UNIVERSITY OF MARY WASHINGTON – PROGRAM CHANGE PROPOSAL

Electronically submit this completed form with attachments to the Chair of the College Curriculum Committee.

**COLLEGE (check one):**
- Arts and Sciences **x**
- Business
- Education

Proposal Submitted By: Debra Steckler
Date Prepared:

Department /Program: Psychology

Note: for any program change entailing the addition any new courses, or revisions to existing courses, separate proposal for those course actions must also be submitted.

**PROPOSAL TO CHANGE EXISTING PROGRAM** (check one of the following)

- Revise requirements for existing major
- Revise requirements for a concentration within an existing major
- Revise requirements for an existing degree program
- Revise requirements for existing certificate program
- Revise requirements for existing minor

**Implementation Date:** FALL semester, year:

**REQUIRED ATTACHMENTS FOR CHANGES TO EXISTING PROGRAMS:**

1. **Rationale statement** (Why is this program change needed? What purposes will it serve?)
2. **Impact Statement** (Provide details about the Library, space, budget, technology, and impacts created by this program change. Supporting statements from the Library, IT Department, etc. evaluating the resource impact and feasibility of the program change are required.)
3. **Catalog Copy** (Provide the existing Catalog Description and the complete statement of the proposed new Catalog description that reflects the program changes)

**PROPOSAL TO CREATE PROGRAM NOT REQUIRING STATE ACTION** (check one of the following)

- New concentration within existing major Name:
- New minor Name: Neuroscience
- New Major but NOT a new degree* Name:

*Use ONLY for interdisciplinary majors that will be grouped as part of the “Special Majors/General Liberal Arts and Sciences” degree (CIP Code 24.0101) or reported as a BLS degree (CIP Code 24.0199)

**Implementation Date (semester and year):** Fall 2013

**REQUIRED ATTACHMENTS FOR NEW PROGRAMS NOT REQUIRING STATE APPROVAL:**

1. **Rationale statement** (Why is this additional program needed? What purposes will it serve?)
2. **Impact Statement** (Provide details about the Library, space, budget, technology, and impacts created by this program change. Supporting statements from the Library, IT Department, etc. evaluating the resource impact and feasibility of adding the new program are required.)
3. **Catalog Copy** (Provide the complete Catalog Description for the proposed new program)

**Department Chair Approval:** Debra Steckler ____________________________ Date: Sep. 4, 2012

**CCC Chair Approval:** Bradley Hansen ____________________________ Date: Sep. 19, 2012

**Dean Approval:** Richard Finkelstein ____________________________ Date: Oct. 5, 2012

**UCC Chair Approval:** ____________________________ Date:__________

**Provost Approval:** ____________________________ Date:__________

*Required only in cases of proposals for new concentrations, new minors, or new majors that do not involve a new degree

Program Change Proposal Cover Sheet (July 2012)
To: Brad Hansen, Chair, Curriculum Committee

From: Debra C. Steckler, Chair, Department of Psychology

Date: September 4, 2012

RE: Proposal for a Neuroscience Minor

The Departments of Psychology and Biological Sciences propose a new minor in Neuroscience. The Psychology Department will be the host department. We would like the Neuroscience minor to take effect Fall, 2013.

The requirements for the Neuroscience minor are as follows:

Required courses:
- Psyc 305 Cognitive Neuroscience (3)*
- Psyc 394 Psychopharmacology (3)*
- Psyc 374 Biological Psychology (3)*
- Biol 340 Cellular Biology (4)
- Biol 410 Neurobiology (4)

Total hours required for Minor: 17

*only two of the Psychology courses can count toward the Psychology major requirements.

Rationale for why the Neuroscience minor is needed at UMW. Neuroscience is the interdisciplinary study of the brain and the nervous system. Much of neuroscience focuses on the brain, but it also examines how nerves form networks and how the brain and neuroendocrine system control behavior. Advances in neural imaging technology, molecular genetics, and bioinformatics have positioned neuroscience as one of the most rapidly developing areas of psychology and biology today. Furthermore, surging interest in psychiatric disorders, traumatic brain and spinal cord injury, and Alzheimer’s disease is creating growing demand for professionals trained in neuroscience. A minor in neuroscience would help both psychology and biology majors keep abreast of scientific progress in this discipline and help prepare them for emerging career opportunities.

A recent review of the Psychology programs of our peer institutions, COPLAC group, and strongest in-state competitors for prospective students (e.g. Christopher Newport University, James Madison University) shows that every institution offers an array of experiences in the study of brain/behavior relationships. We cannot neglect this area if we hope to attract students who are interested in neuroscience and to train students who are competitive in both the job market and in acceptance to top graduate programs. Demand for psychiatry alone is expected to increase substantially within the next two decades, and a 100% increase in demand for child psychiatrists is anticipated by 2020.

Anecdotally, this proposed neuroscience minor is in demand among UMW students. Several students in just the first two days of this semester have expressed interest in this minor. New faculty who have expertise in the biological basis of behavior, including brain function, have recently been added to the Department of Psychology. The psychology major has been redesigned to include a greater emphasis
on biopsychology. Additionally, it now has a new prerequisite structure that would allow biology majors to efficiently complete a neuroscience minor. Therefore, the curricular resources are now in place to offer a structured neuroscience program.

The Neuroscience minor would be an appropriate minor for anyone interested in a psychiatric health-care career including general medicine or nursing, but especially psychiatry, pharmacology, psychiatric nursing, clinical psychology, or cognitive rehabilitation. This minor would also provide a strong undergraduate foundation for further training in a graduate program in neuroscience or psychobiology.

Resource impact.

Library. Because the neuroscience minor draws upon courses already in existence, no additional library resources are needed. Simpson library currently subscribes to necessary journals in this field, such as the Journal of Neuroscience Research, Cognitive Neuroscience, Basic and Clinical Neuroscience, and the Annual Review of Neuroscience, among others.

Staff. Similarly, no additional staffing requirements would be necessary upon implementation of this minor. The courses included in this minor are currently offered by the Biological Sciences and Psychology Departments. The anticipated number of students minoring in neuroscience (perhaps 5-7 a year) would not place a strain on current course offerings in either department.

Equipment. The Psychology Department currently owns two physiographs that would be useful in courses included in this minor. We have other additional equipment, such as brain models, dissection trays, and tools that would be used in some of the Psychology courses. The Biological Sciences Department purchased new neurophysiology data collection equipment during the 2011-2012 academic year for use in BIOL 410, Neurobiology.

Space. Although we are not sure how Psychology’s move into the Annexes will exactly impact our courses we do not anticipate any additional space needs other than classrooms and labs necessary for our courses. Biology would be able to accommodate the expected increase in enrollment in BIOL 410 and BIOL 340 if this minor is approved.

Academic Catalog copy.
Requirements: Seventeen (17) credits, including Psyc 305, Psyc 374, Psyc 394, Biol 340, and Biol 410. Only two of the Psychology courses can count toward the Psychology major requirements.