

THE UNIVERSITY OF NORTH CAROLINA AT ASHEVILLE
FACULTY SENATE

Senate Document Number 1319S
Date of Senate Approval 01/31/19

Statement of Faculty Senate Action:

APC Document 8 (NEUR): **Add new courses: NEUR 410, NEUR 490, and NEUR 499;**
 Change description of NEUR 480;

Effective Date: Fall 2019

1. Add: On page 203, new course **NEUR 410, Advanced Topics in Neuroscience:**

410 Advanced Topics in Neuroscience (4)

Addresses a specific topic in the field of Neuroscience. Topics covered may include neuropharmacology, molecular neurobiology, neurodegeneration, cognitive neuroscience, consciousness, systems neuroscience, and clinical neuroscience. May include a required laboratory experience. May be repeated as course content varies. Prerequisites: NEUR 216 and permission of instructor. Fall and Spring.

Impact: This change will not have a significant impact on the staffing, course offerings or resources of the Neuroscience program because this course number will be used for rotating elective offerings in the Neuroscience program that have recently been taught as 373 or 374 courses. One NEUR 410 course will be offered every semester, but the topic and instructor of record will vary (a table showing NEUR special topics offerings of the last 5 semesters is included below. We have been able to offer one NEUR special topics course every semester except for SP18 when Pat Foo was on Professional Development Leave and as such we had to cover the core offerings in NEUR, leaving us unable to offer an elective course). We anticipate the class size for NEUR410 to be 20 on average based on the class sizes of the NEUR special topics offerings listed below. The course learning objectives will vary based on the instructor.

This course may include a separate laboratory component similar to natural science courses, which will be listed as NEUR410.0L1 in keeping with other co-requisite laboratory courses offered in STEM departments across campus (e.g. Biology and Physics). The attached table shows the frequency of lab and non-lab NEUR courses offered in the last 5 semesters. At the moment, NEUR lab courses have been held in Zeis128, a laboratory classroom in the Chemistry department, based on the availability of the room and approval by the chair. Current chair of Chemistry, Sally Wasileski, has agreed to continue to support Neuroscience lab offerings in Zeis128 scheduled around the core Chemistry classes. After the construction of Carmichael Hall is completed, we will have an additional dedicated teaching laboratory space available for NEUR course offerings. As such, we do not anticipate this course having a major impact on space use on campus.

Faculty that will routinely teach NEUR 410 include Angel Kaur (Neuroscience, Interdisciplinary Studies), Pat Foo (Psychology), and Laura Jones (Health and Wellness Promotion). Though the table below only shows offerings by Angel Kaur, Pat Foo has been enthusiastic about offering upper-level NEUR electives for the past few semesters. With Angel now contributing to the teaching of PSYC/NEUR 216, a primary part of Pat's teaching responsibilities (Pam Laughon, Chair of Psychology, is supportive of this), Pat will now be available to offer NEUR410 while Angel teaches PSYC/NEUR 216. As such, this rotation of teaching duties will ensure the addition of this course does not have an impact on staffing for Psychology.

In meetings with HWP NEUR faculty Jason Wingert and Laura Jones, both expressed an interest in teaching NEUR410 but were concerned about their availability from HWP teaching responsibilities to do so. Amy Lanou, Chair of Health and Wellness Promotion, confirmed that while Jason’s teaching schedule does not leave room for his consistent contribution to NEUR410, she foresees Laura being able to offer one NEUR410 course every year. Laura is enthusiastic about developing a NEUR410 course exploring the neurophysiology of mental health. As such, concurrence conversations with department heads suggested that there will be minimal impact on staffing or resources.

Student course load will not be impacted by this change because it offers an elective course for declared minors, not an additional required course. In fact, students will be able to plan their course work more easily knowing that there will be a NEUR 410 course offered every semester.

Semester	Upper-level NEUR offering	Instructor	Enrollment
FA16	NEUR 374: Neuropharmacology	Kaur	7
SP17	NEUR 374: Neuroscience - Cell and Molecular (with lab)	Kaur	17
FA17	NEUR 374: Neuropharmacology	Kaur	14
SP18	<i>No special topics elective offered due to NEUR Faculty Pat Foo being on PDL, and Angel Kaur teaching NEUR/PSYC216 in his stead Michael Neelon offered NEUR 362 as an elective this semester</i>		
FA18	NEUR 374: Neuropharmacology	Kaur	16
SP19	NEUR 474: Neurodegenerative Diseases (with lab)	Kaur	

Rationale: This course listing will allow flexibility for faculty to contribute upper-level elective offerings to the Neuroscience minor as their other teaching obligations allow. As such, students will know they will have a neuroscience elective option every semester, but the faculty will be able to rotate the teaching as need be. Recently offered special topics courses in NEUR have been listed at the 300 level. However, as the courses were developed, the content and assignment structures resembled more advanced level coursework. As such, setting this elective at the 400 level allows for students to anticipate the kind of work they can expect in this elective course.

