**WELCOME TO ADVANCED NEUROPHARMACOLOGY (#03766)**

**Spring 2025**

**Course Description**:

This section (03766-1) is geared towards graduate students from a variety of backgrounds. The goal of this course is to give you experience at reading, analyzing, and presenting primary literature at the cutting edge of neuropharmacology, as well as discussing some classic work in the field. Each week, one student will present a primary research article related to a topic covered in the main Neuropharmacology (03366) lectures. As a class, you will discuss the strengths and weaknesses of the study. Class attendance and participation is mandatory.

**Class time**

Monday, 5:00pm– 6:20pm. In-person only.

Mellon Institute Room 355

**Instructor:  Kate Hong, PhD (she/her)**

* email: katehong@andrew.cmu.edu
* Office Hours by appointment.

**Grading and attendance (edited 01/23/25 according to class discussion):**

This is a graduate level class which means the emphasis is on application of knowledge rather than memorization and tests.

* You are required to attend the advanced sections (Mon, 5pm).
* You are required to attend the main lectures (Tue, Thurs 11a-12:20a).

**Special Accommodations:**

If you require any special or disability accommodations, please let the instructor know in the first week of class.

**Course policies**

**Please read carefully. This will likely address most questions that may come up:**

***Attendance*** is required. This is a presentation and discussion based class, and the quality of the class is set by your presence and active participation.

***No grade negotiations or bargaining***: Do not try to negotiate a last-minute deal to improve your grade. Please be responsible for keeping up with the material and assignments. We do not offer special arrangements for extra credit or grade changes. If you want a good grade, you must do the work, participate, and submit assignments on time. It's that simple.

**Attendance & in-class work policy:**

* Please make every effort to come to class.
* If a medical situation or emergency causes you to miss class, please let me know ASAP.
* Unexcused absences will cause you to miss points on in-class assignments and participation grades.

**Late work policy:**

Unless stated otherwise, homework assignments are turned in via file upload to Canvas. Please be attentive not just to the due date, but the **time** **due** for every assignment on Canvas. The timestamp documented on Canvas will be used for submission time. Assignments that are late will receive a 10% penalty for being late by anywhere between 1 second and 24 hours. Assignments submitted between 24 hours – 1 week late will earn half credit. No credit will be given for submission beyond 1 week.

**Missed in-class assessments:**

Please check the syllabus schedule carefully and notify the instructor of any conflicts. If you are unable attend an in-class discussion, please contact the instructor at least 2 weeks in advance to discuss if it is possible to schedule an alternative time. If a situation prevents you from attending the assessment that arises less than 2 weeks before, documentation from Student Affairs (<https://www.cmu.edu/student-affairs/>) and/or a medical professional is required for an excused absence.

**Students with Disabilities:**

If you wish to request an accommodation due to a documented disability, please inform your instructor and contact Disability Resources as soon as possible. You can apply for accommodations through the Disability Resources website: [www.cmu.edu/disability-resources](http://www.cmu.edu/disability-resources).

Students who have accommodations related to in-class assessments (including extra time or distraction-reduced environments) will take assessments with Disability Resources proctoring the assessment.  **Assessment accommodations must be discussed in person with the instructor at least 2 weeks before the assessment**.  Other accommodations also do not take effect until they have been approved.

**Technology Policy**

Research has shown that divided attention is detrimental to learning, so I encourage you to close any windows not directly related to what we are doing while you are in class. Please turn off your phone notifications and limit other likely sources of technology disruption, so you can fully engage with the material, each other, and me. This will create a better learning environment for everyone.

**Respect for Diversity**

It is our intent that students from all diverse backgrounds and perspectives be well served by this course, that students’ learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: national origin, gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

**Academic Integrity**

**ChatGPT or other AI resources.** We strongly encourage you to come up with your own ideas and interpretation of the literature assigned for homework rather than resorting to using tools such as ChatGPT. To best support your own learning, you should complete all graded assignments in this course yourself, without any use of generative artificial intelligence (AI). Please refrain from using AI tools to generate any content (text, video, audio, images, code, etc.) for an assignment or classroom exercise. Passing off any AI generated content as your own (e.g., cutting and pasting content into written assignments, or paraphrasing AI content) constitutes a violation of [CMU’s academic integrity policy](https://www.cmu.edu/policies/student-and-student-life/academic-integrity.html). If you have any questions about using generative AI in this course please email or talk to me.

**Cheating.** Cheating of any sort will not be tolerated.  For example, if quiz or assessment answers are copied from another student, both students will receive zeros. Copying text from an AI chatbot (e.g., ChatGPT) will also be considered cheating. Other forms of cheating may result in reduction of final grade in the course, including course failure, depending on the severity of the violation.  In addition, these and other forms of cheating will also be referred to the Academic Review Board for more severe penalties.  This warning has two purposes: 1) to dissuade a small number of students from even thinking about cheating; and 2) to persuade the large majority that they will get a fair grade based on their individual performance.

**Plagiarism.**  Cheating includes plagiarism.  In this course, this is defined as using another person’s work as your own, especially on homework assignments and written assignments.  You may consult sources if you cite them, but you should demonstrate your understanding by writing the assignments in your own words.  See additional plagiarism guidelines:

https://www.cmu.edu/policies/student-and-student-life/academic-integrity.html

**Homework.**  For the homework, you are welcome (encouraged) to discuss the questions with others.  However, you are required to **write the answers** **entirely on your own.**

**Honor code on exams and quizzes:**

*Because some students may be making up the assessment at different times, please do not discuss the assessment with other students in the class until assessments have been returned and the answer key has been made public (usually about 1 week after the assessment date).  If you accidentally overhear someone talking about the assessment before you take a make-up assessment, please contact me immediately (*katehong@andrew.cmu.edu*). If you contact us and let us know what happened before you take your make-up assessment, it will not be an honor code/academic integrity violation.*

**Auditing**

Students may audit this course. Students that want to take the course for credit have higher admission priority than students that want to audit the course. Thus, typically audit approval happens near the semester course add deadline, after the waitlist (if any) has been cleared.

