included small graded weekly conference assignments, 2 larger writing assignments (including a 1000 word paper), and a final exam.

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

N/A

WHAT TO TAKE NEXT

Almost any philosophy class!
For example:
PHIL 242 — Introduction to Feminist Theory
PHIL 306 — Philosophy of Mind

PROFESSORS

Oran Magal

Michael Blome-Tillmann

PHIL 201
Introduction to Philosophy 2
core complementary course: philosophy

COURSE OVERVIEW

An introduction to some of the major problems of philosophy. This course does not duplicate PHIL 200.

THOUGHTS FROM COG SCI STUDENTS

- This is a very interesting and thought-provoking class.
- You learn about a wide variety of topics from different philosophical eras.
- Overall, it is not too challenging if you are willing to put in the work.
- Though the readings are not required, they are very helpful during conferences.
- Lecture material is usually not tested and only presented to help deepen your understanding of the material.

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

N/A

WHAT TO TAKE NEXT

Any higher level philosophy class!

PROFESSORS

Ian Gold

Philip R. Buckley

Oran Magal

PHIL 221

Intro to History & Philosophy of Science
core complementary course: philosophy

COURSE OVERVIEW

A survey of the development of modern science since the Eighteenth Century.

THOUGHTS FROM COG SCI STUDENTS

- If possible, take this class with Dr. Ian Gold. His version of the course focuses specifically on cognitive science. It is essentially an "introduction to cog sci" course. Dr. Gold is a very clear and engaging professor.
- Dr. Eran Tal is also an excellent professor for this course, though he teaches with less of a focus on cognitive science. The pace of his lectures is very reasonable and he encourages class participation, despite the class being lecture-format. In his version of the course, there are 3 papers that require you to think critically about philosophers' arguments. For these papers, you are required to come up with an objection to the philosophers' argument and consider how they would reply to your objection.
  - ***TIP*** Seek guidance and feedback from the TAs while you are working on the papers.
- Assignments will vary depending on which professor is teaching the class, but this is generally a favourite among cognitive science students.

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

N/A

WHAT TO TAKE NEXT

PHIL 341 — Philosophy of Science
PSYC 433 — Cognitive Science

PROFESSORS

Oran Magal

Michael Blome-Tillmann

Eran Tal

Andre Martin

NSCI 200
Introduction to Neuroscience
core complementary course: neuroscience

COURSE OVERVIEW

An introduction to how nerve cells generate action potentials, communicate with one another at synapses, develop synaptic connections, early brain development, and the construction of specific neural circuits.

THOUGHTS FROM COG SCI STUDENTS

- This course is dense and content-heavy, but very interesting, as it covers the biological and physiological basis of neuroscience.
- The assessments require large amounts of memorization and application. Start studying the content early!
  - *TIP* In order to draw connections between course content and aid with memorization, form a small study group and talk through the content.
  - You can find people to study with by posting to the myCourses Discussion board for the class or by reaching out to people in Facebook groups!
- The textbook readings are not emphasized on assessments, but they are testable.
  - *TIP* Split up the readings amongst members of a study group and share your summary notes!
- In previous years, the grading structure included 2 midterms and a final exam that consisted of multiple choice and short answer questions.

COURSE STYLE

Lectures

RECOMMENDED YEAR

U1

PREREQUISITES

BIOL 112, **CHEM 110**, **CHEM 120**, **PHYS 101 or PHYS 131**, and **PHYS 102 or PHYS 142**. Pre-/Co-requisite **BIOL 200**, **CHEM 212** or permission of instructor; cannot be taken after PHGY 209

WHAT TO TAKE NEXT

NSCI 201 — Introduction to Neuroscience 2
PSYC 311 — Human Cognition and the Brain
NEUR 310 — Cellular Neurobiology

PROFESSOR(S)

Dr. Edward Ruthazer
Dr. David Stellwagen
Dr. Aparna Suvrathan

PSYC 211

Introductory Behavioural Neuroscience

core complementary course: neuroscience

COURSE OVERVIEW

An introduction to contemporary research on the relationship between brain and behaviour. Topics include learning, memory and cognition, brain damage and neuroplasticity, emotion and motivation, and drug addiction and brain reward circuits. Much of the evidence will be drawn from the experimental literature on research with animals.

