1 Course Details

1.1 Calendar Description
This is the first part of the two-semester course NEUR*4401/2. Refer to NEUR*4401/2 for the course description.

Pre-Requisite(s): 14.00 credits
Restriction(s): BIOM*4510, BIOM*4521/2, NEUR*4450. Instructor consent required. Enrolment restricted to BSC.NEUR major and minor.

1.2 Course Description
Objectives: This research course is designed to expose students to neuroscience research where information is created, interpreted and integrated with current knowledge, and to teach effective skills for communicating scientific information orally and in writing.

It is important to realize that this course is at the undergraduate level. The research project should be well-defined and have a reasonable likelihood of success. This course is not mini-Masters and certainly should not involve a rigorous series of experiments.

1.3 Timetable
Timetable is subject to change. Please see WebAdvisor for the latest information.

1.4 Final Exam
Exam time and location is subject to change. Please see WebAdvisor for the latest information.

2 Instructional Support

2.1 Instructional Support Team
Course Co-ordinator: Craig Bailey Dr.
Email: bailey@c.uoguelph.ca
Telephone: +1-519-824-4120 x54954
Office: OVCE 2602
3 Learning Resources

4 Learning Outcomes

This course is designed to give the student a realistic view of research by providing an opportunity for "hands-on" research.

4.1 Course Learning Outcomes

By the end of this course, you should be able to:

1. Develop an appreciation for research.
2. Improve library skills by researching the literature on a specific topic.
3. Develop awareness of current research techniques.
4. Develop the techniques and attitudes of critical thinking through evaluation of research data.
5. Teach problem solving.
6. Improve written and oral communications skills.

5 Teaching and Learning Activities

A CHECK-LIST FOR STUDENTS

1. When the semester begins, students should contact their supervisor and begin working on their laboratory project according to his/her directions.
2. Arrange a time each week to meet with your supervisor to discuss your progress.
3. You need to discuss the points raised in the Seminar Questionnaire. This form needs to be returned to Kim Best, Rm 2633, OVC; kbestb@uoguelph.ca before the deadline date to facilitate planning the seminar days. Students taking NEUR*4401 should indicate that this will be the interim report. If this questionnaire is not received by the date in the deadline dates, 5 marks will be deducted from your seminar.
4. All final seminar presentations will be uploaded to V drive. The deadline to submit your presentation, for uploading, is 8 am the day of your presentation (saved in PowerPoint). (You will lose 5% off your final grade if past the deadline.)
5. Preview your completed computer-generated presentation with your supervisor. A sign-up sheet will be posted on the seminar room door several days before the practice times are scheduled.
6. You are expected to participate and critique your colleagues' presentations. Evaluation forms for everyone in your group must be completed and submitted. These evaluations must have the students name clearly printed on the bottom to get the full marks.
7. Complete a course evaluation on-line during the last 2 weeks of classes.
8. A preliminary draft of your experimental project report should be submitted to your
supervisor for general comments and feedback before the final copy is submitted. Allow
time for this to occur. The final research project report is due to your supervisor on the
specified day indicated in semester deadlines (see Semester Deadlines – use date as a
guideline).

6 Assessments

Students will not be penalized when a project fails due to circumstances beyond their control. In
such cases however, students should give a critical appraisal of the problem(s) encountered,
and the emphasis of the project may be re-directed to improving the methodology.

6.1 Assessment Details

Interim Report (15%)
7.5% seminar and 7.5% written report (1 reviewer)

Students taking the two semester course will be required to provide an interim report for the
first semester on their progress to-date. This report consists of two components: an oral
presentation (a 5 minute PowerPoint presentation followed by 5 minute question period) on
one of the regularly scheduled seminar days for that semester and a written (2 page single
spaced report) provided to the supervisor on the same date that all final reports are due to be
handed in to supervisors. The purpose of the interim report is primarily to identify the
objectives/hypothesis being tested in the research project, the research protocol for the
project and any progress to date. The formal seminar given in the second part of the course
(NEUR*4402) concentrates more on the results and discussion of the overall project.

Evaluation of your colleagues’ seminars (5 in total) (2.5%)
Students are required to assist with the evaluation of their colleagues’ presentations and to
participate in the question periods. Each student must submit a minimum of 5 evaluations for
their peer presentations each semester. These evaluations must have the evaluator’s name
clearly printed on the bottom of the page to receive the full marks assigned for peer review.
All present in the audience will be asked to evaluate and grade each seminar. Only seminar
scores provided by the faculty present will be used in determining the grade for the
presentation. All evaluation forms will ultimately be returned to the student and their
supervisor, and the supervisor will be expected to review these with the student as a means of
providing feedback on the oral presentation.

7 Course Statements

7.1 Faculty and Student Commitments

Neuroscience minors may require one of the double-weighted courses for their programs. The
‘0-6’ and ‘0-12’ hr/week labels on the courses should be regarded as the minimum time
commitment for students. In other courses, students are expected to work on course material
after lectures and laboratories are finished. Research course students can expect that they will
have to spend more than the listed time/week to complete their research work. Students may
have to deliberately limit the time that they devote to these courses if they find the work
particularly interesting or demanding. If a student feels that a problem is arising, he/she must
talk to the supervisor about either becoming more efficient, or limiting the workload.

If a student wishes to perform their research off-campus, they must secure a co-supervisor who is a faculty member of the University of Guelph.

Students should also feel free to talk to the course coordinator.

7.2 ‘Animal Utilization Protocol’ Approval

Some projects may require working with live animals. Faculty supervisors are responsible for obtaining the appropriate Animal Utilization Protocols to cover the work being done by Research project students under their supervision. Students should be aware of these protocols and understand their purpose. Discuss these with your supervisor.

7.3 Course Evaluation

Course evaluations will be turned on the last 2 weeks of classes - https://courseeval.uoguelph.ca/CEVAL_LOGIN.php

If you see ways that the course could be improved, please say so on the evaluation form. Your feedback is vital for us to assess the impact of the research courses and to fine tune the way we operate. This feedback will be provided to the course coordinator ONLY after the final grades have been submitted to the Registrar’s Office and will be used to make improvements to the course.

8 University Statements

8.1 Email Communication

As per university regulations, all students are required to check their e-mail account regularly: e-mail is the official route of communication between the University and its students.

8.2 When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The regulations and procedures for Academic Consideration are detailed in the Undergraduate Calendar.

8.3 Drop Date

Courses that are one semester long must be dropped by the end of the fortieth class day; two-semester courses must be dropped by the last day of the add period in the second semester. The regulations and procedures for Dropping Courses are available in the Undergraduate Calendar.

8.4 Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

8.5 Accessibility

The University promotes the full participation of students who experience disabilities in their
academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required, however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance, and not later than the 40th Class Day.

More information: www.uoguelph.ca/sas

8.6 Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University’s policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar.

8.7 Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

8.8 Resources

The Academic Calendars are the source of information about the University of Guelph’s procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.