NEUR 355
Fundamentals of Neuroscience
Section EC
Fall 2026

This syllabus is subject to change and any changes will be posted in the Announcements section of your eConcordia portal.

Disclaimer: In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

About the Course

About the Course

This is a course in the Department of Psychology.

Instructor: Dr. Wayne Brake

Instructor Contact Information: neur355online@concordia.ca

This email address allows you to contact the Professor directly with any general inquiries. If you have any questions or concerns about the course, or if there is a delay in hearing back from your TA, please do not hesitate to use this email.

TA Contact Information: available through the course website

Note: Please email your TA with any questions or concerns you have, or if you require further feedback. Also, allow for a 24-hour response time during the week (Monday-Friday). Teaching Assistants check their messages once over the 48-hour weekend period and are not available on statutory or university holidays.

Course Description

This course provides an introduction to the neural mechanisms that underlie behaviour. Topics include the structure and function of neurons, neural communication, an introduction to neuroanatomy, and the processing of sensory information. Students also learn how complex systems, such as the sensory and motor systems, interact to produce behaviour.

Prerequisite: BIOL 200, BIOL 201, BIOL 202, CEGEP Biology 301, CEGEP Biology 101-NYA, or CEGEP Biology 921.

NOTE: Students who have received credit for BIOL 383 or PSYC 358 may not take this course for credit.

Course Material

The material for this course consists of the NEUR 355 course website.

Course Website

The course website can be accessed at www.econcordia.com

Your account will allow you to access the online course material, which includes videos, notes, discussion boards, all graded course components, useful links, readings and many more resources from the course website for the duration of the term

Assessments

Graded Assessments

Practice Quizzes	10%
Midterm	15%
Term Project	15%
Final Exam (In Person)	60%

***You must pass the final exam to pass this course**

Description of Graded Assessments

Quizzes (10%)

There will be practice exercises during this course. These will be multiple choice questions. The practice exercises are a good way to help you learn. There will be 10 practice quizzes that you will take that are worth 1% of your grade each for a total of 10%. This is a helpful way to learn course material, practice your understanding, prepare for the final exam, and boost your grade! Quizzes are due the last day of classes. There will be no extensions.

Midterm Exam (15%)

The Midterm will consist of multiple choice and short answer questions.

The Midterm exam can be written anytime between 8 am and midnight (but only one attempt).

Term Project (15%)

The term project will require you to write a paper about a specific topic covered in this course. You will pick a topic from the course that interests you, then find a recent scientific paper on the subject, and explain what you learned.

Term Project due at midnight. Late penalties will be 10% per day up to a maximum of 5 days, after which it will receive a grade of 0.

Final Exam (60%)

This exam will be cumulative. The final exam will be the same format as the midterm exam albeit with many more questions that cover the entire course and it will be in person.

You cannot pass this course if you are unable to write the final exam in person. **You must pass the final exam to pass this course.**

Grades

It is your responsibility to ensure your work has been received (to be verified as outlined in your assignment instructions) and to contact your TA via e-mail for clarification if you have any questions concerning your grades.

Your final letter grade for the course will be posted in your MyConcordia Portal at the end of the term.

Mark Breakdowns

Letter Grade	Percentage (%)	Letter Grade	Percentage (%)
A+	95 to 100	C	64 to 66
A	87 to 94	C-	60 to 63
A-	80 to 86	D+	57 to 59
B+	77 to 79	D	54 to 56
B	74 to 76	D-	50 to 53
B-	70 to 73	F	Less than 50
C+	67 to 69		

Class Policies and Expectations

i. **Communications: Students are expected to display proper etiquette and professional conduct at all times,** including their communications with the instructor, with the TAs, and with other students. This includes being polite, disagreeing courteously when necessary, and practicing mutual respect. Overtly inappropriate or negative comments will **not be tolerated** on the discussion boards or in email communications.

ii. **Emails:** All emails should be written in a professional manner. Include the following information in all of your e-mail communications:

Your full name
Your Concordia student ID number
The course name and number (NEUR 355) pertaining to your inquiry

Emails regarding course content should include specific questions and should also clearly state your current understanding of the topic. Questions related to course content can also be posted on the discussion board (see below).

We strongly encourage you to use a Concordia University e-mail account or an account from a provider such as Sympatico, Videotron, etc. Free e-mail accounts such as Hotmail, Yahoo, etc. are NOT recommended and very often lead to communication problems. **Your e-mail address must be registered** in your MyConcordia Portal as well as in the Student Profile of your My eConcordia Portal

iii. **Discussion Boards:** You may post questions about course content on an appropriate thread on the Discussion Board. This is a great way to ask a general question that others might also be interested in reading. For more urgent or personal matters, please send an email instead (see above).