THOUGHTS FROM COG SCI STUDENTS

- This course is very content heavy.
  - ***TIP*** Make flashcards and review the material frequently.
- Dr. Britt is a straightforward and clear lecturer.
- The class provides a solid foundational background in the main areas of neuroscientific research. Many upper-level courses build on the concepts covered in this class.
- Having a strong background in basic biological concepts will be very helpful.
- In order to do well in this course, you must be willing to dedicate lots of time to it. There is so much to learn!
- The exams are multiple-choice and very fair.
- The textbook presents information in a new way and can help you make connections between topics. It's not necessary to read, but a great resource.

RECOMMENDED YEAR

U1 or **U2**

PREREQUISITES

BIOL 111, **BIOL 112**, **or BIOL 115** and **PSYC 100** or equivalent

WHAT TO TAKE NEXT

PSYC 318 —Behavioural Neuroscience 2
PSYC 302 — Psychology of Pain
PSYC 342 — Hormones and Behavior
PSYC 514 — Neurobiology of Memory

PROFESSOR(S)

Jonathan Britt (Fall)

Matthew Graham (Summer**)**

PSYC 212
Perception
core complementary course: psychology

COURSE OVERVIEW

Perception is the organization of sensory input into a representation of the environment. Topics include: survey of sensory coding mechanisms (visual, auditory, tactile, olfactory, gustatory), object recognition, spatial localization, perceptual constancies and higher level influences.

THOUGHTS FROM COG SCI STUDENTS

- The material sometimes seems challenging at first and takes a while to wrap your head around.
- Exams are multiple-choice and the questions are very straightforward.
- The readings are very helpful and do a good job clarifying the topics explained in lecture.
- The course content overlaps with quite a few other introductory psychology/neuroscience courses.
- It is a great introductory course that briefly covers many aspects of psychology and neuroscience that will be learned in more depth in future courses.
- Opportunities for extra credit are available.

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

N/A

WHAT TO TAKE NEXT

PSYC 213 — Cognition
PSYC 406 — Psychological Tests
PSYC 526 — Advances in Visual Perception

PROFESSOR(S)

Stephane Gaskin

Mathieu Roy

PSYC 213
Cognition
core complementary course: psychology

COURSE OVERVIEW

Where do thoughts come from? What is the nature of thought, and how does it arise in the mind and the brain? Cognition is the study of human information processing, and we will explore topics such as memory, attention, categorization, decision making, intelligence, philosophy of mind, and the mind-as-computer metaphor.

THOUGHTS FROM COG SCI STUDENTS

- Dr. Signy Sheldon is an excellent professor. She goes at a good pace and is very clear and organized.
- This course teaches you the basic concepts of cognition and is a great foundation for upper-year psychology and neuroscience courses.
- The exams are multiple-choice and require a deeper level of understanding compared to exams in PSYC 211 and PSYC 212.
- To do well in the course, it is recommended to do the textbook readings.
  - Be sure to focus on the studies not mentioned in class and the vocabulary words at the end of each chapter!

RECOMMENDED YEAR

U0 or **U1**

PREREQUISITES

One previous course in Psychology

WHAT TO TAKE NEXT

PSYC 352 — Cognitive Psychology Lab
PSYC 310 — Intelligence
PSYC 433 — Cognitive Science
PSYC 529 — Music Cognition

PROFESSOR(S)

Signy Sheldon

Sarah McCrackin

COMPLEMENTARY COURSES

PSYC 302
The Psychology of Pain
complementary course: psychology & neuroscience

COURSE OVERVIEW

An introduction to pain research and theory, with emphasis on the interactions of psychological, cultural and physiological factors in pain perception. The role of these factors in clinical pain and its management by pharmacological and non-pharmacological means will be discussed.

THOUGHTS

This course is known among students for being one of the best courses in the psych department, but is challenging due the amount of material. Be sure to stay on top of the material by reviewing the content at the end of each week. Anyone that is interested in healthcare or going into medicine should definitely take this class, as it touches on relevant topics like clinical trials and pain management techniques. There are very few readings in this course (compared to other psych classes), and make up a small part of the exam

PREREQUISITES

NSCI 201 or **PSYC 211** or **PSYC 212** or permission of instructor.

