Thinking and Knowing - FYSM 1607 C
Fall/Winter 2023/24
Course Syllabus

Instructor: Brendan Conway-Smith
Day/Time: Tues. & Thurs. 11:35 - 12:55 EST
Location:
Fall: Southam Hall - room 409
Winter: Paterson Hall - room 115

Format: In person
Course website: https://brightspace.carleton.ca
Office Hours: by appointment
E-mail: brendan.conwaysmith@carleton.ca

Course Description
An interdisciplinary examination of discoveries in linguistics, psychology, philosophy, and computer science concerning the question “What is cognition”? Issues may include the mind-brain controversy, the role of language in thought, and artificial vs. natural intelligence.

Prerequisite(s): Normally restricted to students entering the first year of a B.A., B.Cog.Sc., B.Co.M.S., B.Econ. or B.G.In.S. program.

Asynchronous material is posted on Brightspace. The lectures and posted material will comprise the content of midterms.

Learning outcomes
Students are introduced to different theories on cognition, and how they can be integrated to gain an improved understanding of human cognition. Students will assess these theories, formulating their own views and their applicability to life and as well as in cognitive science.

Outcomes include:
• Understanding and applying theories in cognitive science to real-world issues.
• Applying theoretical frameworks.
• Defining and identifying issues in cognition.
• Critical thinking skills by analyzing, interpreting and applying the course material.
• Learning to read and write scientific articles.
• Practicing scientific communication skills by giving a verbal presentation on a cognitive science issue of choice.
**Readings**
The readings for this course include a range of scientific articles, media, and textbook chapters. Readings are assigned on a weekly basis and available on the Brightspace webpage.

**Textbook**


**Course modality & technical requirements**
This course contains online material, with mandatory asynchronous components (weekly modules and assignments). Consult Carleton’s Technical Specs for New Students webpage to ensure you have the minimum technical requirements to participate in the class. You are strongly discouraged from trying to complete this course on a mobile phone device. For computer programs, note that Carleton students have free access to the Office 365 suite.

**E-mail Protocol**
The best forum for answering questions is on the Brightspace forum, which will be answered quickly by peers, teaching assistants, or by the instructor. I am also available for questions after class. I will respond to e-mails within 48 hours (excluding weekends and holidays) so patience is appreciated. E-mails are best kept short and questions simple.

**Participation**
Will be taken and marked individually per term from in-person attendance. You must both attend and participate in class to achieve a fair grade on this evaluation. If you miss a lecture and have a valid reason for doing so, you may be excused if communicated in advance, but not on the day.

**For other important dates and deadlines**
https://calendar.carleton.ca/academicyear/

**Evaluation Fall Semester**

**Attendance**
Value: 10% (entire course)

**Assignment 1**
Due Date: Sept. 22nd, 2023
Value: 5%
Description: Color-code 5 scientific abstracts (details in class).
Assignment 2  
Due Date: Nov. 3rd, 2023  
Value: 5%  
Description: 1-page scientific paper following color-coded formula (details in class).

Mid-term 1  
Date: Oct. 5th, 2023  
Value: 10%  
Description: Multiple-choice

Mid-term 2  
Date: Nov. 16th, 2023  
Value: 10%  
Description: Multiple-choice

Evaluation Winter Semester 2  

Assignment 3  
Due Date: Jan. 26, 2024  
Value: 5%  
Description: 1 page outline of final essay

Mid-term 3  
Date: Feb. 8th, 2024  
Value: 10%  
Description: Multiple-choice

Mid-term 4  
Date: March 7th, 2024  
Value: 10%  
Description: Multiple-choice

Presentation  
Due Date: 2nd term  
Value: 10%  
Description: Verbally present a subject using the instructions given in class.

Take home exam  
Due Date: April 25th, 2024  
Value: 25%  
Description: 5 page essay
**FALL SEMESTER SCHEDULE**
*This schedule is tentative and subject to change

