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Course number 623	Course Name: Functional Neuroanatomy	Winter 2021	
<b>Instructor:</b>	Brandy Callahan, Giuseppe Iaria, Julia Kam, Andrea Protzner, Keith Yeates	<b>Lecture Location:</b>	Remote synchronous
<b>Phone:</b>	403-220-2928	<b>Lecture Days/Time:</b>	Friday 09:00-11:45
<b>Email:</b>	<a href="mailto:kyeates@ucalgary.ca">kyeates@ucalgary.ca</a>		
<b>Office:</b>	AD 255		
<b>Office Hours:</b>	By appointment		

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### Course Description and Objectives

Human neuroanatomy and the development of the central nervous system. Functional relationships between brain and behaviour in a variety of domains (sensorimotor, language, memory, affective processing, social behaviour, etc).

### Acknowledgments and Respect for Diversity

Our classrooms view diversity of identity as a strength and resource. Your experiences and different perspectives are encouraged and add to a rich learning environment that fosters critical thought through respectful discussion and inclusion. The Department of Psychology would also like to acknowledge the traditional territories of the people of the Treaty 7 region in southern Alberta. The City of Calgary is also home to Métis Nation of Alberta, Region III.

### Course Format

Lectures and other class activities will be held live via Zoom during each scheduled class as per the class schedule below. Throughout each scheduled class, students will be strongly encouraged to keep their video and audio on, to facilitate engagement and discussion.

### Prerequisites

Admission to the Graduate Program in Psychology or by permission of the Instructor.

### Required Texts and Readings

This course does not have a required textbook. The course material consists of selected readings that students will be provided via a class Dropbox, download from the UofC online journals website (<http://library.ucalgary.ca/journals>), or find online as open source.

### Assessment Methods

Student evaluations will be based on making a class presentation and leading an associated discussion (30% of final grade), participation in class (15%), posting of discussion questions to D2L prior to class (15%), and submission of a research proposal (40% of final grade). Late assignments will not be accepted without instructor approval.

**A. Class presentation and discussion (30% of final grade).** Presenting and leading the associated discussion will consist of examining, in detail, a peer-reviewed journal article focusing on one of the topics addressed in the course. Students will be required to select the journal article. As a guideline, each presentation should include: (1) a brief overview of the subject of the article, (2) the main question that the article aims to address, the relevance of it in the context of the topic of the week, and the authors' hypothesis, (3) a description of the methods and procedure used, (4) the results of the study, (5) the authors' interpretation of the results, (6) the authors' general conclusion, (7) the student's observations about the study (including merits and/or limits of the experimental approach used), and (8) the student's suggestions for future studies given the findings provided in the article. Students are expected to be engaging and lead a group discussion within the time provided. Students will be allocated 15-20 minutes for their presentation and discussion. **All student presentations will occur on Friday March 19.**

**B. Class Participation (15% of final grade).** Instructors will rate each student on their engagement and the quality of their interactions and discussion at the end of each class, on a scale from 1 (low participation) to 3 (high level of quality interaction).

**C. Discussion Questions (15% of final grade).** Twenty-four hours prior to each class (i.e., by Thursday noon), students are expected to post on the D2L discussion forum two questions related to the assigned readings for that class. The questions will be available to all students for discussion during the class.

**D. Research proposal (40% of final grade).** Each student will write a research proposal. The proposal must focus on a topic covered during the course. The topic chosen for the proposal can be the same as that chosen by the student for his/her class presentation and discussion assignment. In the proposal, students are required to formulate one experiment or study that would make an original contribution to the literature/topic on which the proposal focuses. Importantly, the research proposal must include humans as subjects. Research proposals will be submitted by email to the instructor in Word format.

The proposal must be organized into the following sub-headings: (1) Title of the proposal and name of the student, (2) Abstract (150 words maximum), (3) Brief topic/literature overview, (4) Objective of the proposal, (5) Methods, (6) Expected results, (7) Implications and conclusions, (8) References (minimum 10; reference list in any format). Title of the proposal, name of the student, and abstract will form the "Title page" of the proposal. The body of the paper (excluding title page, abstract, and reference list) must not exceed 10 pages (double-spaced, 12 point Times or metrically equivalent font). No figures or tables should be included in the paper. Evaluation will be based on clarity, accuracy and completeness, and special consideration will be given to the novelty and originality of the proposal. To assist students in preparing their research proposals, there will be an optional online review and discussion of the proposals scheduled the week of March 22, 2021. **The completed research proposals will be due on Friday April 16th, 2021.** Without instructor approval, late submissions of the research proposals will not be accepted.

#### **University of Calgary Academic Integrity Policy**

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. It is your responsibility to ensure that you have read and are familiar with the student academic misconduct policy:  
<https://www.ucalgary.ca/policies/files/policies/student-academic-misconduct-policy.pdf>.