WHAT TO TAKE NEXT

PSYC 318 — Behavioural Neuroscience 2
PSYC 342 — Hormones and Behavior

PSYC 304
Child Development
complementary course: psychology & neuroscience

COURSE OVERVIEW

Psychology of children, covering critical issues, theories, biological underpinnings, experimental methods, and findings in perceptual, cognitive, language, emotional, and social development.

THOUGHTS

This course teaches you all about perceptual, motor and cognitive development, and you will learn a broad overview of experimental paradigms used in child psychology. Assessments typically include 2 midterms and a final exam

PREREQUISITES

Two of **PSYC 211, PSYC 212, PSYC 213 and PSYC 215**, or permission from instructor

WHAT TO TAKE NEXT

PSYC 412 — Developmental Psychopathology
PSYC 413 — Cognitive Development
PSYC 414 — Social Development

PSYC 311
Human Cognition and the Brain
complementary course: psychology & neuroscience

COURSE OVERVIEW

The course introduces the correlation between human cognitive processes (like perception, attention, language, learning, memory, planning, and organization) and brain functions. It focuses on studies involving brain lesions and modern functional neuroimaging methods to understand these connections.

THOUGHTS

The class covers a wide range of neuropsychological disorders. The content is very interesting and provides a good basis for understanding the brain and brain circuitry. Neuroanatomy is heavily emphasized in the first part of the course. The course is fairly content heavy and the readings make up a significant chunk of the material tested on exams.

PREREQUISITES

N/A

WHAT TO TAKE NEXT

PSYC 410 — Special Topics in Neuropsychology

PSYC 342
Hormones and Behaviour
complementary course: psychology & neuroscience

COURSE OVERVIEW

The role of hormones in organization of CNS function, as effectors of behaviour, in expression of behaviours and in mental illness.

THOUGHTS

This course focuses on how the endocrine system interacts with the nervous system. The class is very biology-based, so a strong background in this area will be very helpful! The class is very content heavy so it is important to stay on track of the material.

PREREQUISITES

BIOL 111, BIOL 112, BIOL 115 or equivalent

WHAT TO TAKE NEXT

BIOL 200 — Molecular Biology
PSYC 302 — Psychology of Pain
PSYC 318 — Behavioural Neuroscience 2

PSYC 433
Cognitive Science
complementary course: psychology & neuroscience

Click Here!
Syllabus

COURSE OVERVIEW
The multi-disciplinary study of cognitive science, exploring the computer metaphor of the mind as an information-processing system. Focus on levels of analysis, symbolic modeling, Turing machines, neural networks, as applied to topics such as reasoning, vision, decision-making, and consciousness.

THOUGHTS
This course is generally quite popular among cognitive science students, as it touches on many "hot topics" in the field. There is a fair amount of content covered and some of the concepts are very abstract. Usually, there are 2 midterms and a final exam, as well as a writing assignment that involves application and synthesis of material covered in the course (not a formal research paper).

PREREQUISITES
PSYC 212 or **PSYC 213**

WHAT TO TAKE NEXT
PHIL 221 — Introduction to History and Philosophy of Science 2
PHIL 306 — Philosophy of Mind
PSYC 538 — Categories, Communication and Consciousness

PSYC 444
Sleep Mechanisms & Behavior
complementary course: neuroscience

Click Here!
Syllabus

COURSE OVERVIEW
This course covers basic biological mechanisms, possible functions and behavioural aspects of sleep. Additional topics include: disorders of sleep, their effects on behaviour and cognition, and treatment approaches; as well as medical, neurological and psychiatric disorders, and drugs, that affect sleep.

THOUGHTS
This is a very popular course among psychology and cognitive science students. Assessments typically include a midterm, an individual video project and a take-home final exam. Professor Solomonova is incredible and makes the content very interesting and manageable.

PREREQUISITES
One of **PSYC 211, NSCI 201, PHGY 209** and one of **PSYC 311, PSYC 317, PSYC 318, PSYC 342**, or permission from instructor

WHAT TO TAKE NEXT
N/A

PSYC 529
Music Cognition
complementary course: psychology

COURSE OVERVIEW

Interdisciplinary study of music cognition, with an emphasis on psychological, computational, and neuroscientific approaches. Focuses on listeners' response to sound, including perception, attention, memory, motor control, skilled performance, and emotional response.

THOUGHTS

This course covers how music is perceived, processed and interpreted. It also goes over different empirical paradigms used to understand various music-related phenomena. Grading scheme typically includes 2 midterms, a debate group project, homework questions (related to the debates), and participation during other class members' debates. This course is reading heavy, and debates come in quick succession.

