# Program Review Report Summary: Short Progress Report

# Eastern Illinois University BS in Neuroscience February 25, 2020

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## Summary of Program Goals and Objectives and Progress at Meeting Them

Background: Neuroscience is the study of the nervous system at different levels of interest – from molecules to cells, networks, the brain and entire body – and through the perspective of different disciplines. The focus is on the organization, development, and function of the nervous system, and how this relates to behavior and cognition, and disorders of the same. The program provides students with comprehensive foundational knowledge in neuroscience and behavioral neuroscience, while exposing them to hands-on-research experience and nurturing the development of analytical, critical thinking, and communication skills. The curriculum was designed to prepare students for careers and graduate training in this and related fields. Graduates with degrees in neuroscience are well-equipped to enter graduate programs in neuroscience, medicine, and psychology, leading to academic and professional employment in these areas. As neuroscience is becoming increasingly relevant, and necessary, in both medicine and psychology, individuals with training in neuroscience will be in high demand.

#### Curriculum

No new resources were required to start this program in Fall 2018. EIU already had the faculty, courses, and equipment to begin implementation. It is expected that by year 5, the program enrollment would generate enough tuition revenue to support the addition of new tenure-track faculty, non-tenure-track faculty, and laboratory equipment, which would sustain further development of the program.

All courses in the curriculum have been offered at least once since the inception of the Neuroscience major in Fall 2018 (see Appendix A) and continue to be offered on a rotation that can lead to timely graduation of students.

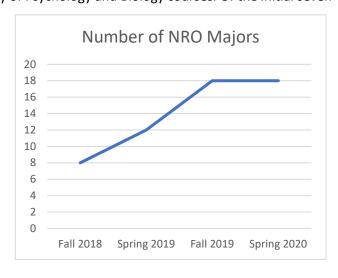
### Faculty

The Neuroscience B.S. program consists mainly of Psychology and Biology courses. Of the initial seven

faculty members who were to provide the main support for the neuroscience program, one left the institution, and another died suddenly. However, two new tenure-track faculty have been hired to replace them.

#### Student Success

The number of neuroscience majors is growing each year, presently at 18. A total of 23 students declared their major as neuroscience, but there has been a small amount of attrition from the university (4 students) and one student changed his major to biology. The first graduate of the major will



likely be summer of 2020. Seven of the students in neuroscience are double majoring in biology or psychology.

