FLORIDA ATLANTIC UNIVERSITY

NEW/CHANGE PROGRAM REQUEST
Undergraduate Programs

UUPC Approval 10/7/24
UFS Approval _____
Banner _____
Catalog _____

Department NA

College Wilkes Honors College

Program Name
Concentration in Biomedical Science

☑ **New Program***
☐ **Change Program***

Effective Date
(TERM & YEAR)
Fall 2025

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

We are proposing a new concentration in Biomedical Science. The majority of Wilkes Honors College students concentrate in Biology, Neuroscience, or Psychology. There is great demand from students for a concentration designed specifically for students interested in Biomedical Science, including students who are interested in going to medical school. Please see the attached pages for a detailed list of the proposed requirements for this new concentration.

*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
Julie Earles/jearles@fau.edu/5617998673

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

Approved by	***Date***
Department Chair	9/13/2024
College Curriculum Chair Terje Hill	9-13-2024
College Dean	9/13/24
UUPC Chair Korey Sorge	10/7/24
Undergraduate Studies Dean Dan Meeroff	10/7/24
UFS President	
Provost	

Email this form and attachments to mjenning@fau.edu seven business days before the UUPC meeting.

Biomedical Sciences

Course#	Course Title	Credits
REQUIRED COURSES		
BSC 1010	Honors Biological Principles	3
BSC 1010L	Honors Biological Principles Lab	1
BSC1011	Honors Biodiversity	3
BSC1011L	Honors Biodiversity Lab	1
CHM 2045	Honors General Chemistry I	3
CHM 2045L	Honors General Chemistry I Lab	1
CHM 2046	Honors General Chemistry II	3
CHM 2046L	Honors General Chemistry II Lab	1
CHM2210	Honors Organic Chemistry I	3
CHM2204L	Honors Organic Chemistry I Lab	1
CHM2211	Honors Organic Chemistry II	3
CHM2205L	Honors Organic Chemistry II Lab	1
MAC 2311	Honors Calculus I with Analytic Geometry	4
STA 2023 or MAC 2312	Honors Introductory Statistics or Honors Calculus	3 - 4
PHY 2048 or PHY2053	Honors Gen Physics I or Honors College Physics	4
PHY 2048L	Honors Gen Physics I Lab	1
PHY 2049 or PHY2054	Honors Gen Physics II or Honors College Physics	4
PHY 2049L	Honors Gen Physics II Lab	1
PCB 3063	Honors Genetics	4
BSC 2085/L OR PCB 3703/L	Honors Anatomy and Physiology I and Lab or Honors Human Morphology and Function I with Lab	4
	Biology Electives - see below	14
IDS 4970	Honors Thesis (two semesters)	6
	Total Credits	**72-73**
Electives - 14 credits required		
BSC 3452	Honors Experimental Design and Data Analysis	3
BSC 4403L	Honors Biotechnology Lab	2
BSC 4915	Honors Directed Ind Research in Biology	1 -- 3
BSC 4930	Honors Special Topics in Biology (* Must be related to biomedical sciences - approval of	1 -- 3
BSC 4930	Honors Neurobiology of Mental Illness	3
BSC 4930	Honors Introduction to Neuroscience	3

Biomedical Sciences

BSC 4930	Honors Drosophila Genes and Behavior (CURE)	3
MCB 3020 (L)	Honors Microbiology (with Lab)	3 (4)
PCB 3411	Honors Animal Behavior	3
PCB 3704/L OR BSC 2086	Honors Human Morphology and Function II with Lab OR Anatomy and Physiology II and Lab	4
PCB 4102	Honors Cell Biology	4
PCB 4233	Honors Immunology	3
PCB 4234	Honors Biology of Cancer	3
PCB 4253	Honors Developmental Biology	3
PCB 4673	Honors Evolution	3
PCB 4832C	RI: Neurophysiology	3
PCB 4841	Honors Cellular Neuroscience	3
PSB 3441	Honors Drugs and Behavior	3
PSB 3340	Honors Behavioral Neuroscience	3
PSB 4243	Honors Neuroscience of Addiction	3
ZOO 2303/L	Honors Vertebrate Zoology with Lab	4
ZOO 4742	Honors Principles of Human Neuroanatomy	3
PSB 4003	Introduction to Neuroscience Research	1

MPHP Courses		
PSB 4003	Introduction to Neuroscience Research	1
BSC 4934	Honors Scientific Communication	1
PCB 4933C	Honors Advanced Cell Imaging for Neuroscientists	1
PCB 4935	Honors Advanced Genetics	1
PCB 4937C	Honors Advanced Physiology	1
PCB 4956	Honors Advanced Scientific Grant Writing	1
PSB 4110	Honors Life Science Technologies	1
PSB 4112C	Honors Advanced Techniques in Neuroscience	1
PSB 4916	Honors Directed Independent Research	0-3
PSB 4922	Honors Symposium Presentation	1
PSB 4931	Honors Special Topics in Neuroscience	1-3
PSB 4932	Max Planck Honors Seminar	1
PSB 4951	Honors Journal Club in Neuroscience	1

Note: Students in the Max Planck Honors Program may count Introduction to Neuroscience Research (PSB 4003, 1 credit) and two distinct MPHP Enrichment courses (1 credit each) as one of their 3 credit, Biology electives.

