Fau	NEW/CHANGE PROGRAM REQUEST Graduate Programs		UGPC Approval UFS Approval Banner Posted		
FLORIDA	Department Biomedical Science		Catalog		
ATLANTIC UNIVERSITY	College Medicine				
Program Name		New Program	Effective Date		
Master of Science	Biomedical Science	✓ Change Program	SPING 2020		
Please explain	the requested change(s) and offer ra	ationale below or on ar	attachment		
credits. The Bior options. Below w	cience Biomedical Science would like to a medical Data and Informatics would be movould be the new core requirements (9 cr	loved from the core requir	ents from 12 credits to 9 ements to the electives		
<ol> <li>Intensive Biomedical Writing PCB 6933 - 3 credits</li> <li>Human Genetics PCB 6665 - 3 credits</li> <li>Advanced Molecular and Cellular Biology PCB 5532 - 3 credits</li> </ol>					
Please see attac	thed for track catalog changes. We also withesis option in the catalog.	wanted to add the course	requirements for both the		
Course Catalog Changes Rationale:					
Our office changed from 4 to 3 required core courses and updated catalog to reflect requirements for thesis track more accurately.					
	<i>-</i>				
Faculty Contact/			nents that may be affected by		
Dr. Marc	Lanterow	the change(s) and attac	a documentation		
201-001	7-2910 Dhealth.few.edu				
Approved by			Date ( ()C		
Department Chair	Jani Robiotic	w	7/30/19		
		ದ	7/30/19		
College Curriculum Chair  College Dean			7-31-119		
UGPC Chair					
UGC Chair Feet C. Viller			9/11/19		
Graduate College Dean			9-12-19		
UFS President					
Provost					

Email this form and attachments to <u>UGPC@fau.edu</u> one week before the UGPC meeting so that materials may be viewed on the UGPC website prior to the meeting.

JUL 31 2019

### Master of Science with Major in Biomedical Science

Students interested in pursuing advanced studies in biomedical science may obtain a degree of Master of Science (M.S.) with Major in Biomedical Science, taking either the thesis or non-thesis option. The thesis option is oriented toward those students interested in pursuing biomedical research or careers in academia. The non-thesis program is an option for students seeking to solidify their knowledge base in order to apply to appropriate professional schools or pursue careers in the biomedical sciences industry.



#### **Admission Requirements**

All program applicants must have an undergraduate grade point average of 3.0 in the last 60 credits and competitive Graduate Record Exam (GRE) scores (scores are valid for five years). These are minimum requirements that are necessary for consideration for admission to the program. Higher scores will increase applicants' chances for admission. Prerequisites of the master's degree program include one year each of biology, chemistry and physics; one semester each of biochemistry and organic chemistry; and at least two upper-division biology classes. A personal statement explaining career goals is required as well as three letters of recommendation, at least two of which must be from former professors.

## Recency of Credits

No credit that is more than seven years old at the time the M.S. in Biomedical Science degree is awarded may be counted toward the degree.

# Degree Requirements

### Non-Thesis Option

This option requires a minimum of 30 graduate-level credits. With their advisor's approval, students design a course of study courses offered in the Charles E. Schmidt College of Medicine as well as courses in related departments and colleges chosen from the following list.

## Thesis Option

This option requires a minimum of 30 credits consisting of coursework chosen from the list below, a minimum of 6 thesis credits, 3 thesis-related research credits. Students design a course of study and research with the guidance and approval of the advisors and thesis committees. Thesis students are required to make a formal research proposal to their committees within their first year prior to enrollment in thesis credits. In addition, upon completion of their research, they must make a formal thesis presentation and defense in the semester they plan to graduate. All thesis students must also receive certification of completion of the Responsible Conduct of Research program. The RCR program, which is offered jointly through the Graduate College and Division of Research, covers the nine instructional areas of RCR. All four components are mandatory in order to receive certification of completion.

Students wishing to change their admission from the thesis option to the non-thesis option must submit to the Graduate Program Committee a letter of request that states the justification for the change and a letter from the thesis advisor in support of the request. An interview with the Graduate Program Committee may be required. A maximum of 6 credits from the thesis career can be applied toward the non-thesis career upon approval by the Graduate Program Committee. PCB 6974 and PCB 6971 credits are non-transferable.

Core - 12-9 credits					
Biomedical Data and Informatics	BSC 6459	3			
Advanced Molecular and Cellular Biology	PCB 5532	3			
Human Genetics	PCB 6665	3			
Special Topics (such as Biomedical Writing, Intensive Biomedical Writing	PCB 6933	3			
Thesis Requirements - 9 credits (minimum)					
Master's Thesis (may be taken multiple times; 6 credits minimum; 12 credits maximum)	PCB 6971	<u>1-12</u>			

**GRADUATE COLLEGE** 

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Received

Thesis-Related Research		
(may be taken only twice; 3 credits minimum; 6 credits	PCB 6974	2-3
<u>maximum)</u>		
<u>Electives</u>		
Biomedical Data and Informatics	BSC 6459	<u>3</u>
Integrated Morphology 1	BMS 6102C	4
Integrated Morphology 2	BMS 6104C	4
Clinical Microbiology	BMS 6303	3
Autonomic Function and Diseases	BMS 6523	3
Fundamentals of General Pathology	BMS 6601	3
Brain Diseases: Mechanism and Therapy	BMS 6736	3
Bioinformatics	BSC 6458C	3
Cognitive Neuroscience	ISC 5465	3
Macromolecules and Human Disease	GMS 6301	3
Molecular Basis of Disease and Therapy	GMS 6302	3
Host Defense and Inflammation	MCB 6208	3
Advanced Molecular Genetics of Aging	PCB 5245	3
Neurobiology of Addiction	PCB 5844	3
Advanced Cell Physiology	PCB 6207	3
Molecular Basis of Human Cancer	PCB 6235	3
Advanced Immunology	PCB 6236	3
Problem-Based Immunology	PCB 6238	3
Tumor Immunology	PCB 6239	3
Molecular Biology of the Cardiovascular System and Cardiac Disease	PCB 6705	3
Adult Neurogenesis	PCB 6848	3
Physiology of the Heart	PCB 6885	3
Directed Independent Study (maximum of 6 credits allowed)	PCB 6905	1-3
Special Topics (general)	PCB 6933	1-8
Graduate Seminars	PCB 6934	1
Biological Vision	PSB 5117	3
Principles of Neuroscience	PSB 6037	3
Neuroscience 1	PSB 6345	3
Neuroscience 2	PSB 6346	3
Developmental Neurobiology	PSB 6515	3