Instructors: Carl Michael Galang (PhD Candidate; galangc@mcmaster.ca) & Dr. Michael Jenkins (PhD; jenkim9@mcmaster.ca)

Lectures: Tuesday (1:30-2:20pm), Thursdays (12:30-1:20pm); Tutorials: Wednesday (9:30-10:20am)

Location: TSH 120 (Lectures); BSB B138 (T01); BSB B139 (T02); BSB B140 (T03); BSB B142 (T04); BSB B154 (T05); BSB 121 (T06).

Teaching Assistants: TA1: Deewa Anwarzi (anwarzid@mcmaster.ca), TA2: Jiali Song (songj16@mcmaster.ca), TA3: Emily Wood (woode1@mcmaster.ca), TA4: Zahra Khalesi (khaleszs@mcmaster.ca), TA5: Hasan Siddiqui (siddih6@mcmaster.ca), TA6: Emil Apostolov (apostole@mcmaster.ca).

Office Hours with TAs or Instructors: By appointment. Please prepare early and contact the TA/instructor as soon as possible. Please note, no guarantee can be made that you will receive a response if you make last minute inquiries, so be sure to request a meeting as early as possible to give the TA/instructor time to respond.


Course Objectives

There are several aims of this course, but they can be broken down into three main areas:

1. Developing your scientific (PNB related) presentation and communication skills.
2. Understanding (at a high level*) core issues, approaches, and challenges in conducting PNB research.
3. Becoming a discerning and critical consumer of PNB related information.

*this is not a research methods course, so our consideration of research will be at a high level – e.g., conceptual understanding of stages of research and issues relevant to research, as opposed to research designs and data processing and analysis etc.
Tutorials & Guest Lectures

Tutorials will provide a forum for you to develop your presentation skills and this will lead up to a group presentation in front of the entire class toward the end of term. Presentation skills will be emphasized early on in the course so that you can begin to sharpen your skills quickly. The course will also introduce you to various issues, approaches and challenges involved in conducting and evaluating research in Psychology, Neuroscience & Behaviour (PNB). We will do this by surveying and discussing core elements of the research pipeline (stages of doing research). You will also learn about research ethics, research funding, and dissemination of research to other scientists and to the public. There will be an emphasis on developing critical thinking and on understanding how the broader social context affects both the research process and the consumption of PNB research. Emphasis will also be placed on how to extract good PNB research from the multitude of good and bad information we are exposed to everyday (including on social media). You should leave the course with improved scientific communication skills and a solid high-level understanding of the research process. These skills are critical regardless of the career path you end up choosing.

As part of your exposure to research in PNB, every week, a graduate student (or alumni) from the department will deliver a guest lecture relating to a specific theme linked to psychology, neuroscience, and/or behaviour. The aim of these lectures is to provide the “story behind the story” to give you insight into the research process, as well as give you a sense of the academic journeys that our graduate student (or alumni) presenters have undertaken. These lectures will provide invaluable insights for you as you move through the PNB program. Toward the end of the term, your assigned group will deliver a presentation to the entire class in which you will present a critical fact check of an assigned TED talk. The aim is to foster critical thinking and analysis of information.

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<th>Assessment</th>
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<tr>
<td>Quizzes on book &amp; lectures</td>
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<tr>
<td>Tutorial attendance</td>
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<td>Tutorial participation</td>
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<td>Lecture attendance</td>
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<tr>
<td>Presentation 1 (group)</td>
<td>20%</td>
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<td>Presentation 2 (single)</td>
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Quizzes (5%) will happen at the start of every Tuesday lecture. The contents of the quiz will either be on relevant book chapters (at the start of the semester) or on the guest lecturers from the previous Thursday. This will be done via Google Forms (the link will be provided during class -- you will have 2-3min to complete this; if you do not show up during lecture, your mark for this will not count if you complete it at home).

Tutorial Attendance (5%) will be taken at the start of every tutorial. This is a binary mark, you either show up (1) or are absent (0). Your total grade will be the number of tutorials you attend / the total number of tutorials in the semester.

Tutorial Participation (5%) will be assessed by your TA during tutorials. Participation marks will be given on a 3-point scale. 0 means you did not participate at all. 1 means you somewhat participated (e.g., repeating points other people have made). 2 means you participated substantially during the tutorial. Your total grade will be the sum of your individual participation grades during tutorials / the total amount you could possibly get over all tutorials.

Lecture Attendance (10%) will be taken at the start of both Tuesday and Thursday lectures. The TAs will be at the front of the room. Please go up to them to confirm that they have marked you for attendance. This is a binary mark, you either show up (1) or are absent (0). Your total grade will be the number of lectures your attend / the total number of lectures in the semester. If in doubt, please make sure to talk to your TA at the end of the class, to make sure you were marked as present.

Group (2-3max) Presentations (20%) will be a presentation in 2-3max groups on papers assigned by the previous week’s guest lecturer. Your presentation will be 10 minutes and will provide a synopsis of your assigned journal article. It is also recommended that all students think about questions that could be asked to speakers on the day of their lectures. Each person in your group should be involved in the presentation. Please see the Rubric on Avenue.

Individual Presentations (20%) will be a solo presentation on papers assigned by the previous week’s guest lecturer. Your presentation will be 10 minutes (+3min Q&A) and will provide a synopsis of your assigned journal article. Please see the Rubric on Avenue.
TED Fact Checking Presentations (35%) will be your final assessment for the course. In groups of 5, your job will be to spend 12 minutes (+3min Q&A) scrutinizing your assigned TED talk in detail. You should use everything you've learned about effective presentations and critical appraisal when you give your talk. Links to TED talks will be posted ahead of your session, so there is no need to play the whole TED talk in your presentation. You may however play parts of it to illustrate specific points (these should be very short clips). Your TED talk fact checking should include three essential components:

1. The main thesis of the talk and the specific claims made.
2. A critical appraisal of both the thesis (is it important and worthy of dissemination to the public) and the specific claims made. For each of the claims you identify, you should research the relevant background literature with great care and attention to detail and relay to the class whether the claim made is justifiable in the light of the extant research and whether there any inaccuracies.
3. You should also identify whether the speaker has any biases or hidden or unhidden agendas and ultimately assign a “truth score” out of 10 to the TED talk. A truth score of 1 means the TED talk bears no relation to the research evidence on the topic of the talk. A truth score of 10 means that every single point or claim made in the TED talk was based on solid data.

Notes on Group Work

Before you begin, think about how best to effectively complete course assignments that involve multiple people. Read the chapter on Effective group work in the course text. Have a discussion about strategies that have worked in the past and also about those that did not! Clearly communicate group expectations about: [1] method(s) of communication, [2] expected response time, [3] deadlines, and [4] what to do if a group member does not complete his/her assigned task(s).

Also think about possible tools your group could use to work efficiently and effectively. Some examples of online (free) resources are provided below.

1. Google Drive: https://www.google.com/drive
2. Doodle: http://doodle.com/?home
3. Slack: https://slack.com/

Regarding MSAF

Any MSAFs should be sent to both your TAs and the Instructors.
Special Accommodations

Please contact the course instructor(s) if you require any special accommodations.