PREREQUISITES
PSYC 212, PSYC 213 and PSYC 204

WHAT TO TAKE NEXT
N/A

PSYC 538

Categorization, Communication and Consciousness
complementary course: psychology & neuroscience

COURSE OVERVIEW

The main challenges that cognitive science faces today, focusing on the capacity to learn sensorimotor categories, to name and describe them verbally, and to transmit them to others, concluding with cognition distributed on the Web.

THOUGHTS

This course explores all aspects of cognitive science -- it is a great class to take if you want to explore how all the streams of cognitive science fit together! Professor Harnad likes to spark discussion and ensure that you understand the content -- he has no problem re-explaining concepts until you thoroughly understand them, so feel free to ask him clarifying questions throughout the lectures.

PREREQUISITES
A **300-level** PSYC or NEURO or PHIL or LING or COMP course

WHAT TO TAKE NEXT
PSYC 433 — Cognitive Science

ANAT321
Circuitry of the Human Brain
complementary course: neuroscience

COURSE OVERVIEW
This course explores the functional organization of the human brain and spinal cord. The course focuses on how neuronal systems are designed to subserve specific motor, sensory, and cognitive operations.

THOUGHTS
This course provides an in-depth overview of general brain morphology, which offers students a really good basis if they want to take more courses in the PSYC or NSCI fields.
Plus, everyone loves Professor Ragsdale!

PREREQUISITES
ANAT/BIOC 212 or **BIOL 201**; and **one of PHGY 209, NSCI 200 or PSYC 211**; or permission of instructor

WHAT TO TAKE NEXT
Any higher level PSYC course.

PSYT 301
Issues in Drug Dependence
complementary course: neuroscience

COURSE OVERVIEW
The phenomenology and epidemiology of the use and abuse of alcohol, nicotine, opiates, stimulants, sedatives and psychotomimetic agents are discussed in relation to current theoretical and experimental issues. The perspective is multidisciplinary and the intention is to develop an understanding of the nature of the issues surrounding drug dependence.

THOUGHTS
This course is a great introduction into both the behavioural and biological side of substance use! Professor Rabin and all the guest professors are experts in the field and make the content easy to digest. The exams are very fair, and the questions don't try to trick you.

PREREQUISITES
One of: **NSCI 201, PHGY 209, PHGY 210, PSYC 100,** or **BIOL 201**; or permission of instructor

WHAT TO TAKE NEXT
PSYT 500 — Advances: Neurobiology of Mental Disorders
PSYT 515 — Advanced Studies in Addiction

COMP 206
Intro to Software Systems
complementary course: computer science

COURSE OVERVIEW

Comprehensive overview of programming in C, use of system calls and libraries, debugging and testing of code; use of developmental tools like make, version control systems.

THOUGHTS

Learn Bash, C, how to work in the UNIX environment, and debug/test code. You may also learn the basics of Git and GitHub. Many concepts useful for software engineers! Might have a group project where you apply Git at the end of the course.

PREREQUISITES

COMP 202 or COMP 250

WHAT TO TAKE NEXT

COMP 251 — Algorithms & Data Structures

COMP 302 — Programming Languages & Paradigms

MATH 240 — Discrete Structures

COMP 251
Algorithms & Data Structures
complementary course: computer science

COURSE OVERVIEW

Introduction to algorithm design and analysis. Graph algorithms, greedy algorithms, data structures, dynamic programming, maximum flows.

THOUGHTS

Start your assignments early! Designing the program/algorithm is the time consuming part of the assignments, not the actual coding! Make sure to do the practice problems and solve assignments on your own as much as you can! Additionally, aim to have a solid conceptual understanding of algorithms and the standard methods of data structures.

PREREQUISITES

COMP 250; and one of **MATH 235** or **MATH 240**

WHAT TO TAKE NEXT

COMP 303 — Software Design

COMP 551
Applied Machine Learning
complementary course: computer science

COURSE OVERVIEW

Selected topics in machine learning and data mining, including clustering, neural networks, support vector machines, decision trees. Methods include feature selection and dimensionality reduction, empirical validation, algorithm design and parallelization

THOUGHTS

Background in AI is recommended but not required.

This is an applied course, so it has emphasis on good methods and practices for deployment of real systems and working with big data sets (and more)!

