

**Course Description (v1a)**  
**Psych 2260.03 A (F-2024) Cognitive Processes**

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| <b>Section: 2260.03A F</b><br><b>Time: N/A (online)</b><br><b>Rm: N/A (online)</b> | <b>Course Director:</b> Prof. Vinod Goel<br><b>Office:</b> 235 BSB/Lab: BSB 037<br><b>Email:</b> vgoel@yorku.ca<br><b>Office Hrs:</b> TBA (via Zoom) |  |
|  | <b>TA:</b> ??<br><b>TA contact info:</b> ??<br><b>Office Hrs:</b> TBA  |  |

**Course Prerequisites:** HH/PSYC 1010 6.00 (Introduction to Psychology)

**Drop Date:** Nov. 8, 2024.

**General Description:** This will be a basic course in the cognitive structures & processes involved in perception, memory, language, thinking, reasoning, & problem solving. We will motivate & explicate the cognitive paradigm, discuss data from the various domains, and examine the models that have been advanced to account for the data. The section will have a cognitive science bias. The objective of the course is to give you an overview of the field of cognitive psychology.

**Learning Objectives:** Your immediate learning objectives should be to use the course content and exercises to develop reading, writing, and critical evaluation skills.

**Program/Dept. Learning Outcomes:**

Upon completion of this course, students should be able to:

1. Demonstrate broad knowledge of cognitive/biological determinants of behaviour.
2. Describe and evaluate current theory and research in core areas.
3. Understand and interpret psychological information in everyday life.
4. Define causes of human behaviour from different perspectives.

**Class Format:** This is an online course. I will provide video lectures, and readings for each topic. When and how you choose to engage the material is up to you. However, I will assume a nominal day of Thursday for the class. All of the dates in the schedule (except test dates) are based on this assumption. Assignments and tests must be submitted/written on the dates and times indicated on the schedule.

**Virtual Office hours and communication:** As this is an online course, we will have virtual office hours via Zoom. On the day and time indicated above for office hours, I will open a Zoom session and you will be able to connect to the session by clicking on the virtual office hour link on the eClass course page. This will be an opportunity for you to ask administrative and content

questions. However, administrative questions are already dealt with in this document, so it is largely content questions that you should be raising during the virtual office hours.

**Zoom link for office hours:**

<https://yorku.zoom.us/j/92565937420?pwd=VXdMQ0Nra21FSnRkRXAvSXkzOTZYZz09>

Meeting ID: 925 6593 7420

Passcode: 280592

**Email correspondence:** Please note that I will generally not answer questions via email. I have peripheral nerve damage in my hands which makes it extremely difficult and painful to type. If you cannot meet with me during the virtual office hour, send me an email to make an appointment at an alternative time. In all emails that you send me, you must put the course ID number in the subject line, otherwise it is apt to get lost among my hundreds of emails each day.

**When to contact me and when to contact TA:** Since I cannot easily respond to email, **please direct all administrative questions (tests, deadlines, late submissions, etc.) to the TA.** I will be happy to answer all substantive questions about course content during the Zoom office hours.

**Requirements & Assessment:**

- 1) One Term Paper (40% of grade)
  - Details attached below.
- 2) Participation question answering exercises (10% of grade)
  - Details attached below.
- 3) Two tests (50% of grade)
  - Details attached below.

**Text:**

Goel, V. (2022). *Reason and Less: Pursuing Food, Sex and Politics*. MIT Press. (Selected chapters.) If you wish to have a hard copy or a Kindle copy of the book, you may purchase it from Amazon. The library will also have copies. If you are happy with PDF files of individual chapters (there may be some constraints on printing these out) you may download from the publisher's website: <https://mitpress.mit.edu/9780262045476/>

**Additional Readings (available on eClass)**

- 4.1) Friedenber, J. & Sliverman, G. 2006. Perception Chapter. *Cognitive Science*. London: Sage.
- 4.2) Wittgenstein, L. 1999. Philosophical Investigations, Sections 65-78. *Concepts: Core Readings*, ed. E. Margolis and S. Laurence (Cambridge, MA: MIT Press, 1999), 171–174.
- 4.3) Rosch, E. 1999. Principles of Categorization. In Rosch, Eleanor and Lloyd, Barbara B. (eds), *Cognition and categorization* 27-48. Hillsdale, NJ: Lawrence Erlbaum.
- 5.1) Memory 1: Kathleen Galotti et al. 2009. *Cognitive Psychology; In and Out Of the Laboratory*. 1<sup>st</sup> Canadian edition. Nelson.
- 5.2) Memory 2: Kathleen Galotti et al. 2009. *Cognitive Psychology; In and Out Of the Laboratory*. 1<sup>st</sup> Canadian edition. Nelson.

