

**PNB 4J03: Inquiry in Psychology, Neuroscience & Behaviour**  
**COURSE SYLLABUS      WINTER TERM JANUARY-APRIL 2018**

**Instructor:**      Dr. Judith Shedden      Psychology, Neuroscience & Behaviour (PNB)  
Email: [judith.shedden@gmail.com](mailto:judith.shedden@gmail.com) or [shedden@mcmaster.ca](mailto:shedden@mcmaster.ca)

**Course TAs:**

Hanae Davis      Psychology, Neuroscience and Behaviour (PNB)  
Email: [davishc@mcmaster.ca](mailto:davishc@mcmaster.ca)

Kristie Poole      Psychology, Neuroscience & Behaviour (PNB)  
Email: [poolekristie@gmail.com](mailto:poolekristie@gmail.com)

**Where/when:** PC/204 (and 205a, 205b as breakout rooms)    Thursday 11:30 am – 2:20 pm

**Office Hours:** In class, or send email to set up a meeting.

**Overview:** PNB 4J03 is an upper level Faculty of Science course dealing with the systematic investigation of broad topics within the field of Psychology, Neuroscience & Behaviour. Inquiry is a process of critical thinking. We will review the basic tenets and principles pertinent to conducting science: the scientific method, hypothesis testing, experimental design, data analysis and interpretation, and the reporting of scientific findings. Students will engage in self-directed research, critical thinking, and problem solving, and will gain experience in the evaluation of the sources and content of existing research. Students will strengthen their scientific writing and oral presentation skills by writing critiques, leading presentations and discussions, and developing, writing, presenting, and defending a research project. Students will gain experience with peer evaluation through critical evaluation of the logic, the scientific writing and oral presentations of their classmates.

**What is Inquiry-based learning?** Do some searching online to explore what is involved in inquiry or problem-based learning. You might start here (there are some broken links):

[http://ccl.mcmaster.ca/resources/misc/whats\\_unique\\_about\\_inquiry.html](http://ccl.mcmaster.ca/resources/misc/whats_unique_about_inquiry.html).

During our first class, we will ask you and the other students to talk about your expectations regarding inquiry-based learning, and you will take a major role in designing the course itself.

**Web Site:** Avenue and Google Drive (access to shared folders will be provided).

Students should be aware that, when they access the electronic components of this course, private information such as first and last names, usernames for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with Prof Shedden.

Students will be providing feedback and evaluations of other students (peer review). This is an integral part of the course. In doing this, your identity may be known to the other students even if names are removed from the written work. Be honest in your assessment of their material and provide constructive comments. The only way to improve your writing is to write often and have your writing read and critiqued by others. If you are uncomfortable with having other students read your writing, you should talk to Prof Shedden.

At certain points in the course it may make good sense to modify the schedule; the instructor reserves the right to modify elements of the course and will notify students accordingly.

**Course Calendar** (the schedule is tentative: students will contribute to the final design). We will work with this schedule on the first day of class, and shift some things around depending on number of students in the course, individual and group goals, etc. As part of the inquiry-based learning, students will take an active role in designing the schedule, rubrics, etc.

**Edited Schedule** - last revised date December 26

*Next overview/revision date: January 4*

Jan 4	Course introduction. Discussion of course mechanics + creation of working groups.
Jan 11	Discussion and workshops continued. Groups lead discussions on topics started last week. Groups work on their ideas and plan their presentations.
Jan 18	Discussion and workshops continued. Groups bring proposal ideas to TAs and/or Dr. Shedden for feedback.
Jan 25	<u>Presentation and peer discussion by groups.</u> Post your written project proposal to Drive on Wed. Jan. 24 (day before class). In class (Thursday), groups present and lead discussion. Submit <i>peer reviews</i> to Avenue dropbox before 11:59PM.
Feb 1	Workshops (in class): Project preparation and writing
Feb 8	Workshops (in class): Project preparation and writing
Feb 15	<b>Project presentation (1st draft);</b> peer review and feedback
Feb 22	<i>Reading Week</i>
Mar 1	<b>Project presentation (2nd draft);</b> peer review and feedback First set of <i>self and group member assessments</i> submitted to Avenue by 11:59PM
Mar 8	Workshops (in class): Project preparation and writing
Mar 15	<b>Project presentation (3rd draft);</b> peer review and feedback
Mar 22	Workshops (in class): Project preparation and writing
Mar 29	Workshops (in class): Project preparation and writing All groups submit <b>written project</b> by 11:59PM Mar 29 (this allows time for peer review and discussion preparation before next meeting)
Apr 5	Project proposal: <b>Final oral presentations and discussion</b> <i>Peer evaluation</i> of projects due by 11:59 pm Apr 5 Second set of <i>self and group member assessments</i> submitted to Avenue by 11:59PM

