FLORIDA ATLANTIC UNIVERSITY

NEW/CHANGE PROGRAM REQUEST
Graduate Programs

UGPC Approval _____
UFS Approval _____
Banner _____
Catalog _____

Department CESCoS Dean's Office (Interdisciplinary)

College Science

Program Name
Neuroscience Certificate

☐ **New Program***

☑ **Change Program***

Effective Date
(TERM & YEAR)
Fall 2021

Please explain the requested change(s) and offer rationale below or on an attachment.

We are requesting to update the names listed for two existing courses in our program whose titles have recently been changed. Please see the updated catalog entry attached.

*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.

Faculty Contact/Email/Phone
William Kalies <wkalies@fau.edu> 7-1107

Consult and list departments that may be affected by the change(s) and attach documentation

Approved by	***Date***
Department Chair: Gary W Perry	
College Curriculum Chair: Christyan Beetle Date: 2021.03.15 11:59:11 -04'00'	
College Dean: William David Kalies	03/15/21
UGPC Chair	
UGC Chair	
Graduate College Dean	
UFS President	
Provost	

Email this form and attachments to UGPC@fau.edu 10 days before the UGPC meeting.

Neuroscience Certificate

The Neuroscience certificate program provides students with an understanding of the essential principles of neuroscience and elective concentrated study in theoretical and dynamical, molecular and cellular, cognitive and behavioral neuroscience. Available to master's and doctoral students, the program is administered through the College of Science's Dean's Office and consists of a multidepartmental curriculum comprised of courses from the College of Medicine, College of Science and the College of Engineering and Computer Science.

Admission Requirements

1. Acceptance into a master's or doctoral training program in any of the following departments or programs: Biological Sciences, Biomedical Sciences, Chemistry and Biochemistry, Complex Systems and Brain Sciences, Electrical Engineering, Integrative Biology, Mathematical Sciences, Physics or Psychology.

2. Approval from the certificate program coordinator prior to taking courses to satisfy the 14-credit certificate requirement.

Degree Requirements

The Neuroscience certificate consists of 14 credits. It requires the successful completion (at least a B+ average) of four courses from the tables below plus satisfactory achievement in two semesters of the 1-credit Neuroscience Colloquium. Students are also expected to participate in the FAU Neuroscience Research Day held each spring semester.

Required Courses (6 credits)		
Cellular and Molecular Neuroscience~~Neuroscience 1~~	PSB 6345	3
Systems and Integrative Neuroscience~~Neuroscience 2~~	PSB 6346	3

Elective Courses

Select one course from any two of the four areas listed below for a minimum of 6 credits: Theoretical and Dynamical Neuroscience, Cognitive Neuroscience, Molecular and Cellular Neuroscience and Behavioral Neuroscience. Note that one of the elective courses is required to be from outside the student's "home" program area. This requirement ensures that the student gains an interdisciplinary exposure to the neurosciences.

Theoretical and Dynamical Neuroscience		
Introduction to Neural Networks	CAP 5615	3
Computational Neuroscience 1	ISC 6460	3
Methods in Complex Systems	ISC 6450	3
Bioinformatics	BSC 6458C	4
Bioinformatics: Engineering Perspectives	BME 6762	3

Cognitive Neuroscience		
Cognitive Neuroscience	ISC 5465	3
Cognition and Complex Systems	ISC 6452	3
Seminar in Cognition	EXP 6609	3
Seminar in Attention	ISC 6932	3

Biological Vision	PSB 5117	3
Seminar in Human Perception	EXP 6208	3
Seminar in Biopsychology of Language	PSB 6809	3

Molecular and Cellular Neuroscience		
Advanced Cell Physiology	PCB 6207	3
Developmental Neurobiology	PSB 6515	3
Brain Diseases: Mechanisms and Therapy	BMS 6736	3
Special Topics	BSC 6936	3
Special Topics	PCB 6933	3

Behavioral Neuroscience		
Seminar in Behavioral Neuroscience	PSB 6058	3
Developmental Neuropsychology	PSB 6516	3
Seminar in Sensory Processes	PSB 6609	3
Special Topics in Behavioral Neuroscience	PSB 6930	3

Neuroscience Colloquium		
Special Topics (Students must enroll in two semesters of the 1-credit Neuroscience Colloquium.)	ISC 6930	1

The Neuroscience Colloquium is a public seminar series with distinguished speakers from outside and inside of FAU. Students also present their own research in the form of a seminar to the other students in the program and faculty. Students in the certificate program are required to present at least one seminar during the two semesters that they are enrolled. Attendance is mandatory for all students.