- 6.1) Anderson, J. Chapter 12: Language. *Cognitive Psychology (8<sup>th</sup> Edition)*. Worth Publishers.
- 7.1) Goel, V. & Waechter, R. (2017). Inductive & Deductive Reasoning: Integrating Insights from Philosophy, Psychology & Neuroscience. In V. Thompson & L. Ball (Eds.), *International Handbook on Thinking and Reasoning*. New York, NY: Taylor & Francis.
- 8.1) Tversky, A. & Kahneman, D. 1974. Judgment under Uncertainty: Heuristics and Biases. *Science*, Vol. 185, pp.1124-1131.
- 9.1) Ollinger, M. & Goel, V. (2010). Problem-Solving. In B. Glatzeder, V. Goel, & a von Müller (Eds), *Towards a Theory of Thinking*. Springer.
- 10.1) Gazzaniga, MS, Ivry, RB, Mangun, GR. (2014). Chapter 3: CNS Methods. *Biology of the Mind* (4<sup>th</sup> ed.). NY: Norton.
- 10.2) Goel, V. (2007). Anatomy of Reason. *Trends in Cognitive Sciences*. Vol. 11 (10).

**How to do the readings:** (1) listen to the lecture video; (2) read the participation questions associated with the lecture/topic; (3) begin your readings with the aim of answering the participation questions.

**Participation/Question Answering Grade (10%):**

Each week you will receive questions to guide you through the weekly readings. You will submit written answers to these questions by the specified dates and times. Once you have submitted your answers through eClass, you will be able to see the answers submitted by other students. We will indicate some of the good answers to the questions prior to the tests. Answering these questions will get you participation grades and help you study for the tests. Please note the submission dates and time on the schedule. The system will not accept late submissions. As this is meant to be a weekly exercise to encourage you to keep up with the readings, no extensions will be granted.

The 10 participation points are evenly divided over the topics/question sets. At the end of the term I will tally how many of the participation exercises you completed. For each submission with a reasonable attempt at an answer (that shows you did the readings) you will get the full grade. If the exercise is not submitted, or the answer does not indicate knowledge of the readings, you will get a zero grade. Note: you will **not** receive feedback for the participation exercise.

**Tests (50%):**

There will be two tests on the dates indicated on the schedule. The tests will be written online, as per University requirements. *The University requires that tests for online courses be held on Sundays*. Each test will consist of multiple choice and/or short answer questions. The grade value of each test is indicated on the weekly schedule. The test material will be based on the lectures and the indicated readings. Each test will focus on the topics covered up to that period, but may contain questions from earlier topics. The best way to study for the test is to attend to the recorded lectures, do the readings, and ANSWER THE QUESTIONS ASSOCIATED WITH EACH READING. Tests will be written on Sundays at 2pm. If you cannot be available to write the tests during this period, on the indicated dates, do not take the course.

## Electronic Device Policy

This course will be delivered in an online format and therefore electronic devices (e.g., tablets, laptops) are permitted during class time for course-related purposes. It is expected that you will complete tests/exams in a manner that does not require consulting an unauthorised source during an examination unless the tests/exams are open-book

**Missed Tests:** Students are expected to write each test on the dates and times specified. Test dates and times are not negotiable. **If you miss a mandatory piece of course work for no acceptable documented reasons, you will receive a grade of zero.** If you have a legitimate reason (e.g., death in the family, severe illness, etc.) for being excused from a test/exam, and have documentation to verify your absence, you may write a make-up test, in lieu of the missed test/exam, on a date to be determined by the instructor. You **MUST** be available on this date and time as it will be the only chance to write a makeup if you miss a scheduled test. *Please note that one consequence of missing the first scheduled test will be that you will not receive the usual grade feedback by the drop date. (Furthermore, given the limited number of multiple-choice questions available, there may be fewer or no multiple-choice questions on the makeup tests. The makeup tests may consist largely or exclusively of written essay and short answer questions.)* There is no makeup test for the makeup test.

In addition, for any missed tests or late assignments, students **MUST** complete the following online form which will be received and reviewed in the Psychology undergraduate office.

[HH PSYC: Missed Tests/Exams Form](#). Failure to complete the form within 48 hours of the original deadline will result in a grade of zero for the test/assignment.

At this time, due to COVID-19 an Attending Physician's Statement (APS) is not required, however, a reason for missing an evaluated component in the course must be provided.