**Assignments:** Assignments include written work, oral presentations, and peer review. These will be laid out in detail in documents on Avenue and/or our shared Google Drive. Written assignments should be submitted to the appropriate folder in our shared Google Drive. Late work will not be accepted. Always keep a dated copy of your work for your records.

**Self and group assessments:** Forms for self and group assessments can be found on Avenue; complete these electronically and upload to Avenue dropbox. Students will complete and upload these in the middle of the course and again at the end of the course; due dates can be found in the schedule above;

the same forms are used for both due dates. These assessments are confidential and should not be shared with other group members. The assessments will be considered when final grades are determined.

**Avenue discussion board posts:** All students are expected to come prepared to contribute to all discussions that follow group oral presentations. Presenting groups will provide background reading (links posted on the discussion board on Avenue). The other students will post comments about the readings. These comments/observations must be posted on the Avenue discussion board before the end of the day prior to the presentation (i.e., before end of Monday). The observations you make are completely up to you. They should be unique (don't copy what another student writes), intellectually interesting (evaluate; use critical thinking), and brief (between 100 and 200 words). Note that I used 124 words to write this paragraph. Credit for these posts is part of the 25% participation grade.

**Logistics & Grading.** The following weights will be used to compute a total score for each student. During the first class, we will adjust these as necessary to accommodate any changes in course design. McMaster University reserves the right to change course dates, course assignments and their grading weights, and course deadlines in case of an emergency, labor disruption, civil unrest/disobedience, etc.

	<b>Assignment</b>	<b>Grade based on</b>
<b>10%</b>	Initial project ideas (written and oral presentations; peer review)	Group and individual performance; peer evaluations
<b>5%</b>	Project: First draft, Oral Presentation	Group and individual performance; peer evaluations
<b>10%</b>	Project: Second draft, Oral Presentation	Group and individual performance; peer evaluations
<b>10%</b>	Project: Third draft, Oral Presentation	Group and individual performance; peer evaluations
<b>35%</b>	Project (written and oral presentations; peer review)	Group and individual performance; peer evaluations
<b>30%</b>	Participation	Attendance; abstracts; weekly progress reports; class participation (in class and on Avenue discussion board); intellectual contribution to class and groups; self and group assessments, peer evaluations, instructor evaluations

Your total score will be translated into a letter grade using the following general competency guidelines:

A... has attained a high level of competency in all areas of the subject matter. This level of competency would allow the student to complete excellent projects in other areas of inquiry. This would be recognized by any instructor or member of the student's peer group.

B... has attained a high level of competency in most (but not all) areas of the subject matter, or has attained a moderate level of competency in all areas. This level of competency would allow the student to complete above average projects in other areas of inquiry. The student is aware of some areas of weakness, has shown improvement in those areas, and has developed strategies for minimizing or eliminating them.

C... has attained a moderate level of competency in most (but not all) areas of the subject matter, or has attained a low level of competency in some areas. This level of competency would allow the student to complete average (satisfactory) projects in other areas of inquiry. The student recognizes multiple areas of weakness, and has discussed a plan of action to deal with the concerns.

D... has attained a low level of competency in all areas of the subject matter. This level of competency would allow the student to complete below average projects in other areas of inquiry. This would be recognized by any instructor.

F... has attained no competency in all areas of the subject matter.

### **Academic Integrity:**

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at <http://www.mcmaster.ca/academicintegrity>.

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.