

Undergraduate Neuroscience

NEUROSCI 493 / 494 /495 / 496 Research Independent Study 1, 2, 3, or 4

Overview

Research Independent Studies in Neuroscience are academic courses of scholarly content overseen by faculty principal investigators. The criteria for Research Independent Studies include:

- 1) Eligible students are typically in their junior or senior year and should have completed 2 or more Neuroscience courses (courses that carry the NEUROSCI subject code). Interested sophomores may also be eligible, but they should first discuss their plans for independent study with the Director of Undergraduate Studies in Neuroscience or the Associate Director. Students pursuing a minor in Neuroscience may also enroll in research independent study.
- 2) Mentorship is the responsibility of a faculty member (affiliated non-faculty research associates and assistants may also contribute to the supervision of the research).
- 3) Student research must focus on Neuroscience and occur primarily in a basic science or clinical science research setting. The student must explain in their proposal for research independent study how their work will contribute to the advancement of knowledge and understanding in the field of neuroscience (see proposal application).
- 4) The work should be fundamentally academic and/or scholarly in nature (acquisition of research techniques may be included as part of the experience, but should not be the primary goal of the research independent study).
- 5) Students proposing a second term of independent study on the same project should plan to enroll in NEUROSCI 494. Please note that **an approved proposal is required for enrollment in NEUROSCI 494**. In preparing a 494 proposal, the project description section should focus on the specific scientific aims and learning objectives that are to be accomplished in the second term of the research independent study. This applies to NEUROSCI 495 and 496, research independent study 3 and 4.
- 6) At the end of the term for both NEUROSCI 493 and 494, the research activities should be summarized in a **substantive written paper**, which should take the form of scientific manuscript, with Background and Significance, Methods, Results and Discussion sections (standard APA format or grant proposal format is acceptable). The precise format and length of this paper should be discussed by the student and research mentor. At the end of the term, the paper should be submitted to the research mentor for evaluation. The student's grade for the term will in part depend on the mentor's evaluation of this scholarly product. This applies to NEUROSCI 495 and 496, research independent study 3 and 4.
- 7) A copy of the final paper must be submitted electronically to Tyler Lee [tyler.lee@duke.edu] in the Office of Undergraduate Studies in Neuroscience.
- 8) No more than one term of research independent study in neuroscience will be approved for Summer Session.

Students may wish to pursue research independent study with faculty who are not presently designated as Undergraduate Neuroscience Faculty. If this is the case, the student should discuss her/his interests with the Associate Director of Undergraduate Studies in Neuroscience. If the proposed project satisfies the above criteria, the student may be directed to a faculty sponsor from among the ranks of the Undergraduate Neuroscience Faculty who will serve as a liaison between the Undergraduate Studies in Neuroscience Office and the student's faculty mentor. Under these circumstances, the student will work directly with the faculty mentor in pursuit of the research aims, but the proper conduct of the course (including grade submission) is the responsibility of the faculty sponsor.

Remember, no course credit can be awarded for paid work.

If interested in applying for research independent study in neuroscience, download, complete and submit the PDF application (see above) to the Undergraduate Studies in Neuroscience Office (DIBS B022).

Permission numbers for registration will be issued from that Office. **Proposal applications are due by 4:00 p.m. on the Friday of the first week of class.**

Neuroscience Research Independent Study Proposal Application

Complete this form and submit with your attached project proposal description.

Proposal applications are due by 4:00 p.m. on the Friday of the first week of class.

(However earlier submission of this proposal application is highly recommended.)

STUDENT NAME: _____ DATE SUBMITTED: _____

STUDENT ID #: _____ (not Duke unique ID) Expected Grad Year (sem./year): _____

AB or BS Major: _____ PHONE#: _____ E-MAIL: _____

Are you planning to Graduation with Distinction in Neuroscience? Yes _____, No _____, Undecided _____

Is this project through Bass Connections? Yes _____ No _____

Are you handing in a W code form from Trinity with this application? Yes _____ No _____

List two NEUROSCI courses you have taken toward the major: NEUROSCI _____ Term/Year _____

NEUROSCI _____ Term/Year _____

Which Neuroscience Research Independent Study course are you applying for with this proposal?

_____ NEUROSCI 493 Research Independent Study 1

_____ NEUROSCI 494 Research Independent Study 2 *(Note: 494 is a continuation of 493)*

_____ NEUROSCI 495 Research Independent Study 3 *(Note: 495 is a continuation of 494)*

_____ NEUROSCI 496 Research Independent Study 4 *(Note: 496 is a continuation of 495)*

Print the term and year you plan to take this Ind. Study: Spring _____, Fall __, Summer (1 or 2) _____, YEAR: _____

TRANSCRIPT TITLE for this project – print clearly: _____

(30 character maximum, including spaces and symbols are all that will fit on your transcript.)

PROJECT TITLE (optional for longer title): _____

PROJECT DESCRIPTION: Attach a single sheet. Description must include the overall purpose of the project, the specific aims of the study, the methods to be employed and the means for assessment (e.g., term paper prepared in scientific manuscript style, scientific poster, etc.). The description should also make clear how the proposed project is likely to advance our understanding of neuroscience. If this is a continuation (NEUROSCI 494), you may use the description from 493, however add a paragraph or so describing your plans, accomplishments, and goals you intend for the NEUROSCI 494 semester. This applies to NEUROSCI 495 and 496, research independent study 3 and 4.

REQUIRED FACULTY SIGNATURE

1.) FACULTY MENTOR: *With this signature I acknowledge that I will meet with this student weekly, and oversee the submission of the final paper describing the research done this semester.*

x _____
(signature) (print name)

Faculty Mentor Department: _____ Faculty Mentor Email: _____

This form should be completed and returned to Tyler Lee in the Office of Undergraduate Studies in Neuroscience, DIBS Rm B022. Section and Permission numbers for registration will be emailed to you from that office after approval.

Please plan ahead and consider completing and submitting your proposal before the end of the current semester, well before the due date.

FOR OFFICE USE ONLY

Associate Director of Undergraduate Studies in Neuroscience

Date

Staff assistant--Email sent: Y N