ANATOMICAL SCIENCES AND NEUROBIOLOGY (ASNB)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm).

500-level courses generally are included in both the undergraduate- and graduate-level course listings; however, specific course/section offerings may vary between semesters. Students are responsible for ensuring that they enroll in courses that are applicable to their particular academic programs.

Course Fees
Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (http://louisville.edu/bursar/fee/).

ASNB 491. Undergraduate Neuroscience Research 1-3 Units
Term Typically Offered: Fall, Spring, Summer
Prerequisite(s): PSYC 201, or permission of instructor.
Description: This is the basic course for granting course credit to undergraduates participating in laboratory research. Students engage in laboratory research activities for 3 hours per week per credit hour (e.g., students enrolled in 3 credits complete 9 hours of laboratory research activities per week).

For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

ASNB 492. Undergraduate Neuroscience Research CUE - CUE 3 Units
Term Typically Offered: Fall, Spring, Summer
Prerequisite(s): PSYC 301 and PSYC 355; declared Neuroscience major.
Description: This course is a variation of ASNB 491, one that grants CUE credit. In addition to 9 hours per week of research activity, the student must read 10 research articles over the course of the semester, meet with their mentor regularly, and create and present their findings at a departments seminar or research symposium.

Course Attribute(s): CUE - This course fulfills the Culminating Undergraduate Experience (CUE) requirement for certain degree programs. CUE courses are advanced-level courses intended for majors with at least 90 earned credits/senior-level status.

For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

ASNB 495. Honors Neuroscience Research 3 Units
Term Typically Offered: Fall, Spring, Summer
Prerequisite(s): Acceptance to the Neuroscience Honors Program (University Honors students can also enroll) and consent of instructor (i.e., consent of the faculty research mentor). This course involves the designing of experiments and collection of data in support of the honors thesis. This research course is the first in a series of two intended to yield a thesis for Honors in Neuroscience. The major focus in the first semester is to write a formal thesis proposal, have it approved, and begin data collection.

For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

ASNB 496. Honors Neuroscience Thesis - WR, CUE 3 Units
Term Typically Offered: Fall, Spring, Summer
Prerequisite(s): ASNB 491 or ASNB 495; admission to Neuroscience Honors Program (University Honors students can also enroll) and consent of instructor (i.e., consent of the faculty research mentor). Students enroll in this course in the semester that they intend to submit their Honors thesis. In order to complete this course (and earn Neuroscience Honors), the student must: 1) Form a thesis committee of three faculty, including the mentor; 2) Write a thesis paper describing the methods and results of an independent research study; and 3) Complete an oral defense and adequately address committee requests for revisions to the written thesis document.

Course Attribute(s): CUE - This course fulfills the Culminating Undergraduate Experience (CUE) requirement for certain degree programs. CUE courses are advanced-level courses intended for majors with at least 90 earned credits/senior-level status.

For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

ASNB 502. Fundamentals of Neuroscience 3 Units
Term Typically Offered: Fall Only
Prerequisite(s): PSYC 355 or permission of instructor.
Description: Basics of cellular and systems neuroscience are taught through a combination of lectures and laboratories. Topics include: electrical potentials in the nervous system, synaptic transmission, somatosensory pathways, special senses (vision, hearing, balance, taste, and smell), eye movements, motor systems and higher functions (language, sleep and wakefulness, cognition, emotion and memory).

Note: Credit may not be earned in both ASNB 502 and ASNB 602.

For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)
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<td>ASNB 514</td>
<td>Molecular Neuroscience - CUE</td>
<td>Fall Odd Years</td>
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<td>Prerequisites or corequisites: ASNB 502, BIOL 241, BIOL 329, BIOL 415, Instructor Permission</td>
<td>Fall Odd Years</td>
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<td>Prerequisites or corequisites: ASNB 502.</td>
<td>Spring Even Years</td>
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<td>ASNB 517</td>
<td>Seminar on Developmental Neurobiology - CUE</td>
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<td>Prerequisites: ASNB 502, and BIOL 329 or ASNB 514.</td>
<td>Spring Even Years</td>
<td>3</td>
<td>Prerequisites: PSYC 305, or permission of instructor.</td>
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<td>Prerequisites: PSYC 305, or permission of instructor.</td>
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<td>ASNB 530</td>
<td>Origin of Mammalian Sensory Systems and Comparative Neurobiology - CUE</td>
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<td>ASNB 566</td>
<td>Synaptic Organization of the Central Nervous System - CUE</td>
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