

**Psychology, Neuroscience and Behaviour 3V03**  
Laboratory in Human Memory and Cognition  
Winter, 2012

**INSTRUCTOR**

Bruce Milliken ([millike@mcmaster.ca](mailto:millike@mcmaster.ca))  
Room 414, Psychology Complex  
525-9140 x24361

**TEACHING ASSISTANTS**

Ellen MacLellan ([maclele@mcmaster.ca](mailto:maclele@mcmaster.ca))  
Room 327, Psychology Complex  
525-9140 x27156

Alex Gough ([goughaw@mcmaster.ca](mailto:goughaw@mcmaster.ca))  
Room 145, Psychology Complex  
525-9140 x24824

**WHEN AND WHERE**

Thursdays 11:30 – 2:20  
PC 204

**WEBSITE**

[www.psychology.mcmaster.ca/3v03](http://www.psychology.mcmaster.ca/3v03)

**COURSE CONTENT**

The primary objective of the course will be to teach students the skills necessary to conduct independent research. This objective will be addressed in the context of a practical aim, which is to complete three research projects. In carrying out this research, five sets of skills will be emphasized. The first set of skills relates to conducting research in a manner that meets the guidelines set out by the Tri-Council Policy Statement on conducting ethical research with human subjects. This set of skills will be addressed in a lecture at the outset of the course, and the lessons taught in this lecture will be applied to all of the research projects conducted in the course (see [www.mcmaster.ca/ors/ethics](http://www.mcmaster.ca/ors/ethics)). The second set of skills involves identifying a research question. There will be a series of assigned readings related to the research projects, and these readings will give students the background necessary to identify the research question of interest. A third set of skills is required to conduct the research itself. Students will be responsible for aspects of experimental design, data collection, data analysis, and data interpretation in the research projects. A fourth set of skills that will be emphasized involves the interpretation of data. Students will be expected to learn the types of inferences that can be drawn from a set of data, the implications of various patterns of data for experimental hypotheses, and what kinds of follow-up research are encouraged by particular sets of data. Finally, students will be required to practice the oral and written reporting of research results. This objective will be addressed in two ways. First, each student will be responsible for one 20-minute oral presentation based on one of the assigned readings. Second, each student will be responsible for written reports of the research projects undertaken in the course.

## EVALUATION

Assignment 1	5%
Assignment 2	5%
Project 1	20%
Project 2	20%
Project 3	20%
Oral presentation	20%
Participation	10%
<b>Total</b>	<b>100%</b>

### ASSIGNING OF FINAL GRADES

Numerical grades will be assigned for all components of the evaluation. These numerical grades will be summed at the end of the course and converted to a letter grade according to the scale below.

Numerical Grade	Letter Grade
90 – 100	A+
85 – 89	A
80 – 84	A-
77 – 79	B+
73 – 76	B
70 – 72	B-
67 – 69	C+
63 – 66	C
60 – 62	C-
57 – 59	D+
53 – 56	D
50 – 52	D-
0 – 49	F

**Note 1:** Because a great deal of the organizational and informational content of the course will be delivered during our weekly meeting times, class attendance is extremely important. If you know in advance that you must miss a meeting, then please let it be known with as much advance warning as possible.

**Note 2:** The penalty for assignments submitted late is 10% of the total grade per day that the assignment is late. Application of this penalty is left to the discretion of the instructor.

**Note 3:** The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

**Note 4:** All excuses for missed assignments must be submitted through the office of the Associate Dean of Social Science (or Science etc., depending on your program). Also, attention is drawn to the Statement on Academic Ethics and the Senate Resolutions on Academic Dishonesty as found in the Senate Policy Statements distributed at registration and available in the Senate Office. Any student who infringes one of these resolutions will be treated according to the published policy.

## TENTATIVE SCHEDULE OF IMPORTANT DATES

<b>Week of ...</b>	<b>Activity</b>
January 5	Discussion of ethics in research with human participants Description and Discussion of Assignment 1
January 12	<b>Assignment 1 due</b> Introduction to Project 1 Discussion of Focal Reading 1
January 19	Oral presentations 1-3 Discuss Method of Project 1 <b>Data collection for Project 1 begins: January 20 @ noon</b>
January 26	Oral presentations 4-6 <b>Data collection for Project 1 ends: February 1 @ 5pm</b>
February 2	Discuss Results of Project 1 Introduction to Project 2 Discussion of Focal Reading 2
February 9	<b>Project 1 due</b> Discuss Method of Project 2 Oral presentations 7-9 <b>Data collection for Project 2 begins: February 10 @ noon</b>
February 16	Oral presentations 10-13 Description and Discussion of Assignment 2 <b>Data collection for Project 2 ends: February 29 @ 5pm</b>
February 23	READING WEEK
March 1	<b>Assignment 2 due</b> Discuss Results of Project 2 Introduction to Project 3 Discussion of Focal Reading 3
March 8	<b>Project 2 due</b> Discuss Method of Project 3 Oral presentations 14-16 <b>Data collection for Project 3 begins: March 9 @ noon</b>
March 15	Oral presentations 17-20 <b>Data collection for Project 3 ends: March 21 @ 5pm</b>
March 22	Discuss Results of Project 3
March 29	<b>Report of Project 3 due</b>