UNIVERSITY FACULTY SENATE FORMS
UGS0246
Academic Program Approval

This form is a routing document for the approval of new and revised academic programs. Proposing department should complete this form. For more information, call the Faculty Senate Office at 831-2921.

Submitted by: _____Brian Ackerman_____phone number_____2385_____

Department: _____Psychology_____email address_bpa@psych.udel.edu___

Date: _____October 4, 2012_____

Action: ___Revise Neuroscience BS Major_____
(Example: add major/minor/concentration, delete major/minor/concentration, revise major/minor/concentration, academic unit name change, request for permanent status, policy change, etc.)

Effective term_____September 2013_____
(use format 04F, 05W)

Current degree_____Bachelor of Science_____
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed change leads to the degree of: _____Bachelor of Science_____
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed name:_____Bachelor of Science in Neuroscience_____
Proposed new name for revised or new major / minor / concentration / academic unit (if applicable)

Revising or Deleting:

Undergraduate major / Concentration:___BS in Neuroscience_____
(Example: Applied Music – Instrumental degree BMAS)

Undergraduate minor:_____
(Example: African Studies, Business Administration, English, Leadership, etc.)

Graduate Program Policy statement change:_____
(**Must attach** your Graduate Program Policy Statement)

Graduate Program of Study:_____
(Example: Animal Science: MS Animal Science: PHD Economics: MA Economics: PHD)

Graduate minor / concentration:_____

Note: all graduate studies proposals must include an electronic copy of the Graduate Program Policy Document, highlighting the changes made to the original policy document.

List new courses required for the new or revised curriculum. How do they support the overall program objectives of the major/minor/concentrations)?
(Be aware that approval of the curriculum is dependent upon these courses successfully passing through the Course Challenge list. If there are no new courses enter "None")

None of the courses below are required. But all are optional. The goal of NSCI100 is to provide an early exposure to neuroscience in the freshman year, primarily for majors. Otherwise, majors do not typically take a neuroscience introductory course until the fourth semester. PSYC437 expands the set of PSYC and NSCI options at the 400-level for majors (must take two). The NSCI6XX courses expand the optional set of dedicated NSCI courses students must take at the 600-level. Students are required to take two and often take more than two. These courses will be taught every two years on average. The reason for this expansion is that the smaller set of 6XX courses are overenrolled (often 25 in each class) and the Behavioral Neuroscience and Cognitive Science faculties have new members who can offer important courses for preparation of NSCI undergraduate students for graduate schools and professional training. In sum, the numbers of NSCI majors has increased dramatically over the last three years, and we need to offer more courses to meet the needs of majors.

NSCI100 Psychology and Brain Science
PSYC431 Hormones and Behavior
NSCI635 Neuroplasticity
NSCI636 Spatial Cognition
NSCI637 Behavioral Epigenetics
NSCI638 Clinical Neuropsychology
NSCI639 The Emotional Brain
NSCI640 Immune System and Behavior
NSCI641 Hormones and Behavior
NSCI642 Social Neuroscience
NSCI643 Body and Space

Explain, when appropriate, how this new/revised curriculum supports the 10 goals of undergraduate education: http://www.ugs.udel.edu/gened/

The revised curriculum, with its strong science emphasis, enhances critical thinking skills (Goal 2), and systematically instructs about the relations and methods of examining those relations between brain, mind, and behavior (Goals 5 and 6: methods of search for knowledge, and intellectual curiosity and engagement).

Identify other units affected by the proposed changes:
(Attach permission from the affected units. If no other unit is affected, enter "None")

Department of Biological Sciences. We have attached a letter of support.

Describe the rationale for the proposed program change(s):

(Explain your reasons for creating, revising, or deleting the curriculum or program.)

1. We now include a new introductory course (NSCI100) as an option (to PSYC100) so that students could get systematic exposure to neuroscience concepts early in their college careers, rather than in the 4th semester for the typical student. The early exposure should encourage a more informed selection of majors and courses.

2. At the request of BISC, we have rationalized our BISC requirements for the major. BISC requested this change to relieve enrollment pressure on BISC labs. In this regard, we have added one additional lab (BISC413), and so have helped spread out the demand across more labs. We also have increased the credit requirements, in accord with the increase in credits for the lab courses from 2 credits to 3.

3. We have added courses at the 400-level as options for students. One goal is to increase the neuroscience component of the set of options (e.g., more NSCI courses). Another is to open up more topical courses (e.g., stress and the brain) that would be of interest to both PSYC and NSCI students, and thus help increase the exposure of PSYC majors (BS and BA) to brain concepts.

4. We now restrict the number of NSCI and PSYC courses (a maximum of four) that NSCI majors can count for a double major in Psychology (BA or BS). Our intent here is to make the majors more distinctive and make it non-trivial for an NSCI major to double major. Absent this constraint, many students in completing the NSCI major will have 21 credits toward the Psychology major, and can too easily double major by taking three more courses.

5. We have increased the roster of 600-level courses available for NSCI majors. The goal is to relieve enrollment pressure on a few courses and increase the diversity and topicality of the offerings. The more complete roster should enhance the competitiveness of NSCI majors for graduate school and professional training.

Program Requirements:

(Show the new or revised curriculum as it should appear in the Course Catalog. If this is a revision, be sure to indicate the changes being made to the current curriculum and **include a side-by-side comparison** of the credit distribution before and after the proposed change.)