PREREQUISITES

MATH 323 or ECSE 205, **COMP 202, MATH 133**, **MATH 222** (or their equivalents).

WHAT TO TAKE NEXT

COMP 546 — Computational Perception
Any other AI or ML course!

COMP 546
Computational Perception
complementary course: computer science

COURSE OVERVIEW

Computational models of visual perception and audition. Vision problems. Audition problems include source localization and recognition. Emphasis on physics of image formation, sensory signal processing, neural pathways, psychophysical methods.

THOUGHTS

While the content itself of this class isn't hard, there is a lot of it! In other words, it requires a lot of memorization and work!

PREREQUISITES

There are no official prerequisites for this class, but a solid background in Math is recommended

WHAT TO TAKE NEXT

COMP 551 — Applied Machine Learning

COMP 302
Programming Languages & Paradigms
complementary course: computer science

COURSE OVERVIEW

Comprehensive overview of programming in C, use of system calls and libraries, debugging and testing of code; use of developmental tools like make, version control systems.

THOUGHTS

You'll learn how compilers work and how new programming languages are built using OCaml (a language with a few built-in tools). It is very insightful; you learn about methods (i.e., filter and map) which are used across programming languages.
COMP 206 is a recommended prereq but not mandatory.

PREREQUISITES

COMP 250 and **MATH 240** or **MATH 235** or **MATH 318** or **COMP 230** or **PHIL 210**

WHAT TO TAKE NEXT

Any upper-level computer science course! Material from this course will help with almost all of them.

MATH 222
Calculus 3
complementary course: computer science

COURSE OVERVIEW

Introduction to algorithm design and analysis. Graph algorithms, greedy algorithms, data structures, dynamic programming, maximum flows.

THOUGHTS

Difficulty may vary based on the prof. "Multivariable calculus" where you will be applying concepts from Calc 2 in three or more dimensions (3+ variables) such as deriving in terms of multiple variables or performing double integrations. It may go in depth into the more generalizable rules of calculus. Usually required for AI courses, but ask an advisor!

PREREQUISITES

MATH 141. Familiarity with vector geometry or Corequisite: **MATH 133**

WHAT TO TAKE NEXT

COMP 424 — Artificial Intelligence

MATH 223
Linear Algebra
complementary course: computer science

COURSE OVERVIEW

Review of matrix algebra, determinants and systems of linear equations. Vector spaces, linear operators and their matrix representations, orthogonality. Eigenvalues and eigenvectors, diagonalization of Hermitian matrices. Applications.

THOUGHTS

This class expands on the content from MATH 133 but is much more proof-heavy! Practice proofs seen in class and do any exercises given! Learn the different approaches and how to spot patterns for when to apply each one. Don't underestimate having a solid conceptual understanding of the topics!

PREREQUISITES

MATH 133 or equivalent

WHAT TO TAKE NEXT

MATH 240 — Discrete Structures
There are also many CS classes that need this as prerequisite!

MATH 240
Discrete structures
complementary course: computer science

COURSE OVERVIEW

Introduction to discrete mathematics and applications. Logical reasoning and methods of proof. Elementary number theory. Combinatorics. Graph theory.

THOUGHTS

The 4 sections feel like a combination of some of the required classes such as deductive logic, probability (combinatorics), and CS (graphs). TIP: Taking PHIL210, MATH323, and a CS course that deals with data structures (COMP 250) or equivalent will make the content super familiar and set you up well for this course! They're required either way!

PREREQUISITES

COMP 250; and one of
MATH 235 or **MATH 240**

WHAT TO TAKE NEXT

COMP 251 — Algorithms and Data Structures
Recommended to take before for familiarity:
PHIL210 - MATH323 - COMP250

PHIL 306
Philosophy of Mind
complementary course: philosophy

COURSE OVERVIEW

A survey of major positions of the mind-body problem, focusing on such questions as: Do we have minds and bodies? Can minds affect bodies? Is mind identical to body? If so, in what sense "identical"? Can physical bodies be conscious?

THOUGHTS

This course covers different philosophical schools of thought pertaining to the mind's substrate, content & functionality. You will focus on selected arguments & their counterarguments. While it is super interesting, and definitely gets you thinking, it is quite dense, so be sure to ask questions!

