

Howie, Cheryl

From: Shenkle, Cynthia W.
Sent: Thursday, September 18, 2008 2:38 PM
To: 'Brian P. Ackerman'
Cc: 'Anthony Seraphin'; Howie, Cheryl
Subject: FW:
Attachments: AcadProgApprovNSCI.doc

Brian,
I'm forwarding this to Cheryl Howie for inclusion on the Ed. Affairs agenda for Friday, 9/2. Brian.

We'll look for the other pieces to arrive and the signed hard copies.

Thank you..

Cindi

From: Brian P. Ackerman [mailto:bpa@psych.udel.edu]
Sent: Thursday, September 18, 2008 11:42 AM
To: Shenkle, Cynthia W.; Anthony Seraphin
Subject:

Cindi,

I attach another curriculum proposal. This one is about a new BS degree/major in Neuroscience. I wanted to get this proposal on the agenda asap in an effort to get it to the upcoming A & S senate meeting. Of course, there may be problems with it that require a delay, but so be it. I will send over hard copy on Monday with Tom DiLorenzo's signature (he's out of town, back on Monday) and with two letters of support from DiLorenzo and Dan Carson (chair of Biological Sciences). I haven't got letters from the Chemistry and Physics chairs because the new BS doesn't add anything to contributions already in place.

Brian

UNIVERSITY FACULTY SENATE FORMS

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

Action: Propose new BS in Neuroscience
(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 09F
(use format 04F, 05W)

Current degree None
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

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

Proposed name: Neuroscience
Proposed new name for revised or new major / minor / concentration / academic unit (if applicable)

Revising or Deleting:

Undergraduate major / Concentration: _____
(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")

When the major label (NSCI) is approved, we will propose NSCI versions of courses already on the books in Psychology or Biological Sciences. The graduate courses will be retitled. Note that there is no mechanism to propose courses in NSCI without prior approval of the NSCI program. These courses are:

PSYC320 Introduction to Neuroscience
PSYC414 Drugs and the Brain
PSYC433 Cognitive Neuroscience

PSYC614 Psychopharmacology (retitled Advanced Neuropharmacology)
PSYC626 Neuroscience I (retitled Advanced Neuroanatomy)
PSYC626 Neuroscience II (retitled Advanced Neurophysiology)

BISC439/639 Developmental Neurobiology

We will also propose three new courses:

NSCI631 Integrative Neuroscience I
NSCI632 Integrative Neuroscience II
NSCI633 Current Topics in Neuroscience

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

This new major supports goals 2, 5, 6, and 7 of the 10 goals of undergraduate education. Students will learn to think critically and will learn to think scientifically about the human brain. In addition the curriculum encourages curiosity in an emerging field, will enable evaluation of claims about brain processes and their implications in the popular press, and will enable application of brain concepts to real world problems involving mental illness, psychopharmacology, etc.

Identify other units affected by the proposed changes:

(Attach permission from the affected units. If no other unit is affected, enter "None")

The new major reflects strong contributions from the Biological Sciences and Psychology Departments. We attach approvals from those departments.

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

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

While neuroscience's roots are found in psychology and biology, during the last three decades, neuroscience has emerged as a coherent, independent discipline to study the brain. There are now over 38,000 members of the Society for Neuroscience worldwide and the Society continues to grow (Society for Neuroscience website:
http://apu.sfn.org/index.cfm?pagename=membership_AboutMembership§ion=membership).

Currently, the University offers an interdepartmental major in Neuroscience. This major began in the late 1980s and has been co-sponsored continuously by the Departments of Psychology and Biological Sciences. The current interdepartmental major attracts excellent students in Psychology and Biological Sciences, with about 15 students participating each year (about 60 across four years). In this interdepartmental major, students graduate with two degrees, one in Psychology and one in Biological Sciences. Unfortunately, this arrangement is unfocused and requires course work that has little to do with neuroscience, it overloads the student with required course-work, and it often is an impediment for admission to graduate studies in competition with students from other universities with neuroscience majors.

We believe a new Bachelor of Science in Neuroscience major will best serve the University and undergraduate students. To keep current with the increased importance of neuroscience in research, health, and society, undergraduate students interested in neuroscience need to graduate with a dedicated degree in Neuroscience. Moreover, the lack of a diploma that specifies a Bachelor of Science in Neuroscience has deterred many students from declaring a major in Neuroscience under our current system. Students want their diploma to read BS in Neuroscience. They are proud of their education in neuroscience and want credit for it.

The new major will be administered by the Psychology Department that currently houses five neuroscientists and their laboratories. Another neuroscientist will join the faculty in 2009. In addition, many faculty members of the Department of Psychology in Cognitive Science and in Clinical Science share neuroscience perspectives and will actively support the major. The new major features heavy doses of courses in Biological Sciences, Psychology, and related sciences (Chemistry and Physics). However, the major imposes no new demands on these departments or their faculties, as the current students in the interdepartmental program are already taking relevant courses in the departments. Similarly, most of the proposed graduate classes in Neuroscience are already serving graduate students in the Behavioral Neuroscience Program in Psychology. The three new 600-level courses that will be proposed will also serve those graduate students and will constitute an integral part of that reconstituted graduate program. The new undergraduate BS major imposes no additional burden.

In regards to the University, an interdisciplinary Neuroscience major fits well with the University's new interdisciplinary educational and health initiatives. Neuroscience has been and will continue to be a quintessentially interdisciplinary field increasingly stimulating new perspectives in numerous fields, including psychology, medicine, engineering, computer science, sociology, philosophy, and economics. Many of the future advances in health and medicine will be in neurological and psychological disorders, and will be developed through research in neurosciences.

As the University moves forward with its Pathways to Prominence, and as our students demand forward-looking degree programs, we think that a restructured interdisciplinary neuroscience major with a Bachelor of Science degree will best serve both the University and its students.

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.)

Neuroscience

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 10/23/2007 /khs