

**Master of Science in Biological Sciences  
 Cellular and Molecular Biology Concentration**

<b>Name:</b>		<b>ID:</b>		
<b>Advisor:</b>		<b>Catalog: 2021-2022</b>		
Core Courses (16 Hours)				
	Course	Hours	Semester	Grade
	BCHM 722 Experimental Design and Techniques	3		
	BIOS 670 Evolution	3		
	BIOS 735 Biology Seminar	1		
	BIOS 799 Thesis	6		
	ENSC 705 Statistical Techniques	3		
	MATH 710 Statistics for Medical Biological Applications			
Electives (14 Hours)				
BCHM	610 Biochemistry and Molecular Biology I	3		
	610L Biochemistry and Molecular Biology I Laboratory	2		
	612 Biochemistry and Molecular Biology II	3		
	612L Biochemistry and Molecular Biology II Laboratory	2		
	740 Plant Biochemistry	3		
BIOS	620 Cellular Biology	3		
	620L Cellular Biology Laboratory	1		
	621 Advanced Immunology	3		
	630 Molecular Biology	3		
	630L Molecular Biology Laboratory	1		
	634 Histology	3		
	634L Histology Laboratory	1		
	660 Microbial Genetics	3		
	663 Medical Genetics	3		
	665 Applied Biotechnology	3		
	675 Advanced Developmental Biology	3		
	686 Clinical Anatomy	3		
	687 Medical Physiology	3		
	690 Special Topics in Biological Sciences	1 - 3		
	690 Special Topics in Biological Sciences: Advanced Endocrinology	3		
	690 Special Topics in Biological Sciences: Advanced Neurobiology	3		
	690 Special Topics in Biological Sciences: Virology	3		
	720 History of Science	3		
	745 Plant Molecular Biology	3		
	760 Human Genetics for Teachers	4		
786 Independent Research	3			
787 Scientific Communication	3			

	790 Special Topics in Biology	3		
	795 Independent Study in Biology	3		
CHEM	690 Independent Study	3		
	790 Special Topics in Chemistry	3		
	795 Independent Study in Chemistry	3		
Total Credit Hours			LSUS GPA	

**Master of Science in Biological Sciences  
Computational Biology Concentration**

<b>Name:</b>		<b>ID:</b>		
<b>Advisor:</b>		<b>Catalog:</b> 2021-22		
Core Courses (16 Hours)				
	Course	Hours	Semester	Grade
	BCHM 722 Experimental Design and Techniques	3		
	BIOS 670 Evolution	3		
	BIOS 735 Biology Seminar	1		
	BIOS 799 Thesis	6		
	ENSC 705 Statistical Techniques	3		
	MATH 710 Statistics for Medical Biological Applications			
Electives (14 Hours)				
BIOS	620 Cellular Biology	3		
	620L Cellular Biology Laboratory	1		
	630 Molecular Biology	3		
	630L Molecular Biology Laboratory	1		
	675 Advanced Developmental Biology	3		
	690 Special Topics in Biological Sciences	1-3		
	690 Special Topics in Biological Sciences: Advanced Endocrinology	3		
	690 Special Topics in Biological Sciences: Advanced Neurobiology	3		
	690 Special Topics in Biological Sciences: Virology	3		
	701 Introduction to Molecular Biology I	3		
	703 Introduction to Molecular Biology II	3		
	787 Scientific Communication	3		
	790 Special Topics in Biology	3		
CSC	662 Introduction to Bioinformatics	3		
	664 Information Visualization	3		
	668 Introduction to Data Mining	3		
	690 Selected Topics	3		
	695 Independent Study	3		
CST	707 Data Modeling and Database Design	3		
	711 Informatics	3		
Total Credit Hours			LSUS GPA	

**Master of Science in Biological Sciences  
Environmental Biology Concentration**

<b>Name:</b>		<b>ID:</b>		
<b>Advisor:</b>		<b>Catalog:</b> 2021-22		
Core Courses (16 Hours)				
	Course	Hours	Semester	Grade
	BCHM 722 Experimental Design and Techniques	3		
	BIOS 670 Evolution	3		
	BIOS 735 Biology Seminar	1		
	BIOS 799 Thesis	6		
	ENSC 705 Statistical Techniques	3		
	MATH 710 Statistics for Medical Biological Applications			
Electives (14 Hours)				
BCHM	740 Plant Biochemistry	3		
BIOS	620 Cellular Biology	3		
	620L Cellular Biology Laboratory	1		
	621 Advanced Immunology	3		
	630 Molecular Biology	3		
	630L Molecular Biology Laboratory	1		
	635 Ornithology	3		
	635L Ornithology Lab	1		
	640 Principles of Ecology	3		
	640L Principles of Ecology Laboratory	1		
	646 Aquatic Biology	3		
	646L Aquatic Biology Laboratory	1		
	660 Microbial Genetics	3		
	665 Applied Biotechnology	3		
	671 Biogeography	3		
	675 Advanced Developmental Biology	3		
	690 Special Topics in Biological Sciences	1 - 3		
	690 Special Topics in Biological Sciences: Advanced Endocrinology	3		
	690 Special Topics in Biological Sciences: Advanced Neurobiology	3		
	690 Special Topics in Biological Sciences: Virology	3		
	740 Ecological Methodology	3		
	745 Plant Molecular Biology	3		
	750 Ecotoxicology	3		
	753 Marine Biology for Teachers	3		
786 Independent Research	1-3			
787 Scientific Communication	3			
790 Special Topics in Biology	3			
795 Independent Study in Biology	3			