Appendix A: Course Offerings by Semester

Core Courses	FA18	SP19	SU19	FA19	SP20
CHM 1310G General Chemistry I	Х	Х		Х	X
CHM 1315G General Chemistry Lab I	Χ	Χ		Χ	Χ
CHM 1410 General Chemistry II	Χ	Χ	Χ	Χ	Χ
CHM 1415 General Chemistry Lab II	Χ	Χ		Χ	Χ
BIO 1500 General Biology I	Χ	Χ		Χ	Χ
PSY1879G Introductory Psychology	Χ	Χ	Χ	Χ	Χ
MAT 2110G Brief Calculus with Applications	Χ	Χ	Χ	Χ	Χ
PSY3310 Biological Psychology	Χ	Χ		Χ	Χ
BIO 3451 Undergraduate Research or	Χ	Χ	Χ	Χ	Χ
PSY 4100 Undergraduate Research	Χ	Χ		Χ	Χ
PSY 3805 Research Methods	Χ	Χ	Χ	Χ	Χ
BIO 3120 Molecular and Cellular Biology	Χ	Χ		Χ	Χ
BIO 3200 Genetics	Χ	Χ		Χ	Χ
BIO 4833 Neurobiology of Diseases			Χ		
BIO 4834 Neurobiology	Х			Х	
Choose 1 course from:	FA18	SP19	SU19	FA19	SP20
MAT 2250G Elementary Statistics	Χ	Χ	Χ	Χ	Χ
MAT 2250G Elementary Statistics PSY 2610 Statistical Methods of Psychology	X X	X X	X X	X X	X X
PSY 2610 Statistical Methods of Psychology	Χ	Χ		Χ	
PSY 2610 Statistical Methods of Psychology BIO 4750 Statistical Analysis of Scientific Data	X X	X X	X	X X	X
PSY 2610 Statistical Methods of Psychology BIO 4750 Statistical Analysis of Scientific Data Choose 3 courses from:	X X	X X	X	X X FA19	X
PSY 2610 Statistical Methods of Psychology BIO 4750 Statistical Analysis of Scientific Data  Choose 3 courses from:  PSY 3450 Neuropsychology	X X FA18	X X SP19	X SU19	X X FA19	X SP20
PSY 2610 Statistical Methods of Psychology BIO 4750 Statistical Analysis of Scientific Data  Choose 3 courses from:  PSY 3450 Neuropsychology PSY 3680 Sensation and Perception	X X FA18	X X SP19	X SU19	X X FA19 X X	X SP20
PSY 2610 Statistical Methods of Psychology BIO 4750 Statistical Analysis of Scientific Data  Choose 3 courses from:  PSY 3450 Neuropsychology PSY 3680 Sensation and Perception PSY 3820 Cognitive Neuroscience	X X FA18	X X SP19	X SU19	X X FA19 X X	X SP20 X X
PSY 2610 Statistical Methods of Psychology BIO 4750 Statistical Analysis of Scientific Data  Choose 3 courses from:  PSY 3450 Neuropsychology PSY 3680 Sensation and Perception PSY 3820 Cognitive Neuroscience PSY 4810 Neuropsychopharmacology  Choose 2 courses from:  PSY 3518 Psychology of Language	X X FA18 X X	X X SP19 X X X	X SU19 X	X X FA19 X X X	X  SP20  X  X  X  SP20
PSY 2610 Statistical Methods of Psychology BIO 4750 Statistical Analysis of Scientific Data  Choose 3 courses from:  PSY 3450 Neuropsychology PSY 3680 Sensation and Perception PSY 3820 Cognitive Neuroscience PSY 4810 Neuropsychopharmacology  Choose 2 courses from:  PSY 3518 Psychology of Language Development	X X FA18 X X	X X SP19 X X	X SU19 X	X X FA19 X X X	X SP20 X X X
PSY 2610 Statistical Methods of Psychology BIO 4750 Statistical Analysis of Scientific Data  Choose 3 courses from:  PSY 3450 Neuropsychology PSY 3680 Sensation and Perception PSY 3820 Cognitive Neuroscience PSY 4810 Neuropsychopharmacology  Choose 2 courses from:  PSY 3518 Psychology of Language Development PSY 3710 Human Memory	X X FA18 X X	X X SP19 X X X SP19 X	X SU19 X SU19	X X FA19 X X X X	X  SP20  X  X  X  X  X  SP20  X
PSY 2610 Statistical Methods of Psychology BIO 4750 Statistical Analysis of Scientific Data  Choose 3 courses from:  PSY 3450 Neuropsychology PSY 3680 Sensation and Perception PSY 3820 Cognitive Neuroscience PSY 4810 Neuropsychopharmacology  Choose 2 courses from:  PSY 3518 Psychology of Language Development PSY 3710 Human Memory PSY 3780 Abnormal Psychology	X X FA18  X X X  FA18	X X SP19 X X X SP19 X X	X SU19 X	X X FA19 X X X X	X  SP20  X  X  X  SP20  X  X
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#### **Dean's Comment**

The interdisciplinary Neuroscience Major is off to a strong start, growing to 18 currently enrolled students midway through its second year. With the demand for a background in neuroscience growing in both medicine and psychology, Neuroscience enrollment is expected to continue to rise.

### **Provost Feedback**

The new major represents a collaborative effort across the College of Liberal Arts & Sciences. The program is attractive to high achieving students and attrition is limited. While the program is technically in Year 3, a delayed start resulted in two full recruitment cycles of enrollments. As a result of the observed trend, I am confident the total graduates and majors will exceed IBHE benchmarks.