

Background Information

Provide a detailed description of the proposed modification, including its nature and purpose and centrality to institutional mission. (1500 characters)

Neuroscience is rapidly growing in popularity as an emerging discipline, with many USCA students demonstrating interest in exploring this field. Currently, USCA offers a minor in Neuroscience, which is becoming increasingly popular amongst Psychology and Biology majors. In order to minor in Neuroscience, a number of biology prerequisites are needed, many of which are not offered every year. This causes students to either abandon their hopes of minoring in neuroscience, or delay graduation by as much as a year or more. Additionally, students majoring in Psychology and minoring in Neuroscience cannot use any of the neuroscience minor courses to satisfy their major (no double-dipping). For those students hoping to minor in neuroscience but falling short of the Psychology major requirements (if not allowed to count the neuroscience courses), some must abandon the minor in order to graduate on time. This may ultimately discourage student interest in taking neurosciences courses from enrolling. As we try to grow interest in neuroscience, it has become necessary to create a path for students who wish to have an emphasis in neuroscience that still falls within the Psychology major. The purpose of the proposed concentration in neuroscience is to provide an opportunity for students to take a series of courses within the field of neuroscience, be able to demonstrate to graduate schools that they have this specialty without imposing the restrictive requirements of the Neuroscience Minor.

This modification will not require the addition of new courses or faculty, no additional facilities, library resources or financial resources.

List the objectives of the modified program. (1500 characters)

1. Demonstrate mastery of the fundamentals of neuroscience spanning the breadth of the field, including psychology, neurobiology, chemistry, and exercise science.
2. Be encouraged to pursue research experiences both on and off campus
3. Understand and apply scientific methods
4. Prepare students with a sufficient depth of knowledge and abilities to prepare them for entry-level employment in a wide variety of fields, or for graduate study in neuroscience

Employment Opportunities			
Occupation	Expected Number of	Employment Projection	Data Source
Medical Scientist (graduate school required)	107,900 current positions in year 2014	8% growth (as fast as average)	United States Department of Labor (Bureau of Labor Statistics)
Medical Scientist (graduate school required)	108,000 current positions in year 2014	42,400 new positions projected over next 10 years	O*Net
Research Assistant (BA/BS required)	27,780 current positions in year 2014	Not listed	United States Department of Labor (Bureau of Labor Statistics)
Neuroscientist (graduate school required)	Not listed	13% between 2012 and 2022	LearningPath.org
Psychologist	173,9000	19% (much faster than average)	United States Department of Labor (Bureau of Labor Statistics)
Computer and Information Research Scientists	25,6000	11% (faster than average)	United States Department of Labor (Bureau of Labor Statistics)

-“Employment of medical scientists is projected to grow 8 percent from 2014 to 2024, about as fast as the average for all occupations. Medical scientists will continue to be needed because they contribute to the development of treatments and medicines that improve human health.” - United States Department of Labor

- “Government agencies, universities, industry, hospitals, and medical centers can all be potential settings for neuroscience jobs. Private research foundations, government laboratories, and regulatory agencies, such as the National Institutes of Health (NIH), Food and Drug Administration (FDA), and Environmental Protection Agency (EPA), all have research and administrative positions for neuroscientists. Universities offer teaching and brain research opportunities.” – Peterson’s (online source)

-Currently there are 255 job postings on the Society for Neuroscience website.

-According to the Regional Work Force Study prepared for the SRS Community Ruse Organization (April 2015), there were 300 job posting for Behavioral Health specialists in the CSRA in 2014.

Assessment of Need

Provide an assessment of the need for the program modification for the institution, the state, the region, and beyond, if applicable. (1500 characters)

Neuroscience degrees are among the fastest growing degrees across the United States, which are being created to fulfill the growing need of neuroscientists in the workforce. For example, recent data suggests that currently there are approximately 27,000 job positions as a research assistant (which requires a bachelor's degree), however a recent search on Indeed.com lists over 47,000 job advertisements for this position. Therefore there is a demand in the field for more people with a research background in general, which is the foundation of the neuroscience concentration. Specific to neuroscience, external grant funding opportunities continue to increase. This was first a result of the Decade of the Brain program implemented by George W. Bush between the years 1990 – 2000 in order to increase brain research. This agenda was recently furthered by President Barack Obama's administration, which prompted the BRAIN Initiative (Brain Research through Advancing Innovative Neurotechnologies). Additionally, by providing a neuroscience concentration option for our Psychology Majors, we can potentially increase competitive enrollment. Psychology is one of the most common majors students pursue while in college. With the option of a neuroscience concentration, we are able to provide this opportunity for the many incoming students who are interested in this field. Specifically, only one other university in South Carolina has this concentration option, and we are among only three universities in the state that offer a minor in neuroscience. Neuroscience majors have become a large percentage of the students in the pre-medical degree and graduate school track. Therefore our new concentration will greatly benefit this growing student body.

Current programs in South Carolina

BS in Neuroscience

- Furman University

Minor in Neuroscience

- USC Columbia
- USC Aiken
- College of Charleston

Concentration in Neuroscience

- Wofford College
- Coastal Carolina University

Will the proposed modification impact any existing programs and services at the institution?

