Proposed Substantive Change to an Existing Degree: Academic Components

1. Please describe and provide a rationale for the proposed change to the existing degree:

Description of proposed change:

We are proposing that current course CAS PS 231 (Physiological Psychology) become a specifically required principal course for the undergraduate Major in Psychology.

The major currently requires a total of 10 courses, distributed as follows:

1. Prerequisite: CAS PS 101 (General Psychology)

2-9. **Eight principal courses**, including four at the 300-level or higher, one of which must be a course in experimental psychology numbered PS 322-PS 328; and also including at least two courses from broad content Group A (perception, physiological psychology, learning, cognition) and at least two from broad content Group B (development, personality, and social and abnormal psychology). PS 231 (Physiological Psychology) is currently one of nine courses that may be taken toward fulfillment of the two-course Group A requirement.

10. CAS PS 211 (Introduction to Experimental Design in Psychology)

The revised major would require a total of 11 courses:

1. Prerequisite: CAS PS 101 (General Psychology)

2-10. **Nine principal courses, including CAS PS 231 (Physiological Psychology)**, at least two courses from broad content Group A [now excluding PS 231], at least two courses from broad content Group B, and at least four courses at the 300-level or higher, one of which must be a course in experimental psychology numbered PS 322-PS 328

11. CAS PS 211 (Introduction to Experimental Design in Psychology)
Rationale:

The specific requirement of PS 231 reflects the fact that the field of psychology is becoming increasingly biological in focus. It is important for all students in the major, whatever their particular interests and motivations, to acquire broad, up-to-date knowledge and understanding of brain structure and function and the biological bases of behavior. CAS PS 231 provides a comprehensive introduction to analysis of the central nervous system and its role in information processing and decision-making, with emphasis on physiological aspects of perception, attention, learning, and memory.

2. Please describe how the proposed change(s) advances the Strategic Plan of the school/college and of the University plan:

The CAS Strategic Plan calls for “periodic, comprehensive review of current majors.” This modification to the Major in Psychology results from such a review. On the recommendation of the department’s curriculum review committee, the Psychology (now, Psychological & Brain Sciences) faculty voted unanimously on November 20, 2013 to make PS 231 a specific requirement of the undergraduate major. It is the consensus view of the faculty that strong grounding in brain science is needed to prepare students for graduate study and careers in the field.

3. Please list the program requirements for the current and revised programs: (expand the table as needed and denote new courses in bold print)

<table>
<thead>
<tr>
<th>Current program</th>
<th>Revised program</th>
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<tbody>
<tr>
<td>Students must complete at least 4 courses in Psychology at the 300-level or above.</td>
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<tr>
<td>Prerequisite: PS101 (General Psychology)</td>
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<tr>
<td>Experimental Psychology course: PS 322, 323, 324, 325, 326, 327, or 328</td>
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<td></td>
<td>PS 231 (Physiological Psychology)</td>
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<td>Three additional Psychology courses</td>
<td>Three additional Psychology courses</td>
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<tr>
<td>Design and Statistical Course: PS211 (Intro to Experimental Design) or MA 116 or MA 214</td>
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4. Please list learning outcomes for the revised program:

The new requirement does not change but strengthens our learning outcomes listed below.

*Students graduating with a major in Psychology are able to:*

1. Demonstrate fundamental knowledge and comprehension of the major concepts, theoretical perspectives, historical trends, and empirical findings in psychology.

2. Understand basic research methods in psychology including design, data analysis, and interpretation; and utilize this knowledge to conduct their own psychological research, with an appreciation of the ethical issues involved in human and animal research.

3. Engage in scientific reasoning and problem solving so that they can evaluate the quality and implications of scientific research.

4. Write empirical research reports and literature reviews in APA (American Psychological Association) style, present findings from scientific research, and discuss how psychological principles apply to daily life (e.g., decision making, social interactions).