**Faculty of Graduate Studies Grading System**

A+ = Outstanding performance, A = Excellent performance, A- = Very good performance  
 B+ = Good performance, B = Satisfactory performance, B- = Minimum pass  
 C+ All grades of "C+" or lower are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements. Individual programs may require a higher passing grade

**Grading Scale**

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
A	90-95%	B	76-79%	C	63-66%	D	50-53%
A-	85-89%	B-	72-75%	C-	59-62%	F	0-49%

As stated in the University Calendar, it is at the instructor’s discretion to round off either upward or downward to determine a final grade when the average of term work and final examinations is between two letter grades. To determine final letter grades, final percentage grades will be rounded up or down to the nearest whole percentage (e.g., 89.5% will be rounded up to 90% = A but 89.4% will be rounded down to 89% = A-).

**Tentative Lecture Schedule**

Ideally in table format with date of class, topics to be covered, and chapters/readings to be read. Due dates for tests/exams and assignments should be included in this schedule as well.

Date	Topic/Activity/Readings/Due Date (revise and add columns & rows as necessary)
M Jan 04	<i>Winter term begins (block week January 4-8)</i>
M Jan 11	<i>Start of Classes</i>
F Jan 15	Introductions/Overview of functional neuroanatomy (Yeates)
R Jan 21	<i>Last day to drop Winter Term half-courses.</i>
F Jan 22	Neuroimaging and EEG (Protzner) <i>Last day to add or swap a course</i>
F Jan 29	Sensorimotor function (Kam) <i>Fee payment deadline for Winter Term fees.</i>
F Feb 5	Functional brain networks (Protzner)
F Feb 12	Memory (Iaria)
M Feb 15	<i>Alberta Family Day</i>
Feb 14-20	<i>Term Break, No Classes (University if Open, Except on Alberta Family Day)</i>
F Feb 26	Language (Callahan)
F Mar 5	Executive functions (Yeates)
F Mar 12	Social-emotional function (Callahan)
F Mar 19	<b>Student presentations</b>
F Mar 26	Attention (Kam)
F Apr 2	<i>Good Friday, University Closed</i>
M Apr 6	<i>Easter Monday, University Closed</i>

F Apr 9	Consciousness (Iaria) Guest lecturer: Adrian Owen, PhD, Western University
R Apr 15	<i>Last day of classes, last day to withdraw from winter courses</i>
F Apr 16	<b>Research proposals due</b>
Apr. 19-29	<i>Final Exam Period</i>
R Apr 30	<i>End of Term</i>

### Absence From A Test/Exam

Makeup tests/exams are **NOT** an option without the approval of the instructor. Students who miss a test/exam have up to 48 hours to contact the instructor to ask for a makeup test/exam. It's the instructor's discretion if they will allow a make-up exam. Students who do not schedule a makeup test/exam with the instructor within this 48-hour period forfeit the right to a makeup test/exam. At the instructor's discretion, a makeup test/exam may differ significantly (in form and/or content) from a regularly scheduled test/exam. Once approved by the instructor a makeup test/exam must be written within 2 weeks of the missed test/exam on a day/time scheduled by the instructor. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam <https://www.ucalgary.ca/registrar/exams/deferred-exams>.

### Travel During Exams

Consistent with University regulations, students are expected to be available to write scheduled exams at any time during the official December and April examination periods. Requests to write a make-up exam because of conflicting travel plans (e.g., flight bookings) will NOT be considered by the department. Students are advised to wait until the final examination schedule is posted before making any travel arrangements. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam <https://www.ucalgary.ca/registrar/exams/deferred-exams>. Students with an exceptional extenuating circumstance (e.g., a family emergency) should contact the Department of Psychology ([psyugrd@ucalgary.ca](mailto:psyugrd@ucalgary.ca)).

**Reappraisal of Graded Term Work** <http://www.ucalgary.ca/pubs/calendar/current/i-2.html>

**Reappraisal of Final Grade** <http://www.ucalgary.ca/pubs/calendar/current/i-3.html>

### Academic Accommodations

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit [www.ucalgary.ca/access/](http://www.ucalgary.ca/access/). Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at <http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>.

### Academic Misconduct

For information on academic misconduct and its consequences, please see the University of Calgary Calendar at <http://www.ucalgary.ca/pubs/calendar/current/k.html>

**Instructor Intellectual Property**

Course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These materials may NOT be reproduced, redistributed or copied without the explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

**Copyright Legislation**

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright ([www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf](http://www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf)) and requirements of the copyright act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

**Freedom OF Information and Protection of Privacy**

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary

**Student Support and Resources**

<https://www.ucalgary.ca/registrar/registration/course-outlines>

**Important Dates**

The last day to drop this course with no "W" notation and **still receive a tuition fee refund** is **Thursday, January 21, 2021**. Last day add/swap a course is **Friday, January 22, 2021**. The last day to withdraw from this course is **Thursday, April 15, 2021** <https://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html>