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td>(Sept. 7)</td>
<td>Why Cognitive Science?</td>
</tr>
<tr>
<td><strong>Week 2</strong></td>
<td>(Sept. 12, 14)</td>
<td>History of thinking</td>
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<tr>
<td><strong>Week 3</strong></td>
<td>(Sept. 19, 21)</td>
<td>Philosophy &amp; Science</td>
</tr>
<tr>
<td><strong>Assignment 1</strong> (Sept. 22nd)</td>
<td>Assignment 1 due</td>
<td></td>
</tr>
<tr>
<td><strong>Week 4</strong></td>
<td>(Sept. 26, 28)</td>
<td>Philosophy &amp; Computation</td>
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<tr>
<td><strong>Week 5</strong></td>
<td>(Oct. 3, 5)</td>
<td>Mind &amp; Brain</td>
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<tr>
<td><strong>Mid-term 1</strong> (Thur. Oct. 5th)</td>
<td>Mid-term 1</td>
<td></td>
</tr>
<tr>
<td><strong>Week 6</strong></td>
<td>(Oct. 10, 12)</td>
<td>Integrating knowledge</td>
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<tr>
<td><strong>Week 7</strong></td>
<td>(Oct. 17, 19)</td>
<td>Cognitive Modeling</td>
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<tr>
<td><strong>Week 8</strong></td>
<td>(Oct. 23-27)</td>
<td>Fall break - no classes</td>
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<tr>
<td><strong>Week 9</strong></td>
<td>(Oct. 31, Nov. 2)</td>
<td>Metacognition</td>
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<tr>
<td><strong>Week 10</strong></td>
<td>(Nov. 7, 9)</td>
<td>Metacognitive skill</td>
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<tr>
<td><strong>Week 11</strong></td>
<td>(Nov. 14, 16)</td>
<td>Healthy mind</td>
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<tr>
<td><strong>Mid-term 2</strong> (Thur. Nov. 16th)</td>
<td>Mid-term 2</td>
<td></td>
</tr>
<tr>
<td><strong>Week 12</strong></td>
<td>(Nov. 21, 23)</td>
<td>Cognitive Psychology 1</td>
</tr>
<tr>
<td><strong>Week 13</strong></td>
<td>(Nov. 28, 30)</td>
<td>Cognitive Psychology 2</td>
</tr>
<tr>
<td><strong>Assignment 2</strong> - Dec. 3rd</td>
<td>Assignment 2 due</td>
<td></td>
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<tr>
<td><strong>Week 14</strong></td>
<td>(Dec. 5, 7)</td>
<td>Review</td>
</tr>
</tbody>
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Winter schedule below
WINTER SEMESTER SCHEDULE *
*This schedule is tentative and subject to change

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>(Jan. 9, 11)</td>
<td>Evolutionary influences</td>
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<tr>
<td>Week 2</td>
<td>(Jan. 16, 18)</td>
<td>Affect</td>
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<tr>
<td>Week 3</td>
<td>(Jan. 23, 25)</td>
<td>Social cognition 1</td>
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<td></td>
<td>Assignment 3</td>
<td>Assignment 3 due</td>
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<tr>
<td>Week 4</td>
<td>(Jan. 30, Feb. 1)</td>
<td>Social cognition 2</td>
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<td>Week 5</td>
<td>(Feb. 6, 8)</td>
<td>Decision Making &amp; Problem Solving</td>
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<td></td>
<td>Mid-term 3</td>
<td>Mid-term 3</td>
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<tr>
<td>Week 6</td>
<td>(Feb. 13, 15)</td>
<td>AI</td>
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<tr>
<td>Week 7</td>
<td>(Feb. 19-23)</td>
<td>Winter break - no classes</td>
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<td>Week 8</td>
<td>(Feb. 27, 29)</td>
<td>Morality &amp; Free Will</td>
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<tr>
<td>Week 9</td>
<td>(Mar. 5, 7)</td>
<td>Consciousness and artificial consciousness</td>
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<td></td>
<td>Mid-term 4</td>
<td>Mid-term 4</td>
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<tr>
<td>Week 10</td>
<td>(Mar. 12, 14)</td>
<td>Imagination and inspiration</td>
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<tr>
<td>Week 11</td>
<td>(Mar. 19, 21)</td>
<td>Issues in Cognitive Science</td>
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<tr>
<td>Week 12</td>
<td>(Mar. 26, 28)</td>
<td>The thinking mind</td>
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<tr>
<td>Week 13</td>
<td>(Apr. 2, 4)</td>
<td>How personality effects thinking</td>
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<tr>
<td>Week 14</td>
<td>(Apr. 9)</td>
<td>Review</td>
</tr>
<tr>
<td>Final exam due</td>
<td>(April 25)</td>
<td>Final exam due</td>
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</table>

Late policy
Late assignments that are ineligible for a deferral automatically earn a grade of zero. Eligible students are those who have communicated in advance, have PMC accommodations, or have legitimate medical issues.
**Mid terms**
Each midterm will involve multiple choice questions to be completed in class on Brightspace - **bring your laptops on the day of class**. Multiple choice questions are based on lectures and the reading material posted on online. Students with valid medical conditions who have already communicated with me will be accommodated. Otherwise, an official note from your doctor is required.

The test will be open for 1.4 hours. You may start anytime within that period to open the test. Once you start the test, you have 1 hour to complete 40 questions. No matter when you start, when the hour is up the test shuts down. **For example, if the test opens at 11:30am, and you start at 11:45, you will be cut off at 12:45.** You have only one chance to answer each question. You may not go back and change a previous answer. The midterms must be completed individually.

Oversleeping, vehicle issues, and other technological problems on the date of the midterm is **not an acceptable excuse** for missing the test.

