



## COURSE OUTLINE

### 1. **Course:** NEUR 511, Neuroscience Seminar - Winter 2024

#### **Coordinator(s)**

Name	Email	Phone	Office	Hours
Dr Christophe Altier Christophe Altier	altier@ucalgary.ca	TBA	HSC 1665	TBA

#### **Section(s)**

Lecture 01 : MW 12:00 - 12:50 in

Instructor	Email	Phone	Office	Hours
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#### **Course Aims and Objectives:**

- 1) Understand the scientific process as it is conducted at the highest level in the world
- 2) Critically evaluate current scientific literature
- 3) Present oral and written analysis of current literature
- 4) Learn to develop strategies to develop innovative approaches to address new questions in neuroscience.

#### **Structure of the Course:**

Monday: Background lecture on upcoming HBI seminar and Journal club, weekly assignment due

Wednesday: Journal club presentation

Friday: HBI Seminar delivered by external, invited speaker

#### **Term Project:**

- 1) Weekly assignments
- 2) Oral presentations
- 3) 5-page written critique of one HBI seminar

To account for any necessary transition to remote learning for the current semester, courses with in-person lectures, labs, or tutorials may be shifted to remote delivery for a certain period of time. In addition, adjustments may be made to the modality and format of assessments and deadlines, as well as to other course components and/or requirements, so that all coursework tasks are in line with the necessary and evolving health precautions for all involved (students and staff).

#### **In Person Delivery Details:**

##### **1) Marking Scheme for Presentations (40% of Final Mark)**

A good journal club presentation goes beyond simply presenting the results of a paper. It should highlight the pressing questions that the study is trying to answer, the central hypothesis being tested, provide an overview of the methodology, and include your own critique of the experimental design and interpretation (strengths and weaknesses of the paper).

Your mark will be based on the quality of your work in the following areas:

Background research on the topic (20 marks)

Hypothesis and rationale/Experimental design/Methodology (5 marks)

Results (5 marks)

Quality of presentation (10 marks)

## Tips for presenting

### 1. Background research on the topic (20 marks) (Chalk Talk)

- Introduction of the field (key concepts, definitions, etc.)
- Provide an overview of important cellular players, how they work, what they do (you are teaching your peers here)
- Provide enough background so your audience can understand the study

### 2. Hypothesis and Rationale/Experimental Design/Methodology (5 marks)

- What is the pressing question being addressed?
- What is the central hypothesis?
- Overview of the experimental design, main technique(s) and strategies
- If the technique or approach is novel or critical to the paper, you might want to spend some time talking about the technique itself

### 3. Results (5 marks)

- Present the results logically and clearly so the audience can follow
- Useful to include the experimental logic/rationale: a good paper will usually contain a logical flow (e.g. because we found this, we next examined this)
- A good approach for important findings is to present the data, the author's interpretation, and then your own interpretation if it is different or if you can expand or extend the author's interpretation (shows you are thinking and not simply presenting the data)

### 4. Quality of presentation (10 marks)

- Clarity of slides
- Speaking voice/style
- Ability to answer questions
- Knowledge of the paper and background
- Always useful to summarize the most important findings/conclusions

### 2) Weekly Participation (20% of Final Mark)

Your participation mark is based on class attendance, weekly short assignments, and contribution to class discussion.

#### Weekly assignment

Submitted at the start of each **Monday** class. This is intended to be a brief highlight of that week's assigned journal club paper and the corresponding HBI seminar. You can submit this via email ([altier@ucalgary.ca](mailto:altier@ucalgary.ca)) on Monday **before** class.

Please include the following headings (can be point form, **200 words max.**):

- 1) Central hypothesis/hypotheses
- 2) Key results (point form)
- 3) Conclusion(s)
- 4) Write 2 questions on one of the assigned journal club papers

### 3) HBI Seminar Critique (40% of Final Mark)

Due **April 8, 2024** by mid night (5% per day will be deducted for late assignments).

- Select **ONE** of the following seminars:
    - o TBA
  - The critique should be
    - o **5 pages** (single spaced, Times New Roman, 12 point font, 2 cm x 2 cm margins).
  - o Include Reference List - Not included in the page count.
  - o Illustrations/figures (optional)
- **Please indicate your student number (Do Not put your name on the assignment).**

- Structure of the critique:

#### 1) Introduction/background (5 marks)

- Provide an overview of the research area.
- The main questions or pressing issues that the HBI speaker's research is addressing.