Yes

No

If yes, explain. (1000 characters)

List of Similar Programs in South Carolina

Program Name	Institution	Similarities	Differences
Behavioral Neuroscience Concentration	Coastal Carolina University	Required coursework in Human Neuropsychology and Physiological Psychology	Biology coursework required/allowed for 12 hours in concentration
Neuroscience Program Concentration	Wofford College	Required coursework in Neuroscience and Lab, Cognitive Neuroscience, option for Psychopharmacology	Interdisciplinary program with many required Biology courses, 33-38 credit hours.
BS Neuroscience	Furman	Option for Psychopharmacology	BS in Neuroscience, requires numerous courses in Biology and Chemistry
Minor in Neuroscience	USC Columbia	Option for coursework in Neuroscience, cognitive neuroscience, cognitive processes	18 credit hours
Minor in Neuroscience	College of Charleston	Option for coursework in Cognitive Neuroscience, Neuropsychology	24-26 credit hours- Biology/Psychology courses cross listed

Description of the Program

Projected New Enrollment						
Year	Fall		Spring		Summer	
	Headcount	Credit Hours	Headcount	Credit Hours	Headcount	Credit Hours
2016-2017	6	24	6	24	0	0
2017-2018	6	24	6	24	0	0
2018-2019	6	24	6	24	0	0
2019-2020	6	24	6	24	0	0
2020-2021	6	24	6	24	0	0

Curriculum

Psychology Major Requirements with Neuroscience Concentration (31 hours)

- 1. PSYC 325, 326, 328 Statistics and Research Methods Sequence (8 hours)**
- 2. PSYC 470 Neuroscience (3 hours)**
- 3. 3 courses selected from the following (9 hours):**
 - PSYC 360 Cognitive Processes**
 - PSYC 370 Cognitive Neuroscience**
 - PSYC 450 Sensation and Perception**
 - PSYC 475 Psychopharmacology**
- 4. Two labs from the following (2 hours)**
 - PSYC 361 Cognitive Processes Lab**
 - PSYC 371 Cognitive Neuroscience Lab**
 - PSYC 451 Sensation and Perception Lab**
 - PSYC 471 Neuroscience Lab**
- 5. PSYC 445 History and Systems of Psychology (3 hours)**
- 6. Psychology at the 300 level or above.....6**

Faculty

Provide a brief explanation of any additional institutional changes in faculty and/or administrative assignment that may result from implementing the proposed program modification. (1000 characters)

No additional changes in faculty or administrative assignment.

Resources

Identify any new library/learning resources, new instructional equipment, and new facilities or modifications to existing facilities needed to support the modified program. (2000 characters)

No additional resources required.

Financial Support

Estimated New Costs by Year						
Category	1 st	2 nd	3 rd	4 th	5 th	Total
Program Administration	0	0	0	0	0	0
Faculty and Staff Salaries	0	0	0	0	0	0
Graduate Assistants	0	0	0	0	0	0
Equipment	0	0	0	0	0	0
Facilities	0	0	0	0	0	0
Supplies and Materials	0	0	0	0	0	0
Library Resources	0	0	0	0	0	0
Other*	0	0	0	0	0	0
Total	0	0	0	0	0	0
Sources of Financing						
Category	1 st	2 nd	3 rd	4 th	5 th	Total
Tuition Funding	19200**	19200	19200	19200	19200	96,000
Program-Specific Fees	0	0	0	0	0	0
State Funding (i.e., Special State Appropriation)*	0	0	0	0	0	0
Reallocation of Existing Funds*	0	0	0	0	0	0
Federal Funding*	0	0	0	0	0	0
Other Funding*	0	0	0	0	0	0
Total	19200	19200	19200	19200	19200	96,000
Net Total (i.e., Sources of Financing Minus Estimated New Costs)	19200	19200	19200	19200	19200	96,000

**Revenue based on 48 credit hours at \$400 per hour.

Budget Justification

Provide a brief explanation for the other new costs and any special sources of financing (state funding, reallocation of existing funds, federal funding, or other funding) identified in the Financial Support table. (1000 characters)

Note: Institutions need to complete this budget justification *only* if any other new costs, state funding, reallocation of existing funds, federal funding, or other funding are included in the Financial Support table.

Because the concentration is a “repackaging” of courses that are already taught on a regular basis, there are no new costs associated with the proposed concentration. We anticipate 6 new majors a year based on the concentration, although we expect many of the current psychology majors may opt for the new concentration. The new revenue generated would be from any new students attracted to the program.

Evaluation and Assessment

Will any the proposed modification impact the way the program is evaluated and assessed?

Yes

No

If yes, explain. (1000 characters)

Will the proposed modification affect or result in program-specific accreditation?

Yes

No

If yes, explain; if the modification will result in the program seeking program-specific accreditation, provide the institution’s plans to seek accreditation, including the expected timeline for accreditation. (500 characters)

Will the proposed modification affect or lead to licensure or certification?

Yes

No

If yes, explain how the program will prepare students for licensure or certification. (500 characters)

Teacher or School Professional Preparation Programs

Is the proposed modified program a teacher or school professional preparation program?

Yes

No

If yes, complete the following components.

Area of Certification

Attach a document addressing the South Carolina Department of Education Requirements and SPA or Other National Specialized and/or Professional Association Standards.