BS in Neuroscience Year 2 Assessment Report

Fall 2019 to Spring 2021

Student Learning Outcomes (SLOs) for Neuroscience Majors

First approved by the Department of Psychology on December 11, 2020

SLO(s) *Note: Measures might be used for more than 1 SLO*	***ULG****	***Measures/Instruments*** *Please include a clear description of the instrument including when and where it is administered*	**How is the information Used?** *(include target score(s), results, and report if target(s) were met/not met/partially met for each instrument)*
I. CONCEPTUAL KNOWLEDGE:			
1. Basic understanding of the development, structure, and function of the nervous system	NA	Embedded course assessments	
2. Basic understanding of the cellular and molecular biology of the nervous system	NA	Embedded course assessments	
3. Basic understanding of systems and behavioral approaches to neuroscience	NA	Embedded course assessments	
4. Broad-based and integrated knowledge acquisition in fields that intersect with neuroscience	NA	Embedded course assessments	
II. ANALYTIC AND SCIENTIFIC THINKING:			
1. Ability to collect, analyze, and interpret quantitative information	C, Q	Embedded course assessments	
2. Abilities in scientific inquiry, such as hypothesis development, experimental design, and data analysis and interpretation	C	Embedded course assessments	
3. Ability to read and critically analyze a primary research paper	C, W	Embedded course assessments	
III. RIGOROUS AND RESPONSIBLE CONDUCT OF RESEARCH:			
1. Basic understanding of scientifically rigorous experimental design and execution, as well as data analysis and interpretation	C, Q	Embedded course assessments	
2. Basic understanding of research ethics, such as: Research misconduct and research integrity, including data falsification or manipulation; Policies regarding human subjects, live vertebrate animal subjects in research, and safe laboratory practices; Responsible authorship, peer review, and publication processes	R	Embedded course assessments	

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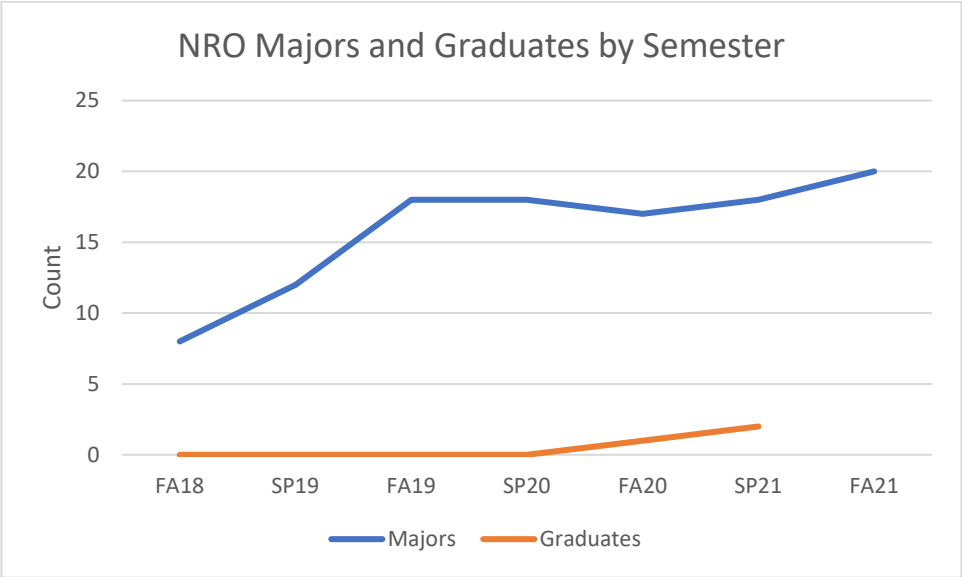
IV. COMMUNICATION SKILLS:			
1. Ability to present scientific information orally in an organized and coherent manner	S	Embedded course assessments	
2. Ability to communicate scientific information in written format for scientific publication	W	Embedded course assessments	
3. Ability to communicate scientific information to the lay public in both oral and written formats	S, W	Embedded course assessments	
4. Listening carefully and asking pertinent questions	S	Embedded course assessments	
5. Visual presentation of data and preparation of figures	W	Embedded course assessments	
V. INDIVIDUAL DEVELOPMENT AND PROFESSIONALISM:			
1. Responsible and ethical behavior	R	Embedded course assessments	
2. Teamwork and professional interpersonal skills	R	Embedded course assessments	
3. Exposure to the cultural diversity of the neuroscience community	R	Embedded course assessments	
4. Advocacy and community outreach	R	Embedded course assessments	
5. Awareness of career opportunities and the paths to achieve career goals	NA	Embedded course assessments	

**Please reference any University Learning Goal(s) (ULG) that this SLO, if any, may address or assess. C=Critical Thinking, W=Writing & Critical Reading; S=Speaking and Listening; Q=Quantitative reasoning; R=Responsible Citizenship; NA=Not Applicable*

We currently do not have direct assessment data of the student learning outcomes so we are not in a position to set benchmark goals for performance. However, we continue to recruit additional neuroscience majors and the first one graduated in Fall 2020.



Improvements and Changes Based on Assessment

1. Provide a short summary (1-2 paragraphs or bullets) of any curricular actions (revisions, additions, and so on) that were approved over the past two years as a result of reflecting on the student learning outcomes data. Are there any additional future changes, revisions, or interventions proposed or still pending?
    a. Since the introduction of the neuroscience major in fall 2018, we have replaced PSY 3805 Research Methods and Experimental Design, with a new course, PSY 3905 Research Methods in Neuroscience that is more closely aligned with research methods that students will use in the future.
    b. The number of credit hours of several biology courses changed and we subsequently updated the catalog copy of the neuroscience major.
2. Please provide a brief description or bulleted list of any improvements (or declines) observed/measured in student learning. Be sure to mention any intervention made that has not yet resulted in student improvement (if applicable).
    a. Difficult to assess yet with a new program and a pandemic.
3. Using the form below, please document annual faculty and committee engagement with the assessment process (such as the review of outcomes data, revisions/updates to assessment plan, and reaffirmation of SLOs).

History of Annual Review		
Date of Annual Review	**Individuals/Groups who Reviewed Plan**	**Results of the Review (i.e., reference proposed changes from #1 above, revised SLOs, etc...)**
10/8/21	Neuroscience Committee	We are developing our assessment measures for this new program and have decided that we will start by having the neuroscience faculty in the psychology department provide student data from embedded course assessments (e.g., research papers, exams, projects) that align with our learning goals.

Dean Review & Feedback

_____ _____

Dean or designee Date

CLAS Deans' comments on B.A. in Neuroscience report

<u>Reviewer</u>: Mike Cornebise

1. SLOs are clear and seem well-suited to departmental curricular and program-specific goals. They include a good mix of high- and mid-level Bloom's Taxonomy verbs. It appears that the Neuroscience faculty are all actively involved in the assessment process and data will be shared with the program-level assessment committee.

2. There is no need at this juncture to include any data nor information about program improvements to date since the goal at this point is to identify the SLOs and the methods/instruments to be used.

Overall, the plan appears ready for data collection. Let us know if we can assist with program assessment as you begin the process. We look forward to seeing data analysis in fall of 2023.