

Psyc 450D: Research Project and Seminar

Instructor

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Office Hours: During class time when no meeting is scheduled or by appointment

Meetings and Format

Class is scheduled for Mondays and Wednesdays from 10:05 to 11:25 in Stewart Biological Sciences N7/14. We will not meet both days every week to allow time for research and other activities related to your lab. Please review the schedule carefully so that you know which days we have seminar.

Course Description and Learning Objectives

This course is designed to be a complementary learning experience for students who are conducting a research project with a supervisor in the McGill research community. During this course, we will work on basic research skills including literature searches, statistical analyses, scientific writing, and oral presentations. It will also provide a forum for you to plan your research, receive feedback on your work from the instructor and your peers, and present your results.

The specific learning objectives of this course are as follows:

- 1) To develop a conceptual understanding of the research process
- 2) To gain experience conducting scientific research under the supervision of a faculty supervisor
- 3) To develop skills related to the formulation of empirical questions, research design, and the critical evaluation of research findings
- 4) To develop skills in scientific writing
- 5) To develop skills in oral presentation

Required Readings

Handouts distributed in class and on WebCT.

Recommended Readings

Strunk, W. & White, E. B. (2000). *The Elements of Style (Fourth Edition)*. New York: Allyn & Bacon.

Morgan, G. A., Leech, N. L., Gloeckner, G. W., & Barrett, K. C. (2013). *IBM SPSS for Introductory Statistics: Use and Interpretation*. New York: Routledge.

Assignments

Written Assignments

1. *Final Thesis*. The major assignment in this course, your final thesis is the written presentation of the research project on which you have worked. It will consist of a cover page, abstract, literature review (introduction), methods, analysis, results, discussion, references, tables, and figures. It should be formatted according to the guidelines of the American Psychological Association, 6th edition. (Note that if research in your area does not typically follow APA style, you may use the style of the major journal in the field, provided you have the permission of your supervisor).
Due date: **Wednesday April 15th, 2014**
2. *Prospectus*. Your prospectus will consist of a literature review, methods, proposed analyses, and references. The goal of the prospectus is to ensure that your project is on track, and to provide you with an opportunity to get feedback on your work that you can incorporate into your final project. Each student is expected to have a meeting with a tutor at the McGill Writing Center to discuss their prospectus.
Due date: **Monday February 2nd, 2014**
3. *Abstract*. You will write a 150 word abstract of a research article assigned by the instructor.
Due date: **Monday October 6**
4. *Article Critiques*. You will write two brief (2-3 pages) critique of a research article. The article can be of your choosing (generally students will pick one that they are reading for their thesis literature reviews) but it may not be by a faculty member at McGill. In your critique, you will provide a brief summary of the article, and then describe its strengths and weaknesses. In your concluding paragraph, you should detail one or two future directions (what is the next step in this line of research).
Due date: **Critique 1, Monday October 20. Critique 2, Monday December 1.**
5. *Peer Review of Prospectus*. You will provide a written 2-page review of one of your classmate's research proposals. This will be done anonymously, and instructions are forthcoming.

Oral Presentations

1. *Article Critique Presentation.* Ten minute presentation of your article critique (with 5 minutes for questions).
2. *Prospectus Presentation.* At the beginning of the winter semester, all students will give a 15 minute presentation (with an additional 5 minutes for questions) of their prospectus.
3. *Final Thesis Poster Presentation.* You will present your thesis during the undergraduate research day poster session. This is fun. (Really. It is. I know you don't believe me now, but it is. There are snacks, in case that helps.) You will practice presenting your poster (5 minutes) in class time. An abstract of your thesis, to be printed in the program, **is due to the instructor on April 1, 2014.**

Attendance

It is very important that you attend all scheduled class meetings and that you arrive on time. Seminars are only rewarding if everyone is present and participating every class. *If you must miss a class for a valid reason (e.g., illness), you must let me know in advance.* Regular class attendance will contribute to your grade.