PREREQUISITES

N/A

WHAT TO TAKE NEXT

PSYC 538 — Categorization, Consciousness & Communication

PSYC 433 — Cognitive Science

PHIL 474
Phenomenology
complementary course: philosophy

COURSE OVERVIEW

A study of phenomenology from a historical and thematic perspective. The course will typically involve the study of central thinkers such as Husserl, Heidegger, or Merleau-Ponty, with an examination of the nature and development of the phenomenological movement.

THOUGHTS

This course covers a completely different side of philosophy you wouldn't normally think about! It's very abstract, and you spend a lot of time on the work of previous philosophers. A very interesting course.

PREREQUISITES

An intermediate course in philosophy

WHAT TO TAKE NEXT

PHIL 419 — Epistemology

PHIL 421 — Metaphysics

PHIL 341
Philosophy of Science 1
complementary course: philosophy

COURSE OVERVIEW

A discussion of philosophical problems as they arise in the context of scientific practice and enquiry. Such issues as the philosophical presuppositions of the physical and social sciences, the nature of scientific method and its epistemological implications will be addressed.

THOUGHTS

This class is an absolute must for anyone thinking of going into linguistics. It provides a very thorough explanation of the acoustic properties of speech and teaches you how to use Praat, an important software used in linguistics research. Labs are time-consuming, start as early as possible. Quizzes and assignments are reasonable.

PREREQUISITES

N/A

WHAT TO TAKE NEXT

PSYC 441 — Philosophy of Science 2
PSYC 306 — Philosophy of Mind

LING 330
Phonetics
complementary course: linguistics

COURSE OVERVIEW

Transcription, identification, and production of speech sounds. Introduction to the acoustic properties of speech sounds, acoustic analysis of speech, and auditory phonetics.

THOUGHTS

This class is an absolute must for anyone thinking of going into linguistics. It provides a very thorough explanation of the acoustic properties of speech and teaches you how to use Praat, an important software used in linguistics research. Labs are time-consuming, start as early as possible. Quizzes and assignments are reasonable.

PREREQUISITES

LING 201

WHAT TO TAKE NEXT

LING 210 — Introduction to Speech Science
LING 450 — Laboratory Linguistics
LING 530 — Acoustic Phonetics

LING 331
Phonology 1
complementary course: linguistics

COURSE OVERVIEW
Introduction to phonological theory and analysis.

THOUGHTS

The class focuses on the systems of sounds within and between languages. The assignments are difficult. Start them as early as possible, do them in groups, and go to office hours. The material builds up as the semester progresses. Professor Goad genuinely wants her students to do well and she will help you if you reach out.

PREREQUISITES

LING 330

WHAT TO TAKE NEXT

LING 440 — Morphology
LING 451 — Acquisition of Phonology
LING 531 — Phonology 2

LING 360
Introduction to Semantics
complementary course: linguistics

COURSE OVERVIEW
Introduction to the rudiments of semantics, focusing on those aspects of meaning that are invariant across contexts and the ways in which the meaning of a complex expression is determined by the meanings of its constituents.

THOUGHTS

If you enjoyed PHIL 210, this is for you! This is not recommended if you struggled in PHIL 210. It's notoriously one of the most difficult in the linguistics department. Spend time on really understanding the concepts and make sure you can extrapolate those conclusions to other kinds of problems that were not explicitly solved in class.

PREREQUISITES

LING 201 and **PHIL 210**

WHAT TO TAKE NEXT

LING 460 — Semantics 2
LING 565 — Pragmatics

ADDITIONAL COURSES

There are so many courses you can take as a Cognitive Science student, we unfortunately were not able to include in-depth descriptions for all of them. However, we've chosen a few more that we personally love and feel are beneficial to the program!

PSYCHOLOGY

- **PSYC 100** — Introduction to Psychology
  - Doesn't count for CogSci but is a prerequisite for a lot of classes!
- **PSYC 305** — Statistics for Experimental Design
  - Provides strong stats knowledge
- **PSYC 310** — Intelligence
- **PSYC 315** — Computational Psychology
- **PSYC 513** — Human Decision-Making
- **PSYC 319** — Computational Models - Cognition
- **PSYC 522** — Neurochemistry and Behaviour