5. How does the change place your program in the context of programs at peer institutions?

We believe that this change places our major in the educational vanguard in ways consistent with trends in the field and the expertise of our faculty, as also reflected in the department’s recently approved name change from “Psychology” to “Psychological and Brain Sciences.” Most of our peer intuitions also require a course in biological bases of behavior, neuroscience, or cognition, although they do not require a specific course in physiological psychology. For example, Columbia requires at least one course from a psychobiology and neuroscience group. NYU requires a course in cognition, perception, or neuroscience. Syracuse requires one course in cognitive neuroscience, and USC requires 4 courses selected from five areas, one of which is biological bases of behavior.

The number of courses required for our revised major will be 11 (12 if students opt to take MA115 & MA116, which also fulfill the divisional requirement in computational and mathematical sciences, rather than PS211, to fulfill the statistics requirement). The number of required courses at our peer institutions ranges from 9 to 12 (Columbia = 10, NYU = 9, Syracuse = 10, USC = 12,).

6. How does the change affect other academic units?

The only other unit this change would affect directly is the Undergraduate Program in Neuroscience. (Please see attached cognate comment.) Those students who double major in Neuroscience and Psychology would not be required to take PS 231 provided they have taken NE101, which has significant overlap with PS231. Students may not take NE 101 for credit if they have completed PS 231; nor may they take PS 231 for credit if they have completed NE 101. Students who double major must count NE 101/PS 231 as one of their overlapping
7. How will you notify current students of the proposed changes and implement the requirements?

All students who become Psychology majors beginning in September 2014 will be required to fulfill the new requirements. Students who were Psychology majors before 2014 would not be required to fulfill the new requirement. We will send an email to all students who become Psychology majors in fall of 2014 outlining the new requirements. In addition, the new requirements will be outlined during summer 2014 Orientation sessions for incoming freshman and transfer students, and reviewed at the orientation sessions Dr. Joanne Hebden Palfai holds for all new Psychology majors each semester. All department literature (e.g., graduation requirements checklist, undergraduate handbook, etc.) and all information on our web site will be revised to reflect this change. We will also revise the information on our requirements in the undergraduate programs bulletin.

8. Please document any implications that the change has on professional accreditation or licensure at the program or school/college level:

None

9. Please list the resources needed including IT, new faculty, new staff, reassignment of faculty from existing courses to new ones (especially if the existing course(s) is not being removed from the bulletin), technology enhanced classrooms, office space, and other facilities:

We currently offer one section of PS 231 in each (Fall and Spring) semester of the academic year.

We would be adding two sections of PS231 per annum, one in the fall and one in the spring. In order to do that, we will need one additional (0.5 AY TF) for the fall section of PS 231, and one additional part-time Lecturer to cover the section of PS 101 whose full-time instructor would be reassigned to the new spring section of PS 231. We would also need to add two sections to existing Group A course offerings because of the enrollment pressure that will result from removing PS231 from that list. This would be accomplished by the addition of one AY TF or two part-time Lecturers.
Cognate Comment Request

TO: Name: Dr. Paul Lipton, Director, Undergraduate Neuroscience Program

Department: Psychology

FROM: Name: Dr. Joanne Hebden Palfai, Director of Academic Affairs & Undergraduate Studies

Department: Psychology

Telephone: 617-353-2064 E-mail jpfal@bu.edu

Course Number: CAS PS 231

Course or Program Title: Physiological Psychology

Note: Psychology is requesting that this course be required for all psychology majors. Double Majors in Neuroscience and Psychology would not be required to take PS231 provided they have taken NE101. Students may not take NE 101 for credit if they have completed PS 231, nor may they take PS 231 for credit if they have completed NE 101. Students who double major must count NE 101/PS 231 as one of their five overlapping courses.

Our Department would like to request cognate comments on this course (or program). A complete proposal is attached for your review. If you need further information, please do not hesitate to contact me.

Kindly return the signed original to me by December 3, 2013 so that I may include your comments when submitting our proposal for review and approval. Please do not send any cognate letters directly to the dean's office. Thank you.

COMMENTS: Neuroscience fully endorses this plan with no objections.

Please explain fully any objections.

Signature: Date: 11/26/2013

Title: Director, UG Neuroscience