Annual Report on Program Student Learning Outcomes Assessment

Program: BA in Neuroscience

Program Contact and Title: Paul Lipton, Director, Undergraduate Neuroscience

Program

College/School Contact and Title: Susan Jackson, Associate Dean

Date: October 2013

1. List the learning outcomes for the program

Students graduating with a major in Neuroscience are able,

Through the acquisition of specialized knowledge and skills, to:

- 1. Demonstrate a mastery of the fundamentals of neuroscience, including neuroanatomy, neurophysiology, sensory and motor systems, cognition and behavior [by, for example, instructing others and/or developing instructional material for introductory or outreach courses]
- 2. Defend or refute a position using evidence from neuroscience
- 3. Communicate scientific information to informed and lay audiences in written and oral format
- 4. Demonstrate a depth of knowledge in a particular area of study within neuroscience
- 5. Understand real-world applications and implications of neuroscience

Through the acquisition of integrative knowledge and skills, to:

- 1. Describe an approach to an experimental question using multiple model systems (animal, human, computational/theoretical) and identify analogous components
- 2. Describe how chemistry and physics relate to fundamental concepts in neuroscience (e.g. chemical and electrical properties of neurons)
- 3. Demonstrate an understanding of experimental design across multiple levels of analysis (i.e., cellular, local circuits, whole systems), including identification of manipulated and measured variables, measurement metrics, experimental controls, power, validity, and reliability
- 2. Outcomes will be published on
- 1. University assessment website [url TBA]

- 2. Undergraduate Neuroscience web site [url TBD], linked to graduate site, etc.
- 3. How do you determine whether learning outcomes have been achieved? To be completed by April 2014
 - a. What evidence do/will you gather? (e.g., sample of final papers in a capstone course; portfolio; licensure exams; comprehensive exams for graduate students; capstone defense evaluation)
 - i. What evidence do you currently have available to begin assessment, or what do your currently use? (Usually, grades are inadequate for gaining specific information on *program* outcomes.)
 - ii. What tools might you like to implement and/or what materials would you like to gather in the future to improve program assessment?
 - b. Who interprets the evidence? (e.g., annually by the curriculum committee; biannually by a jury of faculty)
 - 4. Program Learning Outcomes Assessment can be useful for strategic planning and for a variety of program reviews. Please list the dates of the most recent program reviews and indicate other venues in which you've discussed program learning outcomes:
 - 5. Have you made curricular changes as a result of the information gleaned? If so, what?
 - 6. All programs must have assessed all outcomes and acted upon their assessments by May 2017. Please project a schedule, by year, for an annual cycle of assessment for your program.

Example of #1 and #3 above from new Middle East and North African Studies BA

Learning Objectives and Evaluation

Students graduating with a major in MENA Studies are expected to:

- 1. Demonstrate advanced knowledge of Middle Eastern history, politics, religions, arts, and regional and some local cultural issues.
- 2. Demonstrate proficiency (ACTFL intermediate-high) in reading, writing, speaking, and orally comprehending at least one MENA language, or basic proficiency (ACTFL intermediate-low) in two MENA languages.
- 3. Demonstrate cultural competence sufficient to function in the MENA region, either through coursework or (preferably) through study abroad in the region.

Evaluation: Students will begin keeping a MENA Studies portfolio while enrolled in CAS ME 101. Each student's portfolio will collect and reflect on important classwork in courses for the major as well as track language learning milestones (mock-OPI oral proficiency scores, study-abroad fellowships won, etc.). While primarily designed for the student's current learning and later use (e.g., for a graduate school or job application), the portfolios will also be saved. Analyzed in the aggregate, they will help the MENA Studies Program Faculty to evaluate and track students' fulfillment of the content objectives across the whole program, and to fine-tune the major as necessary.