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/tuitionfee).

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)

ASNB 510. Gross Anatomy for Students of Physical Therapy 3 Units
Term Typically Offered: Summer Only
Description: Lectures and laboratory dissection of regions required for students of Physical Therapy.
Note: Limited to students of the Bellarmine University Physical Therapy program.
Note: Limited to 40 students maximum.

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ASNB 514. Molecular Neuroscience 3 Units
Term Typically Offered: Fall Odd Years
Prerequisite(s): ASNB 502.
Description: The purpose of this course in Molecular Neuroscience is to explore the molecular and cellular basis of nervous system development, function and diseases. The course will provide intellectual tools and skills to evaluate novel hypotheses and mechanisms in neuroscience. Special emphasis of the course will be to provide basic technical knowledge and tools to apply molecular biology concepts in the ongoing research in any area of neuroscience.

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ASNB 517. Seminar on Developmental Neurobiology 3 Units
Term Typically Offered: Spring Even Years
Prerequisite(s): ASNB 502, and BIOL 329 or ASNB 514.
Description: The purpose of this course is to provide the student with a basic understanding of the processes and mechanisms of neural development. Specific topics include emergence of the neural primordium, patterning and growth of the nervous system, neuronal determination, axonal navigation and targeting, neuron survival and death, synapse formation, synaptic refinement and the formation of specific connections.

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

ASNB 566. Synaptic Organization of the Central Nervous System 3 Units
Term Typically Offered: Spring Odd Years
Prerequisite(s): ASNB 502.
Description: The purpose of this course is to provide the student with a basic understanding of synaptic circuits and the techniques used to study them. Each week we will focus on a different brain region or circuit. During the first meeting of each week the instructor will provide an overview of the topic which includes both lecture and reading material. During the second meeting of each week, students will meet with a graduate student teaching assistant to review and discuss the course material presented that week.

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