Grading

The final grade in this course will be based on the instructor's evaluation of your contributions in seminar, the quality of your oral presentations and written assignments, your supervisor's report of your performance in the lab, and importantly, the quality of your final written thesis. Partial grades based on portions of the course will not be used. There will be no supplemental exam or make-up work for this course.

Other Issues

Plagiarism/cheating. McGill University values academic integrity. Therefore, all students must understand the meaning and consequence of cheating, plagiarism, and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/students/srr/hones/ for more information). Cases of suspected cheating will be reported to the Disciplinary Officer for your faculty and may result in a score of 0 on the exam or paper, failure of the course, or suspension or expulsion from the university.

Written work. In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded. Exams will be multiple-choice; however, optional papers may be submitted in either English or French.

Schedule of Meetings

Fall Term		
Week 1	Wednesday September 3	No meeting
Week 2	Monday September 8	No meeting
	Wednesday September 10	Introduction to Course
Week 3	Monday September 15	No meeting
	Wednesday September 17	Overview of Research Methods I
Week 4	Monday September 22	How to Read a Research Article
	Wednesday September 24	Introduction to SPSS I
Week 5	Monday September 29	Introduction to SPSS II
	Wednesday October 1	Introduction to the Library
Week 6	Monday October 6	Graduate School Applications <i>Abstract Assignment Due by 5 pm</i>
	Wednesday October 8	No class
Week 7	Monday October 13	No class
	Wednesday October 15	Overview of Research Methods II
	<i>Friday October 17</i>	<i>Attend Hebb Lecture (3:30 in MacMed 504)</i>
Week 9	Monday October 20	Discuss Hebb Lecture
	Wednesday October 22	No class <i>Article Critique 1 due by 5 pm</i>
Week 10	Monday October 27	No class
	Wednesday October 29	Discuss article critiques
Week 11	Monday November 3	No class
	Wednesday November 5	How to Write a Prospectus and Thesis
Week 12	Monday November 10	Introduction to Research Ethics
	Wednesday November 12	Article Presentations
Week 13	Monday November 17	No class
	Wednesday November 19	Article Presentations
Week 14	Monday November 24	No class
	Wednesday November 26	Article Presentations
Week 15	Monday December 1	No class <i>Article Critique 2 due to instructor by 5 pm</i>
	Wednesday December 3	No class

Winter Term		
Week 1	Monday January 5	No meeting
	Wednesday January 7	No meeting
Week 2	Monday January 12	Student prospectus presentations
	Wednesday January 14	Student prospectus presentations
Week 3	Monday January 19	Student prospectus presentations
	Wednesday January 21	Student prospectus presentations
Week 4	Monday January 26	Student prospectus presentations
	Wednesday January 28	No meeting
Week 5	Monday February 2	No meeting <i>Prospectus due to instructor by 5</i>
	Wednesday February 4	No meeting
Week 6	Monday February 9	No meeting
	Wednesday February 11	How to give feedback
Week 7	Monday February 16	No meeting
	Wednesday February 18	Individual meetings with instructor to discuss prospectus
Week 9	Monday February 23	Individual meetings with instructor to discuss prospectus <i>Peer review feedback due to instructor by 5</i>
	Wednesday February 25	Individual meetings with instructor to discuss prospectus
Week 10	Monday March 2	<i>Winter Break</i>
	Wednesday March 4	<i>Winter Break</i>
Week 11	Monday March 9	How to write a poster
	Wednesday March 11	No meeting
Week 12	Monday March 16	No meeting
	Wednesday March 18	No meeting
Week 13	Monday March 23	No meeting
	Wednesday March 25	Poster dry run
Week 14	Monday March 30	No meeting
	Wednesday April 1	Poster dry run -- <i>Deadline for poster abstracts</i>
Week 15	Monday April 6	No meeting
	Wednesday April 8	No meeting