2. Add: On page 203, new course **NEUR 490, Laboratory Assistantship in Neuroscience:**

490 Laboratory Assistantship in Neuroscience (1)

Guided teaching experience in a laboratory setting. Under the direct supervision of a faculty member, the student will assist in the delivery of a neuroscience laboratory that is appropriate to the student’s experience. Students may present explanatory material to the class and will assist in the preparation of laboratory material and in the daily operation of the laboratory. May be repeated for up to three credits. Will not count toward neuroscience electives. Grading is S/U. Programmatic approval is required. See program director.

Impact: This change will have no impact on the course offerings or resources of the Neuroscience program. It will have an overall positive impact on faculty workload – even though the instructor of record will be supervising the lab assistant, the lab assistant will provide support in preparation of materials for the lab courses, which NEUR faculty have to do on their own at this time as there is no laboratory manager supporting NEUR faculty. As such, the overall workload of the faculty will in effect decrease. It will not impact student course load for Neuroscience minors because this is not a required course for all minors.

Rationale: The change will give students who wish to serve as a lab assistant in Neuroscience laboratory classes an opportunity to do so for course credit. There are currently no course structures in the catalog to allow this for Neuroscience classes, though similar courses exist in Chemistry (CHEM 411) and Biology (BIOL 499) departments. Students serving as lab assistants will already be familiar with the work being completed in the labs, as such this course will not substitute for cross-disciplinary learning in the field. This is why NEUR 490 will not count toward neuroscience elective credit, as this credit has to be earned outside of the student's major department.

3. Add: On page 203, new course **NEUR 499, Undergraduate Research in Neuroscience:**

499 Undergraduate Research in Neuroscience (1-6)

Independent research under the supervision of a faculty mentor. An IP grade may be awarded at discretion of instructor. May be repeated for a total of 6 hours credit. Permission of instructor required. Will not count toward neuroscience electives. See program director.

Impact: This change will have no known impact on the staffing (as this course traditionally does not count towards total credit hours taught), course offerings or resources of the Neuroscience program. There will be no impact on student course load, as undergraduate research will not be a required part of the minor program.

Rationale: This course listing will enable students conducting undergraduate research with Neuroscience faculty to earn credit in Neuroscience for the work they are doing, allowing for their undergraduate transcript to accurately reflect the program within which they conducted their undergraduate research. There are currently no course structures in the catalog to allow students to seek research credit for undergraduate research in Neuroscience.

While undergraduate research is an important way for students to experimentally explore neuroscience topics, it does not substitute for cross-disciplinary learning in the field, since the research work is likely to be in their major field of study. This is why NEUR 499 will not count toward neuroscience elective credit, as this credit has to be earned outside of the student's major department.

4a. Delete: On page 203, the entry for **NEUR 480:**

480 Topical Seminar in Neuroscience (1)

Students will apply neuroscience theory and knowledge during the presentation and discussion of diverse readings in topics chosen by the instructor. May be repeated as subject matter changes for a total of 3 hours of credit. Prerequisites: BIOL 136, NEUR 216 and permission of instructor. See program director.

4b. Add: On page 203, in place of deleted entry:

480 Seminar in Neuroscience (1)

Students will apply neuroscience theory and knowledge during the presentation and discussion of diverse readings from scientific primary literature in topics chosen by the instructor and students. May be repeated as subject matter changes for a total of 3 hours of credit. Prerequisites: BIOL 136, NEUR 216, and permission of instructor. See program director.

Impact: None.

Rationale: The course title and description has been changed; the description changes state that the readings are largely drawn from the scientific primary literature and that they are chosen by the instructor and the students. This change reflects how the course material has been approached in the last few offerings of this course. As such, this update to the catalog more accurately reflects the ways in which NEUR 480 is taught, and more clearly indicates to students that they should feel comfortable with reading scientific literature before enrolling in this course.