[HH PSYC: Missed Tests/Exams Form](#). Failure to complete the form within 48 hours of the original deadline will result in a grade of zero for the missed quiz or late assignment.

### **Term Paper (40%):**

Write an academic term paper (15 pages) addressing one of the questions from the provided list. **Begin by asking ChatGPT to write the paper for you. After this write your own paper and submit both papers.** The paper will be graded not only for content (40%), but also your ability to organize and express your thoughts in a structured, systematic, coherent fashion, using grammatical English sentences organized into paragraphs and sections (60%). **Term papers will be submitted to Turnitin or Google or other engines to check for plagiarism.**

**Late Term Papers and Assignments:**

The term paper is due on the days indicated in the course schedule. Late assignments will be penalized 4 grade points per calendar day and **will not receive feedback**. *No assignments will be accepted after the last day of term.* As you will always have at least 2-3 weeks to complete the assignment, a doctor's note indicating illness will usually not suffice to waive the penalty. To be considered, a doctor's note must indicate that you were incapable of working for at least two weeks during the course of the semester.

**Grades Appeal/Correction:** Any questions or concerns regarding grades on tests and assignments must be raised with the instructor within 10 days of the posting of the grade.

**Grades and Entitlements:**

You are entitled only to the grade that you **earn** in this course. Nothing else. I will **not** increase your grade just because "you need at least a *x* grade to graduate; or you need a *y* grade to get into some other program; or you need a *z* grade to maintain your scholarship;" etc.. It is not fair to other students. If you need a certain grade in this course, please do the required work.

**Grading as per Senate Policy**

The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+ = 9, A = 8, B+ = 7, C+ = 5, etc.). Assignments and tests\* will bear either a letter grade designation or a corresponding number grade (e.g. A+ = 90 to 100, A = 80 to 89, B+ = 75 to 79, etc.)

For a full description of York grading system see the York University Undergraduate Calendar - [Grading Scheme for 2020-21](#)

**Plagiarism** is the passing off of someone else's words and ideas as you own. This is a very serious academic offense. Do your own assignments and acknowledge all your sources. Google and Turnitin software may be used to check for plagiarism on written work. The penalty for plagiarism will be in accordance with the Senate Policy on Academic Honesty which can be found at the following URLs, along with resources to help you avoid plagiarism:

- [Information about the Senate Policy on Academic Honesty](#)
- [Online Tutorial on Academic Integrity](#)
- [Information for Students on Text-Matching Software: Turnitin.com](#)
- [Beware! Says who? A pamphlet on how to avoid plagiarism](#)
- [Resources for students to help improve their writing and research skill](#)

**Student Feedback:** I welcome constructive comments on course organization, lectures (content, style, presentation), assignments, etc.

**Office Hours:** Make use of the office hours. They are for your benefit.

**2260.03A Cognitive Processes**  
**F 2024, Proposed Schedule**  
**(Assuming a nominal day of Thursday for class)**

| <b>Topic</b> | <b>Date</b>   | <b>Lecture Topics</b>   | <b>Readings</b>                       | <b>Assignments</b>  |
|--------------|---------------|---|---------------------------------------|---------------------|
| 1            | Sept 5        | Enigma of Human Minds   | R&L Chap. 2                           | Participation Q     |
| 2            | Sept 12       | Types of Behaviours/Minds   | R&L Chap. 3, 4<br>(p. 49-60), 5       | Participation Q     |
| 3            | Sept 19       | Case for the Cognitive Mind   | R&L Chap. 6                           | Participation Q     |
| 4            | Sept 26       | Perception/ Visual<br><br>Categorization                                  | Articles 4.1<br><br>Articles 4.2, 4.3 | Participation Q     |
| 5            | Oct 3         | Memory  | Articles 5.1, 5.2                     | Participation Q     |
| 6            | Oct 10        | Language  | Articles 6.1                          | Participation Q     |
|              | <b>Oct 17</b> | <b>Reading week</b>   |                                       |                     |
| 7            | <b>Oct 20</b> | <b>Test 1 (30%)</b>   |                                       | <b>Test 2pm</b>     |
|              | Oct 24        |   |                                       | Term Paper<br>(40%) |
| 8            | Oct 31        | Reasoning   | R&L Chap. 1, 7<br>& 8                 | Participation Q     |
| 9            | Nov 7         | Decision Making   | Articles 8.1<br>R&L Chap. 1, 7<br>& 8 | Participation Q     |
| 10           | Nov 14        | Problem solving   | Article 9.1                           | Participation Q     |
| 11           | Nov 21        | Neuropsychology of<br>Reasoning<br>or<br>Is the Cognitive Mind<br>Enough? | Articles 10.1,<br>10.2                | Participation Q     |
| 12           | <b>Nov 30</b> | <b>Test 2 (20%)</b>   |                                       | <b>Test 2pm</b>     |