NEUROSCIENCE

- **NSCI 300** — Neuroethics
  - Really intersting course on ethics in neuroscience and psychology.
- **BIOL 306** — Neural Basis of Behaviour
- **BIOL 320** — Evolution of Brain and Behaviour
- **BIOL 507** — Animal Communication
- **PSYC 506** — Cognitive Neuroscience of Attention
  - Rarely taught unfortunately
- **PSYC 410** — Special Topics in Neuropsychology

COMPUTER SCIENCE

- **COMP 445** — Computational Linguistics
  - Same as **LING 445** if you need Arts credit!
- **COMP 360** — Algorithm Design
- **COMP 451** — Fundamental of Machine Learning
- **COMP 549** — Brain-Inspired AI

PHILOSOPHY

- **PHIL 310** — Intermediate Logic
  - Very theory based and you learn how to use LaTeX.
- **PHIL 481** — Topics in Philosophy
  - May not count depending on the topic... consult Liana to find out.
- **PHIL 311** — Philosophy of Mathematics

LINGUISTICS

- **LING 371** — Syntax 1
  - For you if you love solving puzzles!
- **LING 450** — Laboratory Linguistics

OTHER

- **BASC 201** — Arts and Science Integrative Topics
  - Recommended but no longer required, only counts towards the freshman program or electives

MCGILL SURVIVAL TIPS

MCGILL SURVIVAL TIPS

There are a variety of valuable academic, social and wellness resources available for Cognitive Science students. While it is important to prioritize looking at course reviews and resources, other organizations and databases can also be a great addition to helping you in your academic and personal journeys during your undergrad. This guide includes a selection of different resources that you can use for your future success. If you ever need guidance towards other organizations or resources you can always reach out to SACS and your advisors!

HEALTH AND WELLNESS

- **Local Wellness Advisor**
  - These are trained clinicians that can assist you and get you the help you need.
- **McGill Wellness Hub**
  - The Wellness Hub is where you go for medical-related needs on campus (e.g. doctor's appointments, Local Wellness Advisors, lab tests, etc.).
- **Keep Me Safe**
  - A free service for McGill students, available 24/7 in 60+ languages. It gives you immediate and ongoing access to licensed counsellors remotely, even when outside of QC.
- **First People's House Student Community and Cultural Support**
  - Mission to provide First Nations, Inuit, and Métis students with support to remain connected to their culture.

- **McGill Office of Religious and Spiritual Life** (MORSL)
  - MORSL hosts free workshops, events, meditation spaces and more for all McGill students regardless of their religious denomination, affiliation, or lack thereof.
- **Peer Support Center** (PSC)
  - The PSC is a confidential and non-judgemental place where students can share their experiences with well-trained peer-supporters. Appointments can be booked online.
- **McGill Students Nightline**
  - The McGill Students Nightline is a non-judgemental, confidential and anonymous listening service where you can receive non-professional support from fellow students from 6pm to 3am.

MCGILL SURVIVAL TIPS

- **McGill Library Website**
  - The library website offers a variety of helpful services from databases to citation guides. It is a great place to start your research for any project and to learn more about possible topics of interest.
- **McGill Tutorial Service**
  - If you are looking for a tutor for any of your courses, you can always refer to McGill's Tutoring Centre, which will set you up with a private tutor that fits the class that you are focusing on.
- **Other McGill-Affiliated Tutoring Services**
  - This page contains a list of tutoring services associated with McGill that are not part of the McGill Tutoring Centre.
- **McGill Mind Map of Learning Resources**
  - This is a great overview of the resources available to you from all over campus! It includes sections on all types of learning resources, workshops, advising, support, and more!