#### 2) CRITIQUE OF SEMINAR (15 marks)

- Outline the main findings presented by the speaker.
- Comment on the interpretation, novelty, and significance of their results
- Why do you think the work is/is not significant?

#### 3) FUTURE DIRECTIONS (15 marks)

- Discuss the next important steps/key questions arising from their findings.
- What experiments would most likely provide answers to these questions?
- Basically, if this was your research program, what would you do next and what strategies/approaches would you devise?

#### 4) Writing style (5 marks)

- Grammar, clarity, spelling, punctuation

**TOTAL MARKS: /40**

#### Course Site:

D2L: NEUR 511 S01-(Winter 2023)-Neuroscience Seminar

**Note:** Students must use their U of C account for all course correspondence.

#### Equity Diversity & Inclusion:

The University of Calgary is committed to creating an equitable, diverse and inclusive campus, and condemns harm and discrimination of any form. We value all persons regardless of their race, gender, ethnicity, age, LGBTQIA2S+ identity and expression, disability, religion, spirituality, and socioeconomic status. The Faculty of Science strives to extend these values in every aspect of our courses, research, and teachings to better promote academic excellence and foster belonging for all.

#### 2. Requisites:

See section [3.5.C](#) in the Faculty of Science section of the online Calendar.

#### Prerequisite(s):

Admission to the Neuroscience Program and completion of 75 units (12.5 full-course equivalents) in the Neuroscience program.

### 3. Grading:

The University policy on grading and related matters is described in [F.1](#) and [F.2](#) of the online University Calendar.

In determining the overall grade in the course the following weights will be used:

Course Component	Weight	Due Date (duration for exams)	Modality for exams	Location for exams
In class participation	20%	Ongoing		
Oral presentations (including the Introduction to the research topic and the journal club presentation).	40%	Ongoing		
Seminar critique	40%	Apr 08 2024		

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the student will be assigned a grade. The student's grade for each component listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.

The conversion between a percentage grade and letter grade is as follows.

	A+	A	A-	B+	B	B-	C+	C	C-	D+	D
Minimum % Required	96 %	90 %	85 %	80%	76%	72 %	67 %	63%	59%	54 %	50 %

The University of Calgary offers a [flexible grade option](#). Credit Granted (CG) to support student's breadth of learning and student wellness. Faculty units may have additional requirements or restrictions for the use of the CG grade at the faculty, degree or program level. To see the full list of Faculty of Science courses where CG is not eligible, please visit the following website: <https://science.ucalgary.ca/current-students/undergraduate/program-advising/flexible-grading-option-cg-grade>

### 4. Missed Components Of Term Work:

In the event that a student legitimately fails to submit any online or in-person assessment on time (e.g. due to illness, domestic affliction, etc...), please contact the course coordinator, or the course instructor if this course does not have a coordinator to arrange for a re-adjustment of a submission date, or possible exemption and reweighing of components. Absences not reported within 48 hours will not be accommodated. Students may be asked to provide supporting documentation ([Section M.1](#)) for an excused absence, See [FAQ](#).

If an excused absence is approved, options for how the missed assessment is dealt with is at the discretion of the coordinator or course instructor. Some options such as an exemption and pro-rating among the components of the course may not be a viable option based on the design of this course.

### 5. Scheduled Out-of-Class Activities:

There are no scheduled out of class activities for this course.

### 6. Course Materials:

There is no textbook for this course, but books placed on reserve in the Taylor Family Digital Library (see list on last page) provide excellent reference material.

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam/Camera (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Stable internet connection.

For more information please refer to the UofC [ELearning](#) online website.

### 7. Examination Policy:

No calculators or electronic devices are permitted for quizzes and exams. Students should also read the Calendar, [Section G](#), on Examinations

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## 8. Approved Mandatory And Optional Course Supplemental Fees:

There are no mandatory or optional course supplemental fees for this course.

## 9. Writing Across The Curriculum Statement:

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section [E.2](#) of the University Calendar.

## 10. Human & Living Organism Studies Statements:

See also [Section E.5](#) of the University Calendar.