**Other Information (from Department):****Add/Drop Deadlines**

For a list of all important dates please refer to: [Undergraduate Fall/Winter 2024-2025 Important Dates](#)

|   | <b>Fall<br/>(Term F)</b> | <b>Year<br/>(Term Y)</b> | <b>Winter<br/>(Term W)</b> |
|---|--------------------------|--------------------------|----------------------------|
| Last date to add a course <b>without permission</b> of instructor (also see Financial Deadlines)            | Sept. 18                 | Sept. 18                 | Jan. 20                    |
| Last date to add a course <b>with permission</b> of instructor (also see Financial Deadlines)               | Oct. 2                   | Oct. 16                  | Jan. 31                    |
| Drop deadline: Last date to drop a course without receiving a grade (also see Financial Deadlines)          | Nov. 8                   | Feb. 7                   | Mar. 14                    |
| Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript – see note below) | Nov. 9 -<br>Dec. 3       | Feb. 8 -<br>April 4      | March 15 -<br>April 4      |

**Add and Drop Deadline Information**

There are deadlines for adding and dropping courses, both academic and financial. Since, for the most part, the dates are **different**, be sure to read the information carefully so that you understand the differences between the sessional dates below and the [Refund Tables](#).

You are strongly advised to pay close attention to the "Last date to enrol without permission of course instructor" deadlines. These deadlines represent the last date students have unrestricted access to the registration and enrolment system.

After that date, you must contact the professor/department offering the course to arrange permission.

You can drop courses using the registration and enrolment system up until the last date to drop a course without receiving a grade (drop deadline).

You may [withdraw from a course](#) using the registration and enrolment system after the drop deadline until the last day of class for the term associated with the course. When you withdraw from a course, the course remains on your transcript without a grade and is notated as 'W'. The withdrawal will not affect your grade point average or count towards the credits required for your degree.

## **Information on Plagiarism Detection**

Description of software used to detect plagiarism.

## **Electronic Device Policy**

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## **Academic Integrity for Students**

York University takes academic integrity very seriously; please familiarize yourself with [Information about the Senate Policy on Academic Honesty](#).

It is recommended that you review Academic Integrity by completing the [Academic Integrity Tutorial](#) and [Academic Honesty Quiz](#)

## **Test Banks**

The offering for sale of, buying of, and attempting to sell or buy test banks (banks of test questions and/or answers), or any course specific test questions/answers is not permitted in the Faculty of Health. Any student found to be doing this may be considered to have breached the Senate Policy on Academic Honesty. In particular, buying and attempting to sell banks of test questions and/or answers may be considered as “Cheating in an attempt to gain an improper advantage in an academic evaluation” (article 2.1.1 from the Senate Policy) and/or “encouraging, enabling or causing others” (article 2.1.10 from the Senate Policy) to cheat.

## **Academic Accommodation for Students with Disabilities**

While all individuals are expected to satisfy the requirements of their program of study and to aspire to do so at a level of excellence, the university recognizes that persons with disabilities may require reasonable accommodation to enable them to do so. The university encourages students with disabilities to register with Student Accessibility Services (SAS) to discuss their accommodation needs as early as possible in the term to establish the recommended academic accommodations that will be communicated to Course Directors as necessary. Please let me know as early as possible in the term if you anticipate requiring academic accommodation so that we can discuss how to consider your accommodation needs within the context of this course.

<https://accessibility.students.yorku.ca/>



### **Excerpt from Senate Policy on Academic Accommodation for Students with Disabilities**

1. Pursuant to its commitment to sustaining an inclusive, equitable community in which all members are treated with respect and dignity, and consistent with applicable accessibility legislation, York University shall make reasonable and appropriate accommodations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs. This policy aims to eliminate systemic barriers to participation in academic activities by students with disabilities.

All students are expected to satisfy the essential learning outcomes of courses. Accommodations shall be consistent with, support and preserve the academic integrity of the curriculum and the academic standards of courses and programs. For further information please refer to: [York University Academic Accommodation for Students with Disabilities Policy](#).

### **Course Materials Copyright Information**

These course materials are designed for use as part of the **COURSE CODE** course at York University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law.

Copying this material for distribution (e.g. uploading material to a commercial third-party website) may lead to a violation of Copyright law. [Intellectual Property Rights Statement](#).

### **Course Schedule**

**If you would like to provide a week-by-week course schedule please add this here.**