CONCENTRATION IN BIOMEDICAL SCIENCE

Students must earn a "C" or better in each course taken to fulfill a concentration requirement.

Overview and Advisory Board

The biomedical science concentration is designed for those students who wish to go on to graduate school, medical school, or who desire to work for biotech firms, government agencies, or other organizations in the biomedical field.

Advisory Board:

Dr. Kelsie Bernot
Dr. Lucia Carvelli
Dr. Andia Chaves Fonnegra
Dr. Erik Duboue
Dr. Conrad Toepfer
Dr. Catherine Trivigno

Required Courses

CONCENTRATION IN BIOMEDICAL SCIENCE

Course #	Course Name	Credits
BSC 1010, 1010L	Honors Biological Principles with Lab	4
BSC 1011, 1011L	Honors Biodiversity with Lab	4
CHM 2045, 2045L	Honors General Chemistry I with Lab	4
CHM 2046, 2046L	Honors General Chemistry II with Lab	4

Course #	Course Name	Credits
MAC 2311	Honors Calculus I with Analytic Geometry	4
STA 2023 or MAC 2312	Honors Introductory Statistics or Honors Calculus II	3-4
PHY 2048, or PHY 2053	Honors General Physics I or Honors College Physics I	4
PHY 2048L	Honors Gen Physics I Lab	1
PHY 2049 or PHY 2054	Honors General Physics II or Honors College Physics II	4
PHY 2049L	Honors Gen Physics II Lab	1
CHM 2210, 2204L	Honors Organic Chemistry I with Lab	4
CHM 2211, 2205L	Honors Organic Chemistry II with Lab	4
PCB 3703, PCB 3703L or BSC 2085, 2085L	Honors Human Morphology and Function I with Lab or Anatomy and Physiology 1 with Lab	4
PCB 3063	Honors Genetics	4
	Biology Electives	14
IDS 4970	Honors Thesis (two semesters)	6
	Total Credits	72-73

ELECTIVES:

Biomedical Science Electives are given below. Students are reminded that they need 45 upper-level (3000 or 4000-level) credits to graduate.

BIOMEDICAL SCIENCE ELECTIVES

Course #	Course Name	Credits
BCH 3033	Honors Biochemistry	3
BSC 3452	Honors Experimental Design and Data Analysis*	3
BSC 4403L	Honors Biotechnology Lab	2
BSC 4442C	Honors Molecular Ecology	3
BSC 4915	Honors Dir Ind Res in Biology	1-3
BSC 4930	Honors Special Topics in Biology (Must be related to biomedical science – approval of advisor required)	1-3
PSB 4243	Honors Neuroscience of Addiction	3
BSC 4930	Honors Neurobiology of Mental Illness	3
BSC 4930	Honors Introduction to Neuroscience	3
BSC 4930	Honors Drosophila Genes and Behavior (CURE)	3
MCB 3020 (w/3020L)	Honors Microbiology (with Lab)	3 (4)
PCB 3411	Honors Animal Behavior	3
PCB 3704, PCB 3704L Or BSC 2086, 2086L	Honors Human Morphology and Function II with Lab or Anatomy and Physiology II with Lab	4
PCB 4102	Honors Molecular Cell Biology	3
PCB 4102	Honors Cell Biology	4
PCB 4233	Immunology	3
PCB 4234	Honors Biology of Cancer	3
PCB 4253	Honors Developmental Biology	3
PCB 4673	Honors Evolution	3
PCB 4832C	RI: Neurophysiology	3
PCB 4841	Honors Cellular Neuroscience	3
ZOO 2303, 2303L	Honors Vertebrate Zoology with Lab	4
PSB 3441	Honors Drugs and Behavior	3
PSB 3340	Honors Behavioral Neuroscience	3
PSB 4243	Honors Neuroscience of Addiction	3
PSB 4003	Introduction to Neuroscience Research	3
ZOO 4742	Honors Principles of Human Neuroanatomy	3

Additional Electives to be added that are available only for Max Planck Honors Program Students

MPHP Courses		
PSB 4003	Introduction to Neuroscience Research	1
BSC 4934	Honors Scientific Communication	1
PCB 4933C	Honors Advanced Cell Imaging for Neuroscientists	1
PCB 4935	Honors Advanced Genetics	1
PCB 4937C	Honors Advanced Physiology	1
PCB 4956	Honors Advanced Scientific Grant Writing	1
PSB 4110	Honors Life Science Technologies	1
PSB 4112C	Honors Advanced Techniques in Neuroscience	1
PSB 4916	Honors Directed Independent Research	0-3
PSB 4922	Honors Symposium Presentation	1
PSB 4931	Honors Special Topics in Neuroscience	1 – 3
PSB 4932	Max Planck Honors Seminar	1
PSB 4951	Honors Journal Club in Neuroscience	1

Note: Students in the Max Planck Honors Program may count Introduction to Neuroscience Research (PSB 4003, 1 credit) and two distinct MPHP Enrichment courses (1 credit each) as one of their 3 credit, Biology electives.