

# PSY471H5S — Special Topics in Cognitive Psychology: Voluntary Control of Cognitive Performance

Monday 9:00am - 12:00pm

**ROOM: NE 3160 (New North Building)** 

### **Contact Information**

Course Instructor:
Dr. Keisuke Fukuda

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Office hours:

Mondays 4-5pm or by appointment CCT 4067

# **Course Description**

Our mind is a highly efficient information processor. We can select task-relevant information presented among task-irrelevant information (e.g., listening to your friend who is recommending you a list of great vacation destinations in a busy cafe), comprehend the information to make an appropriate decision (e.g., comparing the recommended destinations and deciding which destination to go for the upcoming vacation), and remember the information to guide your behavior in the future (e.g., booking a flight to the destination after you go home). We tend to think that "we" are in control of this elegant information processor, but is that really true? If not, "who" or "what" is in control? And, to what extent do we have control? In this course, we will review and discuss both classic and recent discoveries in cognitive psychology and neuroscience to seek deeper understanding of the nature and the extent of voluntary control that we have over our mind.

# **Reading Material**

There will be no textbook for this course. Instead, we will be reading one core research article and two additional articles that I will choose with the students who will be presenting that week. Please see Canvas for more details.

## **Course Evaluation**

Exams & Assignment	Date	%
Attendance	1/7-4/1	10%
2 presentations	1/14-4/1	30% (15% each)
6 reaction papers	1/14-4/1	30% (5% each)
Research proposal	4/5	30%

Term tests and final exam: There will be no term test or final exam for this course.

Attendance (2x10% = 20%): Your attendance will be evaluated based on your physical presence (5%) and the quality of intellectual contributions to the in-class discussions (5%).

**Oral presentation (2x15% = 30%):** You are required to deliver two 20-minute oral presentations on research papers of your choice that are relevant to the topic of the week. In preparation, you are required to send in the paper to present at least 2 weeks before the presentation date and get approved by me. The list of recommended papers for your presentations will be available on Canvas. The presentation dates will be assigned in the first week of the class.

Reaction papers (6x5% = 30%): You are required to submit 1-page long reaction paper after 6 of 10 seminar weeks except for the two weeks that you are presenting. In the reaction paper, you will answer one of the questions that I ask in the lecture based on the in-class discussion. You will be turning in your reaction papers online on Canvas. Your assignment will be screened for plagiarism using "Turnitin" function. Please read the following statement for the disclaimer: "Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site".

Research proposal (30%): In this course, you will be writing a 10-page research proposal. In the proposal, you will 1) briefly review the topic of your interest pertaining to voluntary control of cognitive performance, 2) define the research question and hypotheses, 3) propose at least two experiments and predictions, and 4) discuss the potential outcomes and its implications. Your assignment will be screened for plagiarism using "Turnitin" function. Please read the following statement for the disclaimer: "Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site". To provide feedback and guidance along the way, you are required to submit an outline of the research proposal by Feb 15<sup>th</sup>, and I will hold an extended office hour on Feb 25th to go over the outline on one-on-one basis.

## **Course Webpage**

#### The website associated with this course is accessible via http://q.utoronto.ca

**Note:** You don't need to create a new login for Canvas; it already knows who you are. You just need your UTORid and password. This is the same login that gets you onto the wireless network with your laptop, and the same one that you use to check your email. If you're confused about your UTORid or don't remember your password, go to: <a href="https://www.utorid.utoronto.ca/">https://www.utorid.utoronto.ca/</a>

#### IMPORTANT COURSE POLICIES \*\*PLEASE READ\*\*

#### **Extension of Time Special Consideration Request Process**

Students who seek to be granted more time to complete their term work beyond the due date without penalty, owing to circumstances beyond their control (e.g., illness, or an accident), must do so by submitting a request directly to the Instructor for the period up to and including the last day of the term. The decision as to whether or not to apply a penalty for the specified period rests with the Instructor.

Students who seek to be granted more time to complete term work beyond the last day of the term must submit their request directly to the Department. This request covers the period following the last day of classes and ends the last day of the exam period. This is done by submitting a request via the online Special Consideration Request form at https://utmapp.utm.utoronto.ca/SpecialRequest.

You are advised to seek advising by the departmental Undergraduate Counsellor prior to the deadline.

Original supporting documentation (e.g., medical certificates, accident reports, etc.) must be submitted to the Psychology Academic Counselor or dropped off in the drop box located outside the Psychology office Deerfield Hall, 4th Floor. Students are expected to submit requests to the Department before the last day of the term, unless demonstrably serious reasons prevent them from doing so. In the event of an illness, medical certificates or doctor's notes must confirm that student was ill on the due date of the assignment (for a one-day extension). For a longer extension, documentation must specify the full duration during which academic work could not be carried out.

For extensions of time beyond the examination period you must submit a petition through the Office of the Registrar. <a href="http://www.utm.utoronto.ca/registrar/current-students/petitions">http://www.utm.utoronto.ca/registrar/current-students/petitions</a>

#### **Penalties for Lateness**

A penalty of 10% per calendar day (i.e., including week-ends and holidays, during which students are not able to submit term work) up to and including the last day of classes, will be applied by the Instructor. After the last day of classes, the penalty of 10% per calendar day will be applied by the Undergraduate Counsellor on behalf of the Department. No penalty will be assigned if request for special consideration, described above, was successful.

#### **Academic Guidelines**

It is your responsibility to ensure that you have met all prerequisites listed in the UTM Calendar for this course. If you lack any prerequisites you WILL BE REMOVED from the course up until the last day to add a course. Further information about academic regulations, course withdrawal dates and credits can be found in the University of Toronto Mississauga Calendar at: <a href="http://www.erin.utoronto.ca/regcal/">http://www.erin.utoronto.ca/regcal/</a>.