### STUDIES IN THE BSc NEUROSCIENCE PROGRAM MAY INVOLVE THE USE OF LIVING AND DEAD ORGANISMS.

Students taking laboratory- and field-based courses in these disciplines can expect involvement with and experimentation on such materials. Students perform dissections on dead or preserved organisms in some courses. In particular courses, students experiment on living organisms, their tissues, cells, or molecules. Sometimes field work requires students to collect a variety of living materials by many methods, including humane trapping.

All work on humans and other animals conforms to the Helsinki Declaration and to the regulations of the Canadian Council on Animal Care. The program strives for the highest ethical standards consistent with stewardship of the environment for organisms whose use is not governed by statutory authority. Individuals contemplating taking courses or majoring in one of the fields of study offered in the program should ensure that they have fully considered these issues before enrolling. Students are advised to discuss any concern they might have with the Undergraduate Program Director of the Department.

Students are expected to be familiar with [Section SC.4.1](#) of the University Calendar.

## 11. Reappraisal Of Grades:

A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See [Section I.3](#) of the University Calendar.

a. **Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within **ten business days** of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall submit the Reappraisal of Graded Term work [form](#) to the department in which the course is offered within 2 business days of receiving the decision from the instructor. The Department will arrange for a reappraisal of the work within the next ten business days. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. See sections [I.1](#) and [I.2](#) of the University Calendar

b. **Final Exam:** The student shall submit the request to Enrolment Services. See [Section I.3](#) of the University Calendar.

## 12. Other Important Information For Students:

a. **Mental Health** The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, [Mental Health Services Website](#)) and the Campus Mental Health Strategy website ([Mental Health](#)).

b. **SU Wellness Services:** For more information, see their [website](#) or call [403-210-9355](#).

c. **Sexual Violence:** The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email ([svsa@ucalgary.ca](mailto:svsa@ucalgary.ca)) or phone at [403-220-2208](#). The complete University of Calgary policy on sexual violence can be viewed [here](#).

d. **Student Ombuds Office:** A safe place for all students of the University of Calgary to discuss student related issues, interpersonal conflict, academic and non-academic concerns, and many other problems.

e. **Student Union Information:** [SU contact](#), Email your SU Science Reps: [science1@su.ucalgary.ca](mailto:science1@su.ucalgary.ca), [science2@su.ucalgary.ca](mailto:science2@su.ucalgary.ca), [science3@su.ucalgary.ca](mailto:science3@su.ucalgary.ca).

f. **Academic Accommodation Policy:**

It is the student's responsibility to request academic accommodations according to the University policies and procedures listed below. The student accommodation policy can be found at: <https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Accommodation-Policy.pdf>

Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: <https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf>.

Students needing an accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, by filling out the [Request for Academic Accommodation Form](#) and sending it to Dr. Willem Wildering by email [bscndir@ucalgary.ca](mailto:bscndir@ucalgary.ca) preferably 10 business days before the due date of an assessment or scheduled absence.

- g. **Misconduct:** Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional [Code of Conduct](#) and promote academic integrity in upholding the University of Calgary's reputation of excellence. Some examples of academic misconduct include but are not limited to: posting course material to online platforms or file sharing without the course instructor's consent; submitting or presenting work as if it were the student's own work; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; borrowing experimental values from others without the instructor's approval; falsification/fabrication of experimental values in a report. Please read the following to inform yourself more on academic integrity:

[Student Handbook on Academic Integrity](#)  
[Student Academic Misconduct Policy](#) and [Procedure](#)  
[Faculty of Science Academic Misconduct Process](#)  
[Research Integrity Policy](#)

Additional information is available on the [Student Success Centre Academic Integrity page](#)

- h. **Copyright of Course Materials:** All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of student academic or [non-academic misconduct](#), in addition to any other remedies available at law.
- i. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see [Legal Services](#) website.
- j. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction ([USRI](#)) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.

#### Course Outcomes:

- Critically analyze and interpret current scientific literature
- Ability to find information and evaluate its relevance and reliability
- Ability to generate and effectively present oral and written analysis of scientific literature
- Acquire and apply conceptual and scientific technical knowledge

Electronically Approved - Jan 31 2024 11:28

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Department Approval