The Discussion Board is a versatile tool in an online course. It is akin to putting your hand up in class, but with a bonus: each and every student can read the questions and the various answers posted, at their leisure. Before you post on the Discussion board, read the other postings to confirm that any question you pose has not already been answered repeatedly.

The Discussion Board is meant for the academic discussion of the course material. **Do not post your telephone number, student ID, or any other personal information on the Discussion Board**. Do not post questions pertaining to grades, technical issues, or questions of a personal nature on the discussion board (Instead, direct these to your TA via email). The Forum Administrator will remove Discussion Board posts that are inappropriate or contain personal information.

Of vital importance is respectful behavior on the Discussion Board. Refrain from making offensive statements and derogatory comments. Students who fail to respect

these rules will be removed from the discussion. It is within our discretion and authority to edit or remove any posting at any time. Please see the Code of Rights and Responsibilities here: http://www.concordia.ca/students/rights.html.

iv. Announcements: Important information regarding the course will be communicated to you via the Announcements Section of the course website on a regular basis. The Announcements are located in the centre of the main page upon logging in to your eConcordia account. Please make sure to read the postings frequently, at least twice per week.

v. Quiz policies: Students are responsible for scheduling and completing the online quizzes at home by the deadlines. Completion of these unit quizzes is required and there will be **no supplemental quizzes** or alternative assessments given for this portion of the course. You will receive a zero for a missed quiz for reasons such as conflicts with work or travel, academic workload, sleeping in, feeling sick, forgetting there was a quiz, etc. Please note that the **quizzes are considered closed-book assessments** – you should **not** have your notes open or use any other resources to complete the quiz. Students are expected to uphold academic honesty and integrity when taking the quizzes at home. This will help you prepare for the final exam, which will also be a closed-book assessment.

vi. Exam policies: Final exams are scheduled by the University Examinations office and take place during the final exam period. The schedule is released partway through the semester. Your presence at the final exam is required and there will be **no supplemental exams** in this course. You will receive a zero for a missed exam for reasons such as conflicts with work or travel, academic workload, sleeping in, feeling sick, forgetting there was an exam, etc. You will **not** be granted permission to write a deferred exam due to travel plans. For more information on deferred final exams, visit this page:
http://www.concordia.ca/students/exams/accommodations/def-note.html

vii. Course materials: Any intellectual property (including but not limited to notes, quizzes, examinations) displayed or distributed to students during this course by the professor remains the intellectual property of the professor. This means that the student **may not** distribute, publish or provide such intellectual property to any other person or entity for any reason, commercial or otherwise, without the express written permission of the professor.

viii. Cheating and plagiarism: Concordia University has very strict policies on cheating and plagiarism and expects all students to uphold the principle of academic honesty. As such, there is a **zero-tolerance policy** in this course on all instances of cheating and plagiarism. If you get caught, you will be reported to the office for Academic Integrity, who will determine what sanctions to levy against you. As described on the University's website, the Academic Code of Conduct defines

plagiarism as "the presentation of the work of another person, in whatever form, as one's own or without proper acknowledgement" (Article 19a).

You are encouraged to visit the University webpage on Academic Integrity to learn more about how to protect yourself from accidental plagiarism: http://www.concordia.ca/students/academic- integrity/plagiarism.html

You are encouraged to visit the **GenAI Quickstart for Students**. These interactive 15-minute modules are a starting point for thinking about when and how to use GenAI in academic contexts—or not! Explore scenarios and dilemmas to think through the role AI tools might have in your academic life: https://library.concordia.ca/learn/genai-students/index.html

ix. General expectations: As outlined on the eConcordia website, you should expect to spend an average of four to six hours each week for each online course you are taking. The time spent on each course is dependent on the course material itself as well as the rate at which each individual can learn the material. Therefore, four to six hours is an estimate only and should be adjusted based on your ability to learn the material. In this particular course, there is a lot of new terminology to learn. The best way to learn this material is to spend time with it and engage with the material as much as possible: watch the online lectures, complete the readings, post on and read the discussion board, use the additional resources, attend the live discussions with the instructor (or watch them later), and email your instructor throughout the semester if you have further questions. Research has repeatedly shown that spaced studying is more effective than massed studying (cramming): Create a study schedule for yourself and stick to it each week.