- **McGill Writing Centre**
  - If you want to improve your writing skills or learn to write for a specific audience, you can always contact the McGill's Writing Centre. They have drop-in office hours if you want to ask questions about an assignment or paper that you are writing.
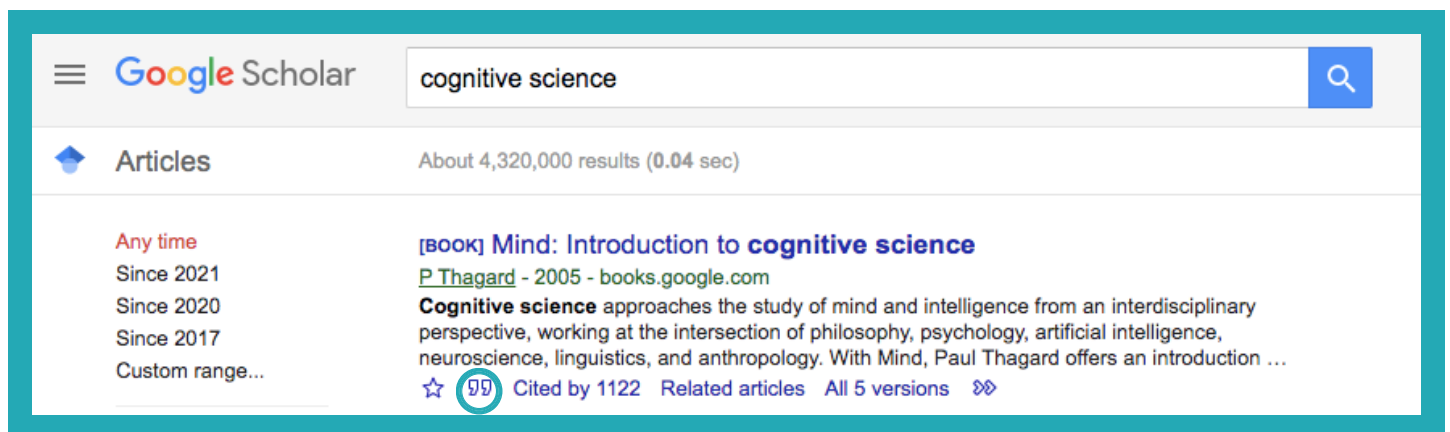- **Media Streaming Sites**
  - There are many downloadable and streaming media sites provided by McGill for free. Websites like Kanopy and the MET Opera on Demand are a great place to find media content (TV shows, documentaries, films, music etc.) for both leisure and class assignments.

MCGILL SURVIVAL TIPS

ACADEMIC RESOURCES

- **Google Scholar**
  - Google Scholar is an incredible resource for informal research and finding readings online. It can also generate citations automatically! If you search up the paper or document that you need, you can click the citation button (circled in **blue**). This will provide you with access to a pop-up containing the citation for the resource in a variety of different styles.

EXAM INFORMATION

- If you are thinking of deferring an exam, check out these resources for more information:
  - Deferred/Supplemental Exams
  - Knowing your Rights for Deferral
  - **Consult your BASC degree advisor if you're considering these options**
- As a student, you have the right to review and challenge your exam grades as well. Check section 8 of PASL for more information.
  - Consider learning more about PASL as well!
- Remember that your mental and physical health are **very** important. Therefore, deferring an exam to keep yourself healthy is an extremely valid reason to do so. Also, it is okay if your exam does not go the way you had expected. This is much more common than you might think and there is no need to panic — your academic performance does not define who you are.
  - However, it is still **strongly recommended** to see your BASC degree advisor to make sure that this is the right choice for you.

MCGILL SURVIVAL TIPS

MINERVA TIPS

- Minerva will not always prevent you from registering for a course that you do not have the prerequisites for. If there is a course you really want to take despite your lack of prerequisites, do so at your own risk— it's always helpful and recommended to take prerequisites before a class, but that's up to you! It's recommended to check with the department offering the course and/or professors beforehand to see if it's feasible.
- Add/Drop Period is your best friend! Use this time to play around with your schedule and see what works and doesn't work.
  - You might have had difficulties with getting into classes during registration, but during Add/Drop, people are adding and dropping classes left and right — don't fret if you don't have the perfect schedule! Frequently check Minerva during Add/Drop and you're likely to find an open spot in the class! If you're still having trouble getting into a class by the end of Add/Drop, contact the <u>department offering the course</u>, and they will give you information on how to proceed.

BALANCING THE ARTS AND SCIENCES

- Given the diverse array of courses you can take in Cognitive Science, it may seem overwhelming to decide what classes to take and when to take them while still making sure you hit all the program requirements. The CogSci Checklist is your best friend.
- You're in a very lucky position being in the Interfaculty program. You have the opportunity to take courses across five different disciplines, so use it! You may discover an interest you didn't know you had.
- More often than not, you can use your skills from arts classes to benefit your science ones, and vice versa. CogSci arts courses tend to enhance your critical and creative thinking, something that can improve study habits in the sciences. CogSci science courses tend to focus on memorization and application of theories and concepts. This can improve note-taking to access later in assignments for the arts. Try to find courses that complement each other!