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2019

Bachelor of Science-Biology 2019-2020

Nova Southeastern University

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Halmos College of Natural Science and Oceanography DEGREE CURRICULUM SHEET | 2019-2020 CATALOG Bachelor of Science - Biology (Premedical)

FIRST YEAR SEMINAR		
Course	Credits	Frequency
UNIV 1000: First Year Seminar	3	FW
Total First Year Seminar Credits	3	

GENERAL EDUCATION REQUIREM	ENTS	
Area/Course	Credits	Frequency
Written Composition		
6 credits at or above COMP 1500		
Open Written Communication	3	FW
Open Written Communication	3	FW
Mathematics		
6 credits at or above MATH 1040		
Satisfied by Major		
Satisfied by Major		
Arts & Humanities		
6 credits in HIST, ARTS, PHIL, HUMN, LITR, THEA,		
FILM, MUSC, DANC, WRIT, foreign language		
Satisfied by Major		
Satisfied by Major		
Social & Behavioral Sciences		
6 credits in PSYC, SOCL, ANTH, ECN, COMM, GEOG,		
GEST, INST, POLS		
Open Social & Behavioral Sciences	3	FW
Open Social & Behavioral Sciences	3	FW
<u>Science</u>		
6 credits in BIOL, MBIO, CHEM, SCIE, ENVS, PHYS		
Satisfied by Major		
Satisfied by Major		
Total General Education Credits	12	

NOTE: Some General Education courses may also fulfill major requirements.

OPEN ELECT	IVES
Total Open Electives Credits	29
	20.20

CONCENTRATIONS
There are no specific concentrations noted for this major
Total concentration credits

MAJOR REQUIREMENTS		
Core Courses	Credits	Frequency
BIOL 1500: Biology I/Lab	4	FW
BIOL 1510: Biology II/Lab	4	FW
BIOL 3600: Genetics/Lab	4	FW
CHEM 1300: General Chemistry I/Lab	4	FW
CHEM 1310: General Chemistry II/Lab	4	FW
CHEM 2400: Organic Chemistry I/Lab	4	FW
CHEM 2410: Organic Chemistry II/Lab	4	FW
Any LITR course	3	FW
MATH 2020: Applied Statistics	3	FW
MATH 2100: Calculus I	4	FW
PHYS 2350: General Physics I/Lab (4 credits) or	4	FW
PHYS 2400: Physics I/Lab (4 credits)		FW
AND		
PHYS 2360: General Physics II/Lab (4 credits) or	4	FW
PHYS 2500: Physics II/Lab (4 credits)		FW
Select one 3000-level PHIL course from the following:	3	
PHIL 3010: Ethical Issues in Communication (3 credits)	3	W
PHIL 3180: Biomedical Ethics (3 credits)		FW
PHIL 3200: Ethics and Sport (3 credits)		F
PHIL 3220: Philosophy of Science (3 credits)		FW
PHIL 3360: Environmental Ethics (3 credits)		W
Total Core Course Credits	49	
Major Electives Credits	27	
Select 27 credits from the following [at least 16 credits must be BIOL 3000+ or 4000+ courses with		
at least one of these being a BIOL course with a lab (4 credits):		
Any 3000/4000-level BIOL course(s), excluding BIOL 3600*		
BIOL 2600: Medical Terminology (3 credits)		FW
CHEM 3650: Biochemistry/Lab (4 credits)		FW
MATH 2001: Introduction to Mathematical Models in Biology (3 credits) or		U
MATH 2200: Calculus II (4 credits) or		FW
MATH 3050 Mathematics and Biology (3 credits)		FE
*NOTE: Major Electives may include no more than 3 credits in total from the following:		
BIOL 4900: Special Topics in Biology (3 credits)		U
BIOL 4950: Internship in Biology (3 credits)		U
BIOL 4990: Independent Study in Biology (3 credits)		U
Total Major Credits	76	

TOTAL CREDITS: 120

NOTE: Click on course link for detail course information including description and prerequisite requirements

Frequency Key: F-Every Fall; W-Every Winter; FE - Even Year Fall; FO - Odd Year Fall; WE-Even Year Winter; WO-Odd Year Winter; U - Upon Contract



Halmos College of Natural Science and Oceanography SAMPLE FOUR YEAR CURRICULUM | 2019-2020 CATALOG

Bachelor of Science - Biology (Premedical)