The University and College requirements are not different in the new and old majors. We put the side by side comparisons only for the specific course requirements for the major.

DEGREE: BACHELOR OF SCIENCE
MAJOR: NEUROSCIENCE

Curriculum		Credits
ENGL 110	Critical Reading and Writing	3
First Year Experience (see page xx)		0-4
Discovery Learning Experience (see page xx)		3
Three credits in an approved course stressing multicultural, ethnic, and/or gender-related course content (see pages xx)		3

COLLEGE REQUIREMENTS

Foreign Language		0-12
Breadth Requirements		18
(Minimum of 6 credits each in Groups A, B, & C)		
Second writing requirement		3

OlD MAJOR REQUIREMENTS		53/54
Biological Sciences		16
BISC207	Introductory Biology I	4
BISC208	Introductory Biology II	4
BISC403	Genetics & Evolutionary Biology	3
Both of these courses:		
BISC306	General Physiology	3
BISC316	Experimental Physiology	2
Or both of these courses:		
BISC305	Cell Physiology	3
BISC315	Experimental Cell Physiology	2
Or both of these courses:		
BISC401	Molecular Biology of the Cell	3
BISC411	Experimental MB of the Cell	2

NEW REQUIREMENTS		54/55*
		17*
BISC207	Introductory Biology I	4
BISC208	Introductory Biology II	4
BISC403	Genetics & Evolutionary Biology	3
One of these courses:		
BISC305	Cell Physiology	3
BISC306	General Physiology	3
BISC401	Molecular Biology of the Cell	3*
One of these laboratory courses:		
BISC315	Experimental Cell Physiology	3*
BISC316	Experimental Physiology	3*
BISC411	Experimental MB of the Cell	3*
BISC413	Advanced Genetics Laboratory	3*

Students wishing to satisfy the **pre-med** requirements are advised but not required to take BISC401 and BISC411.

Related Sciences		16
PHYS201/202	General Physics I & II	8
CHEM103/104	General Chemistry I & II	8
Psychology		12
PSYC100	General Psychology	3
PSYC209	Measurement & Statistics	3
Two of the following courses:		
PSYC310	Sensation & Perception	3
PSYC312	Learning & Motivation	3
PSYC340	Cognition	3
NSCI414	Drugs and the Brain	3
NSCI433	Cognitive Neuroscience	3

Related Sciences		16
PHYS201/202	General Physics I & II	8
CHEM103/104	General Chemistry I & II	8
Psychology		12
PSYC100	General Psychology	3*
or		
NSCI100	Psychology and Brain Science	3*
PSYC209	Measurement & Statistics	3
Two of the following courses:		
PSYC310	Sensation & Perception	3
PSYC312	Learning & Motivation	3
PSYC340	Cognition	3
NSCI414	Drugs and the Brain	3
PSYC428	Nature versus Nurture	3*
PSYC431	Hormones and Behavior	3*
NSCI433	Cognitive Neuroscience	3

Note: NSCI majors can count a maximum of four of these NSCI and PSYC courses for a double major in Psychology (BA or BS). *

Neuroscience		9/10
NSCI320	Introduction to Neuroscience	3
One of the following courses:		
NSCI626	Advanced Neuroanatomy	3

Neuroscience		9/10
NSCI320	Introduction to Neuroscience	3
One of the following courses:		
NSCI626	Advanced Neuroanatomy	3

NSCI627	Advanced Neurophysiology	3
NSCI628	Advanced Neuropharmacology	3

One of the following courses:

NSCI631	Integrative Neuroscience I	3
NSCI632	Integrative Neuroscience II	3
NSCI633	Current Topics in Neuroscience	3
BISC639	Developmental Neurobiology	4

NSCI627	Advanced Neurophysiology	3
NSCI628	Advanced Neuropharmacology	3

One of the following courses:

NSCI629	Integrative Neuroscience I	3
NSCI630	Integrative Neuroscience II	3
NSCI631	Current Topics in Neuroscience	3
NSCI634	Stress and the Brain	3*
NSCI635	Neuroplasticity	3*
NSCI636	Spatial Cognition	3*
NSCI637	Behavioral Epigenetics	3*
NSCI638	Clinical Neuropsychology	3*
NSCI639	The Emotional Brain	3*
NSCI640	Immune System & Behavior	3*
NSCI641	Hormones and Behavior	3*
NSCI642	Social Neuroscience	3*
NSCI643	Body and Space	3*
NSCI667	Varied Topics	3*
BISC639	Developmental Neurobiology	4

*designates changes from the old curriculum.

ROUTING AND AUTHORIZATION: (Please do not remove supporting documentation.)

Department Chairperson _____ Date _____

Dean of College _____ Date _____

Chairperson, College Curriculum Committee _____ Date _____

Chairperson, Senate Com. on UG or GR Studies _____ Date _____

Chairperson, Senate Coordinating Com. _____ Date _____

Secretary, Faculty Senate _____ Date _____

Date of Senate Resolution _____ Date to be Effective _____

Registrar _____ Program Code _____ Date _____

Vice Provost for Academic Affairs & International Programs _____ Date _____

Provost _____ Date _____

Board of Trustee Notification _____ Date _____

Revised 02/09/2009 /khs