You are encouraged to read this material. If you run into trouble and need advice about studying, preparing for exams, note taking or time management, free workshops and advice are available from the Robert Gillespie Academic Skills Centre at 905-828-5406.

# **AccessAbility Services**

Students requiring academic accommodations for learning, physical, sensory, or mental health disabilities or medical conditions should contact the AccessAbility Office (2037B Davis Building), 905-828-3847. http://www.utm.utoronto.ca/accessability/

# **Equity Statement**

The University of Toronto is committed to equity and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect. As a course instructor, I will neither condone nor tolerate behaviour that undermines the dignity or self-esteem of any individual in this course and wish to be alerted to any attempt to create an intimidating or hostile environment. It is our collective responsibility to create a space that is inclusive and welcomes discussion. Discrimination, harassment and hate speech will not be tolerated. If you have any questions, comments, or concerns you may contact the UTM Equity and Diversity officer at edo.utm@utoronto.ca or the University of Toronto Mississauga Students' Union Vice President Equity at <a href="mailto:vpequity@utmsu.ca">vpequity@utmsu.ca</a>.

# **Academic Honesty and Plagiarism**

Honesty and fairness are considered fundamental to the university's mission, and, as a result, all those who violate those principles are dealt with as if they were damaging the integrity of the university itself. When students are suspected of cheating or a similar academic offence, they are typically surprised at how formally and seriously the matter is dealt with -- and how severe the consequences can be if it is determined that cheating did occur. The University of Toronto treats cases of

cheating and plagiarism very seriously. Please take the time to review the Academic Integrity website: http://www.utm.utoronto.ca/academic-integrity/students.

- Common trends in academic offences:
- Plagiarizing/concocted references
- Collaboration/unauthorized assistance
- Purchasing work
- Recycling work "double-dipping"
- Resubmitting of altered work for re-grading
- Electronic devices (cell phones) or any unauthorized aids
- Altering medical certificates and UofT documents

From the Code of Behaviour on Academic Matters: "It shall be an offence for a student to knowingly: represent as one's own any idea or expression of an idea or work of another in any academic examination or term test or in connection with any other form of academic work, i.e. to commit plagiarism. Wherever in the Code an offence is described as depending on "knowing", the offence shall likewise be deemed to have been committed if the person ought reasonably to have known." All students must refer to this website to obtain information on what constitutes plagiarism.

http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize.

If questions arise after reading the material on the website, consult your instructor.

Plagiarism will not be tolerated.

# **Academic Rights**

You, as a student at UTM, have the right to:

- Receive a syllabus by the first day of class.
- Rely upon a syllabus once a course is started. An instructor may only change marks' assignments by following the University Assessment and Grading Practices Policy provision 1.3.
- Refuse to use turnitin.com (you must be offered an alternative form of submission).
- Have access to your instructor for consultation during a course or follow up with the department chair if the instructor is unavailable.
- Ask the person who marked your term work for a re-evaluation if you feel it was not fairly graded. You have up to one month from the date of return of the item to inquire about the mark. If you are not satisfied with a re-evaluation, you may appeal to the instructor in charge of the course if the instructor did not mark the work. If your work is remarked, you must accept the resulting mark. You may only appeal a mark beyond the instructor if the term work was worth at least 20% of the course mark.
- Receive at least one significant mark (15% for H courses, 25% for Y courses) before the last day you can drop a course for H courses, and the last day of classes in the first week of January for Y courses taught in the Fall/Winter terms.
- Submit handwritten essays so long as they are neatly written.
- Have no assignment worth 100% of your final grade.
- Not have a term test worth 25% or more in the last two weeks of class.
- Retain intellectual property rights to your research.
- Receive all your assignments once graded.
- View your final exams. To see a final exam, you must submit an online Exam Reproduction Request within 6 months of the exam. There is a small non-refundable fee.
- Privacy of your final grades.
- Arrange for representation from Downtown Legal Services (DLS), a representative from the UTM Students' Union (UTMSU), and/or other forms of support if you are charged with an academic offence.

# **Course Outline**

Please note that this outline is subject to change depending on the needs of the class (we may need additional time to cover a topic). Any changes to the syllabus will be announced in class one week before.

Date	Topic	Reading	Assignment Due
Jan 7	Introduction		Presentation Signup
Jan 14	Attention 1: Selection	Refer to Canvas	Reaction paper due on Jan 18th
Jan 21	Attention 2: Suppression	Refer to Canvas	Reaction paper due on Jan 25th
Jan 28	Working Memory 1: Capacity Bottleneck	Refer to Canvas	Reaction paper due on Feb 1st
Feb 4	Working Memory 2: Consciousness & Mind reading	Refer to Canvas	Reaction paper due on Feb 8th
Feb 11	Long-term Memory 1: Explicit & Implicit memory	Refer to Canvas	A draft of research proposal due on Feb 15th
Feb 18	Family Day (No class)	Refer to Canvas	
Feb 25	Extended Office Hour for Research Proposal	Refer to Canvas	
Mar 4	Long-term Memory 2: Encoding	Refer to Canvas	Reaction paper due on Mar 8th
Mar 11	Long-term Memory 3: Forgetting	Refer to Canvas	Reaction paper due on Mar 15th
Mar 18	Executive Control 1: Flexibility of Control	Refer to Canvas	Reaction paper due on Mar 22th
Mar 25	Executive Control 2: Motivation	Refer to Canvas	Reaction paper due on Mar 29th
Apr1	Free will: Who are "we"?	Refer to Canvas	Reaction paper and Research Proposal due on Apr 5th