	Freshman Year		
Semester 1 (Fall - 1)		Semester 2 (Winter - 1)	
Course	Credits	Course	Credits
UNIV 1000: First Year Seminar	3	General Education: Social and Behavioral Sciences	3
General Education: Written Composition	3	BIOL 1510: Biology II/Lab (Biology Core)	4
BIOL 1500: Biology I/Lab (Biology Core)	4	CHEM 1310: General Chemistry II/Lab (Biology Core)	4
CHEM 1300: General Chemistry I/Lab (Biology Core)	4	MATH 2100: Calculus I (Biology Core and Gen Ed. Math)	4
Total Credits	14	Total Credits	15
	Sophomore Year		
Semester 3 (Fall-2)		Semester 4 (Winter -2)	
<u>Course</u>	Credits	<u>Course</u>	Credits
CHEM 2400: Organic Chemistry I/Lab (Biology Core)	4	General Education: Written Composition	3
MATH 2020: Applied Statistics (Biology Core and Gen Ed Math)	3	BIOL 3600: Genetics/Lab (Biology Core)	4
Any LITR course (Biology Core and Gen Ed: Arts and Humanities)	3	CHEM 2410: Organic Chemistry II/Lab (Biology Core)	4
General Education: Social and Behaviorial Sciences	3	Biology Major Elective (recommend Calculus II)	4
Elective	3		
Total Credits	16	Total Credits	15
	Junior Year		
Semester 5(Fall-3)		Semester 6 (Winter-3)	
<u>Course</u>	<u>Credits</u>	<u>Course</u>	<u>Credits</u>
PHYS 2350: General Physics I/Lab (4 credits)		PHYS 2360: General Physics II/Lab (4 credits)	
OR	4	OR	4
PHYS 2400: Physics I/Lab (4 credits)		PHYS 2500: Physics II/Lab (4 credits)	
PHIL Course (Biology Core and Gen Ed Arts and Humanities)	3	Biology Major Elective with lab	4
Biology Major Elective (recommend Biochemistry/Lab)**	4	<u>Elective</u>	3
Biology Major Elective	3	<u>Elective</u>	3
Total Credits	14	Total Credits	14
	Senior Year		
Semester 7 (Fall-4)		Semester 8 (Winter-4)	
Course	<u>Credits</u>	Course	Credits
Biology Major Elective with Lab	4	Biology Major Elective	3
Biology Major Elective	3	Biology Major Elective	3
Elective	3	Elective +	4
Elective	3	Elective	3
Elective	3	Elective	3
Total Credits	16	Total Credits	16
	TOTAL CREDITS:	120	

TOTAL CREDITS: 120

3

NOTE: Click on course link for detail course information including description and prerequisite requirements

*NOTE: This sample plan is based on the student starting at least at the level of MATH 1250: Trigonometry.

The plan will need to be adjusted for students who begin at a lower level of MATH.

+ This semester might be a good one in which to complete internship project hours.

++ Must complete a total of 30 credits of upper level coursework (3000 level and higher) Major Electives***

Select 27 credits from the following [at least 16 credits must be BIOL 3000+ or

BIOL 4990: Independent Study in Biology

4000+ courses with at least one of these being a BIOL course with a lab (4 credits):

urses with at least one of these being a BIOL course with a lab (4 credits):	
Any 3000/4000-level BIOL course(s), excluding BIOL 3600	
BIOL 2600: Medical Terminology	3
CHEM 3650: Biochemistry/Lab	4
MATH 2001: Introduction to Mathematical Models in Biology	3
OR	
MATH 2200: Calculus II	4
OR	
MATH 3050 Mathematics and Biology	3
NOTE: No more than 3 credits (in total) from each of the following courses ma	y
be applied to the major elective requirement:	
BIOL 4900: Special Topics in Biology	3
BIOL 4950: Internship in Biology	3

PHIL Courses

 Select 3 credits from the following:

 PHIL 3010: Ethical Issues in Communication
 3

 PHIL 3180: Biomedical Ethics
 3

 PHIL 3200: Ethics and Sport
 3

 PHIL 3220: Philosophy of Science
 3

 PHIL 3360: Environmental Ethics
 3

^{**}NOTE: Students who plan to take the MCAT exam in the summer of the Junior Year are advised to complete CHEM 3650: Biochemistry/Lab as a major elective in the Junior Year.

^{***}Prerequisites may be required for major electives.