CHEM	790 Special Topics in Chemistry	3		
	795 Independent Study in Chemistry	1-3		
ENSC	621 Environmental Analysis	3		
	641 Environmental Compliance	3		
	741 Environmental Law	3		
	790 Special Topics in Environmental Science	3		
GEOG	690 Seminar	1		
Total Credit Hours			LSUS GPA	

**Master of Science in Biological Sciences  
Field and Organismal Biology Concentration**

<b>Name:</b>		<b>ID:</b>	
<b>Advisor:</b>		<b>Catalog: 2021-22</b>	
Core Courses (16 Hours)			
	Course	Hours	Semester
	BCHM 722 Experimental Design and Techniques	3	
	BIOS 670 Evolution	3	
	BIOS 735 Biology Seminar	1	
	BIOS 799 Thesis	6	
	ENSC 705 Statistical Techniques	3	
	MATH 710 Statistics for Medical Biological Applications		
Electives (14 Hours)			
BCHM	740 Plant Biochemistry	3	
BIOS	620 Cellular Biology	3	
	620L Cellular Biology Laboratory	1	
	621 Advanced Immunology	3	
	630 Molecular Biology	3	
	630L Molecular Biology Laboratory	1	
	635 Ornithology	3	
	635L Ornithology Laboratory	1	
	640 Principles of Ecology	3	
	640L Principles of Ecology Laboratory	1	
	646 Aquatic Biology	3	
	646L Aquatic Biology Laboratory	1	
	660 Microbial Genetics	3	
	665 Applied Biotechnology	3	
	671 Biogeography	3	
	675 Advanced Developmental Biology	3	
	690 Special Topics in Biological Sciences	1 - 3	
	690 Special Topics in Biological Sciences: Advanced Endocrinology	3	
	690 Special Topics in Biological Sciences: Advanced Neurobiology	3	
	690 Special Topics in Biological Sciences: Virology	3	
	740 Ecological Methodology (substitution)	3	
	745 Plant Molecular Biology	3	
	750 Ecotoxicology	3	
	753 Marine Biology for Teachers	3	
785 Selected Topics in Biology (substitution)	3		
786 Independent Research	1 - 3		
787 Scientific Communication	3		
790 Special Topics in Biology	3		

	795 Independent Study in Biology	1 - 3		
CHEM	790 Special Topics in Chemistry	3		
	795 Independent Study in Chemistry	1 - 3		
ENSC	621 Environmental Analysis	3		
	641 Environmental Compliance	3		
	741 Environmental Law	3		
	790 Special Topics in Environmental Science	3		
GEOG	690 Seminar	1		
Total Credit Hours			LSUS GPA	

**Master of Science in Biological Sciences  
Health Sciences Concentration**

<b>Name:</b>		<b>ID:</b>		
<b>Advisor:</b>		<b>Catalog:</b> 2021-22		
Core Courses (10 Hours – 0 needed)				
	Course	Hours	Semester	Grade
	BCHM 722 Experimental Design and Techniques	3		
	BIOS 670 Evolution	3		
	BIOS 735 Biology Seminar	1		
	ENSC 705 Statistical Techniques	3		
	MATH 710 Statistics for Medical Biological Applications			
Concentration Courses (9 Hours)				
	BCHM 610 Biochemistry and Molecular Biology I	3		
	BCHM 612 Biochemistry and Molecular Biology II			
	BIOS 686 Clinical Anatomy			
Electives (11 Hours – 0 needed)				
BIOS	620 Cellular Biology	3		
	620L Cellular Biology Laboratory	1		
	621 Advanced Immunology	3		
	630 Molecular Biology	3		
	630L Molecular Biology Laboratory	2		
	634 Histology	3		
	634L Histology Laboratory	1		
	660 Microbial Genetics	3		
	663 Medical Genetics	3		
	675 Advanced Developmental Biology	3		
	687 Medical Physiology	3		
	690: Special Topics in Biological Sciences	1 – 3		
	690 Special Topics in Biological Sciences: Advanced Endocrinology	3		
	690 Special Topics in Biological Sciences: Advanced Neurobiology	3		
	690 Special Topics in Biological Sciences: Virology	3		
	690 Special Topics in Biological Sciences: Cancer Biology	3		
	786 Independent Research	3		
	787 Scientific Communication	3		
	789 Health Sciences Capstone	3		
	790 Special Topics in Biology	3		
795 Independent Study in Biology	3			
		Total Credit Hours		LSUS GPA