

DEPARTMENT OF BIOCHEMISTRY AND CELLULAR AND MOLECULAR BIOLOGY

Add R designated course:

BCMB 452R – Independent Research in Biochemistry and Cellular and Molecular Biology

1-3 Credit Hours

Special experimental problems under direction of a faculty member.

Repeatability: May be repeated. Maximum 12 hours.

Credit Restriction: Maximum 3 hours may be applied toward the Biochemistry and Cellular and Molecular Biology concentration.

Recommended Background: 1 hour of BCMB 200.

Registration Permission: Consent of instructor.

Add new courses:

BCMB 609 – Journal Club in Plant Biology

1 Credit Hour

Readings and discussion based on current literature.

Repeatability: May be repeated. Maximum 12 hours.

Registration Restriction(s): Minimum student level – graduate.

BCMB 623 – Plant Growth and Development

3 Credit Hours

Growth and differentiation of plants at molecular, cellular and organismal levels. Regulation of development; macromolecular interpretation of differentiation, dormancy, germination, flowering, and senescence.

This class is intended for doctoral students.

(DE) Prerequisite(s): 401.

Recommended Background: One semester of introductory plant physiology or cell biology.

Revise prerequisites:

BCMB 423 – Neural Basis of Behavior (3)

Revise prerequisite to:

(RE) Prerequisite(s): Biology 159-160 or equivalent.

Formerly: (RE) Prerequisite(s): 415 or Psychology 461.

Revise title and description:

BCMB 523 – Plant Growth and Development

3 Credit Hours

Growth and differentiation of plants at molecular, cellular and organismal levels. Regulation of development; macromolecular interpretation of differentiation, dormancy, germination, flowering, and senescence. This class is intended for Masters students.

Formerly:

BCMB 523 – Advanced Plant Physiology II

3 Credit Hours

Growth and differentiation of plants at molecular, cellular and organismal levels. Regulation of development; macromolecular interpretation of differentiation, dormancy, germination, flowering and senescence.

Revise course title:

BCMB 550 – Advanced Concepts in Neurobiology

3 Credit hours

Formerly:

BCMB 550 – Advanced Concepts in neurobiology/Physiology

3 Credit hours

Revise course title:

BCMB 605 – Neuroscience Journal Club

1 Credit hour

Formerly:

BCMB 605 – Journal Club in Neurophysiology/Physiology

1 Credit hour

Biological Sciences Major, Biochemistry and Cellular and Molecular Biology Concentration, III. Select (13 total hours), A. Select at least 2 credit hours from laboratory courses, revise entry:

BCMB 452 – Independent Research in Biochemistry and Cellular and Molecular Biology (Maximum of 3 hours may be applied toward the Biochemistry and Cellular and Molecular Biology Major.)

Formerly:

BCMB 452 – Independent Research in Biochemistry and Cellular and Molecular Biology.

Biological Sciences Major, Biochemistry and Cellular and Molecular Biology Concentration, III. Select (13 total hours), B. Select one physiology course, add course to list:

BCMB 423 – Neural Basis of Behavior

Biological Sciences Major, Biochemistry and Cellular and Molecular Biology Concentration, Honors Option, 4th bullet, revise to:

Note: No more than 4 total credit hours combined from BCMB 452 and BCMB 457 may be applied toward the BCMB concentration.

Formerly:

Note: No more than 6 total credit hours combined from BCMB 452 and BCMB 457 may be applied toward the BCMB concentration.

Add new minor to be housed in the Department of Biochemistry and Cellular and Molecular Biology:

Interdisciplinary Graduate Minor in Neuroscience

The Departments of BCMB and Psychology in the College of Arts and Sciences; the Departments of EECS, MABE, and ISE in the College of Engineering; and the Department of Child and Family Services in the College of Education, Health and Human Sciences participate in the Interdisciplinary Graduate Minor in Neuroscience (IGMN) program. Any student pursuing a master's or PhD with a major in these departments can receive a minor in Neuroscience by completing the appropriate IGMN requirements. For further information, see the description of the IGMN below or visit the IGMN web site at <http://IGMN.utk.edu/>.

The Interdisciplinary Graduate Minor in Neuroscience (IGMN) is a formal academic program at the University of Tennessee established to allow students to earn a minor in Neuroscience simultaneously with a master's or doctorate in another academic discipline. The program is open to graduate students in all departments that have approved the IGMN program. The program is administered by a committee composed of representatives, including program faculty, from all colleges that have approved the IGMN program.

The graduate minor consists of a Neurobiology course (BCMB 550; 3 credit hours), a Neuropsychology elective (PSYC 524, 525, or 527; 3 credit hours), one additional course from the approved list of electives (3 credit hours), and the Workshop on Computational Neuroscience.

Requirements

9 credit hours of courses plus one workshop.

Neuroscience is an interdisciplinary field of science. Faculty members from BCMB, Chemistry, Psychology, Child and Family Studies, Computer Science, Biomedical Engineering, Industrial Engineering, Nursing and many other disciplines across the university are engaged in research and training that contribute to and enhance our understanding of the brain. Because modern Neuroscience demands computational and analytical skills that supplement an understanding of nervous system function, the IGMN program is designed to provide students seeking an advanced degree in one of the participating departments with additional knowledge and experience centered on Neuroscience research and computational analyses. In addition to the core courses, the minor currently includes elective courses in EECS, MABE, and Psychology, which are selected according to a plan approved by the respective home departments and then approved by the IGMN Program Committee.

Procedures

The student's home department (i.e., the department in which the student is currently pursuing an advanced degree) must have approved a program of courses with the IGMN Program Committee prior to declaration of the IGMN minor. That program will specify the Neuroscience courses, selected from the IGMN approved list, that are considered appropriate by the home department, and the home department must verify fulfillment of non-Neuroscience degree requirements. Students wishing to participate in this program should contact their college representatives or the Chair of the IGMN Program Committee.

The student's graduate committee must include a member of the IGMN faculty.

The student's Admission to Candidacy form must contain all courses required for the chosen degree program delineated and labeled "Courses required for the minor in Neuroscience." Should the student decide not to apply for admission to the program until after completion of some of the courses, the student's major professor should file a program change with the cooperating departments and assist the student in obtaining an IGMN faculty member to serve on the student's graduate committee.

Successful completion of the graduate minor in Neuroscience is recognized by appropriate documentation on the student's transcript. Students who do not complete the requirements of the minor will still receive academic credit for the courses they have successfully completed. For more information contact Dr. Rebecca Prosser at rprosser@utk.edu or visit <http://IGMN.utk.edu/>.