If students miss a test for extraordinary reasons, they must provide proper documentation within 48hrs. Note that you will be permitted to complete the missed test **only** under conditions of documented illness, bereavement, or religion. If documentation is not provided, a grade of zero will be recorded for the missed test.

**Final Exam**
The final take-home exam will be discussed in class. It will be based on the accumulated readings and lecture material throughout the entire term. Detailed instructions will be provided by the instructor. It will be due on the last day of exams and is subject to change. The final exam will be worth 25% of the final grade.

**Course Expectations & Policies**
_Civility and Privacy:_ The University is a place of open discussion and free inquiry. It is expected that you will be respectful and considerate of your classmates and our learning environment will be free from discrimination and harassment.

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In accordance with the Carleton University Undergraduate Calendar (p 34), the letter grades assigned in this course will have the following percentage equivalents:

- **A+ = 90-100**
- **B+ = 77-79**
- **C+ = 67-69**
- **D+ = 57-59**
- **A = 85-89**
- **B = 73-76**
- **C = 63-66**
- **D = 53-56**
- **A - = 80-84**
- **B - = 70-72**
- **C - = 60-62**
- **D - = 50-52**
- **F = Below 50**

Grades entered by Registrar:
- **WDN = Withdrawn from the course**
- **DEF = Deferred**
Academic regulations
University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university’s website:
https://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/

PLAGIARISM
The University Academic Integrity Policy defines plagiarism as “presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one’s own.” This includes reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and presenting these as one’s own without proper citation or reference to the original source. Examples of sources from which the ideas, expressions of ideas or works of others may be drawn from include but are not limited to: books, articles, papers, literary compositions and phrases, performance compositions, chemical compounds, artworks, laboratory reports, research results, calculations and the results of calculations, diagrams, constructions, computer reports, computer code/software, material on the internet and/or conversations.

Examples of plagiarism include, but are not limited to:

- any submission prepared in whole or in part, by someone else, including the unauthorized use of generative AI tools (e.g., ChatGPT);
- using ideas or direct, verbatim quotations, paraphrased material, algorithms, formulae, scientific or mathematical concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another’s data or research findings without appropriate acknowledgement;
- submitting a computer program developed in whole or in part by someone else, with or without modifications, as one’s own; and
- failing to acknowledge sources through the use of proper citations when using another’s work and/or failing to use quotations marks.

Plagiarism is a serious offence that cannot be resolved directly by the course’s instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of “F” for the course.

Statement on Student Mental Health
As a University student you may experience a range of mental health challenges that significantly impact your academic success and overall well-being. If you need help, please speak to someone. There are numerous resources available both on- and off-campus to support you. Here is a list that may be helpful:

Carleton Resources:
- Mental Health and Wellbeing: https://carleton.ca/wellness/
- Health & Counselling Services: https://carleton.ca/health/
- Paul Menton Centre: https://carleton.ca/pmc/
- Academic Advising Centre (AAC): https://carleton.ca/academicadvising/
- Centre for Student Academic Support (CSAS): https://carleton.ca/csas/
- Equity & Inclusivity Communities: https://carleton.ca/equity/

Off Campus Resources:
- Distress Centre of Ottawa and Region: (613) 238-3311 or TEXT: 343-306-5550, https://www.dcottawa.on.ca/
- The Walk-In Counselling Clinic: https://walkincounselling.com

Requests for Academic Accommodations

ACADEMIC ACCOMMODATION
You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

Pregnancy obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For accommodation regarding a formally-scheduled final exam, you must complete the Pregnancy Accommodation Form (click here).

Religious obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details click here.

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, please request your accommodations for this course through the Ventus Student Portal at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). Requests made within two weeks will be reviewed on a case-by-case basis. For final exams, the deadlines to request accommodations are published in the University Academic Calendars. After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable).

Survivors of Sexual Violence
As a community, Carleton University is committed to maintaining a positive learning,
working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton’s Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: https://carleton.ca/equity/
sexual-assault-support-services

**Accommodation for Student Activities**

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation will be provided to students who compete or perform at the national or international level. Write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. https://carleton.ca/senate/wp-content/uploads/
Accommodation-for-Student-Activities-1.pdf

**Important Information**

- Students must always retain a hard copy of all work that is submitted.
- Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.
- For us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid CARLETON address. Therefore, in order to respond to your inquiries, please send all email from your Carleton CMail account. If you do not have or have yet to activate this account, you may wish to do so by visiting http://carleton.ca/
ccs/students/
- November 15, 2023: Last day for academic withdrawal from full fall and late fall classes
- March 15, 2024: Last day for academic withdrawal from full winter, late winter and fall/winter courses.

For a list of dates and deadlines, including holidays and exam dates, please visit:

[https://calendar.carleton.ca/academicyear/](https://calendar.carleton.ca/academicyear/)