Carnegie Mellon's course auditing policy states that "auditing is presence in the classroom without receiving academic credit or a letter grade." Students auditing the course must attend at least 85% of the lectures (i.e., you can miss up to 4 lectures). Students auditing the course demonstrate that they attended class by handing the TA or instructor a piece of paper that contains the student's name and date.

The instructor may not notice or remember the student's presence in class for any particular lecture. *It is the student's responsibility to demonstrate that he or she was present in the classroom*.

Auditing students are expected to do the assigned readings and participate actively in class.

Auditing students are not required to complete homework assignments or to take exams. For the advanced section, **you will need to present at least one article** with the class.

**Commitment to Health and Interpersonal Support**

***Take care of yourself.***

*Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.*

*All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.*

*If you or anyone you know experiences any academic or personal stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. Counseling and Psychological Services (CaPS) is here to help: call 412-268-2922 and visit their website at* [*http://www.cmu.edu/counseling/*](http://www.cmu.edu/counseling/)*. Consider reaching out to a friend, faculty or family member you trust for help getting connected to the support that can help.*

***ALSO***

*If you or someone you know is feeling suicidal or in danger of self-harm, call someone immediately, day or night:*

***CaPS: 412-268-2922***

***Re:solve Crisis Network: 888-796-8226***

***If the situation is life threatening, call the police:***

***On campus: CMU Police: 412-268-2323***

***Off campus: 911***

**SYLLABUS FOR 2025**

The following syllabus is specific to the Advanced section. These assignments are in addition to all assignments in the main lecture.

(Details will be modified after first meeting)

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Topic | Due before class @5pm | Due 24hrs after class (Tuesday @ 12am) |
| 1/13/25 | Informational meeting |  |  |
| 1/20/25 | No class; MLK day |   |   |
| 1/27/25 | [Kate: Hong 2018.pdf](/courses/45151/files/12159079?wrap=1) | pre-discussion questions | post-discussion summary |
| 2/3/25 | Anna | pre-discussion questions | post-discussion summary; Peer review |
| 2/10/25 | No class (prep for exam) |  |  |
| 2/17/25 | Chris | pre-discussion questions | post-discussion summary; peer review |
| 2/24/25 | Gabriela | pre-discussion questions | post-discussion summary; peer review |
| 3/11 - 3/20 | Take leadership role in group presentation preparations in main class. |  |  |
| 4/14/25 | Peer review: News and Views draft | News and Views draft |  |
| 4/21/25 | Submit News and Views via Canvas | News and Views due |  |

**Assigned papers:**

**Anna:** [**Nardou et al., 2023 "**Psychedelics reopen the social reward](/courses/45151/files/12159073?wrap=1)
[learning critical period"](/courses/45151/files/12159073?wrap=1)

**Chris:** [**Hou et al., 2023 "Coordinated activity of a central pathway drives associative opioid analgesic tolerance"**](/courses/45151/files/12159083?wrap=1)

**Gabriela:** [**Cameron et al., 2021 "A non-hallucinogenic psychedelic analogue
with therapeutic potential"**](/courses/45151/files/12159082?wrap=1)

**\*TBD:** Announce paper choice 1 week before presentation. Ask instructor for recommendations if needed.

**What you will learn**

This is a **discussion-based** section, and the quality will be what you make of it. The goal is to learn:

* **Current literature** and research in neuropharmacology
* **Effective presentation** skills: learn from hearing others and creating your own presentations
* **Critical evaluation** of literature
* **Communication** of scientific concepts, formulating clear questions

**Deadlines:**

* [Pre-reading assignments](/courses/45151/files/12159081?wrap=1): due @ 5pm on in-class meeting days; submit online via Canvas
* [Post-discussion assignments](/courses/45151/files/12159080?wrap=1): due @ 5:00 pm the day after presentations;  submit online via Canvas
* [News and Views:](/courses/45151/files/12159071?wrap=1) due @ 5pm on 4/21; submit online via Canvas
* [Peer evaluations](/courses/45151/files/12159069?wrap=1): end of each in-class session (submit via email).

**Grade Distribution**

|  |  |
| --- | --- |
| Description | % of final grade |
| Exams (best 2 of 3) | 30% |
| Quizzes (lowest 3 will be dropped) | 10% |
| 3 homework assignments (main lecture) | 10% |
| Group presentations (main lecture): you are expected to take a leadership role in your group | 15% |
| [Adv] 1 Presentation | 15% |
| [Adv] Homework assignments (pre- and post- reading summaries) | 10% |
| [Adv] News and Views article | 10% |
| Total | 100% |

**Presentation Guidelines**

At the initial meeting, each student will sign up for (or be assigned) a day when they will be responsible for presenting a paper. See [Presentation Guidelines](/courses/45151/files/12159070?wrap=1) for  details

**Participation**

This is a discussion-based section. The class can only be as good as you make it! Each student is expected to read the article ahead of time. Be curious, ask questions, and engage!

**Homework**

Read the assigned article before class. For each in-class presentation submit 3 questions about the article that you'd like to discuss in class. Assignments are due on Canvas by 5pm at the beginning of class.

After each presentation, you have 1 week to complete the post-discussion assignment, due at 6:20pm, 1 week after the presentation. There will be no meeting on these dates--only homework submissions.

**News and Views**

Choose one of the articles we discussed (you may choose an alternative, but consult instructor at least 2 weeks ahead of due date). See [News and Views](/courses/45151/files/12159071?wrap=1) Assignment for details