Third Party Software/Website

Here is an excerpt on **Concordia's policy on educational software or services developed and owned by third parties**, including those linked to textbooks, in-class surveys, lecture capture, virtual classrooms, course assignments and quizzes. They can be invaluable tools for the development and teaching of courses.

Third-Party software/websites that require personal information (name, email, student number, etc.):

Students are advised that external software and/or websites will be used in the course and students may be asked to submit or consent to the submission of personal information (for example, name and email) to register for an online service. Students are responsible for reading and deciding whether or not to agree to any applicable terms of use. Use of this software and service is voluntary. Students who do not consent to the use the software or service should identify themselves to the course instructor as soon as possible, and in all cases before the DNE deadline, to discuss alternate modes of participation.

Third-party software/websites for work submission:

Students are advised that external software and/or websites will be used in the course and students may be asked to submit or consent to the submission of their work to an online service. Students are responsible for reading and deciding whether or not to agree to any applicable terms of use. Use of this software and service is voluntary. Students who do not consent to the use the software or service should identify themselves to the course instructor as soon as possible to discuss alternate modes of participation that do not require them to give copyright or the right to use their work to a third party.

By using the external software or websites, students agree to provide and share their work and certain personal information (where applicable) with the website/software provider. Students are advised that the University cannot guarantee the protection of intellectual property rights or personal information provided to any website or software company. Intellectual property and personal information held in foreign jurisdictions are subject to the laws of such jurisdictions.

Third-party technology to record a course:

Note that, as a part of this course, some or all of the lectures and/or other activities in this course may be recorded. Recordings will be focused on the instructor and will normally exclude students. It is possible, however, that your participation may be

recorded. If you wish to ensure that your image is not recorded, speak to your instructor as soon as possible.

Also, please note that you may not share recordings of your classes, and that the instructor will only share class recordings for the purpose of course delivery and development. Any other sharing may be in violation of the law and applicable University policies and may be subject to penalties.

Important Information

Topic	Link
Academic Integrity	Academic Integrity
Educational Technology Guidelines	Concordia Educational Technology Guidelines for Faculty and Students (the "Guidelines")
Access Centre for Students with Disabilities	ACSD
Concordia Library Citation & Style Guides	How to cite...
Course Communication Tools	Communication
eConcordia Policies	Policies
Final Exams Information	Final Exams
Helpdesk/Support	FAQ
Multifactor Authentication	MFA for Students
Refunds	Refunds
Technical Requirements	Technical Requirements
Tips for Studying Online	Studying Tips
Tips on how to reach online learning goals (learning modules)	How to Succeed @ eConcordia

NEUR 355 - Fundamentals of Neuroscience
Agenda
Fall 2026

All deadlines indicated are on the due date listed by 11:59 p.m. unless otherwise indicated.

Week 1: September 7 - September 13	
	Review the Course Outline and Agenda
	Lesson 1: Gross Neuroanatomy
September 07	**Labour Day, university closed**
September 08	**Classes begin**
Week 2: September 14 - September 20	
	Lesson 2: Cellular Neuroanatomy
Week 3: September 21 - September 27	
	Lesson 3: Action Potentials
September 21	**Deadline to add fall-term courses**
September 21	**Deadline for withdrawal with tuition refund (DNE) from fall-term courses**
Week 4: September 28 - October 4	
	Lesson 4: The Synapse
Week 5: October 5 - October 11	
	Lesson 5: Sensory Systems
October 10	**Reading week begins**
Mid-term break: October 12 - October 16	
October 12	**Thanksgiving Day, university closed**.
October 16	**Reading week ends**
Week 6: October 19 - October 25	

October 22	**Midterm Exam.** Exam will be written on Moodle. Students can log in between 8 am and midnight to write the exam. Only one attempt is allowed.
October 23	Last day to submit required documentation to register with the Access Centre for Students with Disabilities and request exam accommodations for the fall 2026 final examination period
Week 7: October 26 - November 1	
	Lesson 6: Motor Systems
Week 8: November 2 - November 8	
	Lesson 7: Learning and Memory
November 08	**Term Project due at midnight.**
Week 9: November 9 - November 15	
	Lesson 8: Emotions and Stress
Week 10: November 16 - November 22	
	Lesson 9: Drugs and Addiction
November 16	**Deadline for academic withdrawal (DISC) from fall-term courses**
Week 11: November 23 - November 29	
	Lesson 10: Psychotherapeutic Drugs
Week 12: November 30 - December 7	
November 30	**Last day for instructor-scheduled tests or examinations**
December 07	**Last day of classes, fall term**
Examinations Period: December 9 - December 22	
	Final Exam date and time is posted on your Student Hub