



HALMOS COLLEGE OF NATURAL SCIENCES AND OCEANOGRAPHY
SAMPLE FOUR YEAR CURRICULUM | 2016-2017 CATALOG
Bachelor of Science - Biology (Premedical)



Freshman Year			
Fall		Winter	
Course	Credits	Course	Credits
UNIV 1000 - First Year Seminar	3		
General Education: Written Composition	3	General Education: Social and Behavioral Sciences	3
General Education: Mathematics*	3	BIOL 1510: Biology II/Lab	4
Gene BIOL 1500: Biology I/Lab	4	CHEM 1310: General Chemistry II/Lab	4
CHEM 1300: General Chemistry I/Lab	4	MATH 2100: Calculus I	4
Total Credits	17	Total Credits	15

Sophomore Year			
Fall		Winter	
Course	Credits	Course	Credits
CHEM 2400: Organic Chemistry I/Lab	4	General Education: Written Composition	3
MATH 2020: Applied Statistics	3	BIOL 3600: Genetics/Lab	4
Any LITR course	3	CHEM 2410: Organic Chemistry II/Lab	4
General Education: Social and Behavioral Sciences	3	Elective	3
Elective	3		
Total Credits	16	Total Credits	14

Junior Year			
Fall		Winter	
Course	Credits	Course	Credits
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	3	Biology Major Elective	3
Biology Major Elective with Lab**	4	Elective	3
Biology Major Elective	3	Elective	3
		Elective	3
Total Credits	14	Total Credits	16

Senior Year			
Fall		Winter	
Course	Credits	Course	Credits
Biology Major Elective with Lab	4	Biology Major Elective	3
Biology Major Elective	3	Elective	3
Elective	3	Elective	3
Elective	3	Elective	3
Elective	3		
Total Credits	16	Total Credits	12

TOTAL CREDITS: 120

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.

**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.

Major Electives***

Select 20 credits from the following:

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

NOTE: No more than 3 credits (in total) from each of the following courses may be applied to the major elective requirement:

BIOL 4900: Special Topics in Biology	3
BIOL 4950: Internship in Biology	3
BIOL 4990: Independent Study in Biology	3

***Prerequisites may be required for major electives. Consult the Undergraduate Catalog for details.

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



Halmos College of Natural Sciences and Oceanography
DEGREE CURRICULUM SHEET | 2016-2017 CATALOG
[Bachelors of Science] - [Biology (Pre-medical)]



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

GENERAL EDUCATION REQUIREMENTS		
Area/Course	Credits	Frequency
Written Composition		
<i>6 credits at or above COMP 1500</i>		
Open Written Communication	3	
Open Written Communication	3	
Mathematics		
<i>6 credits at or above MATH 1040</i>		
Open Math	3	
Open Math	3	
Arts & Humanities		
<i>6 credits in HIST, ARTS, PHIL, HUMN, LITR, THEA, FILM, MUSC, DANC, WRIT, foreign language</i>		
Open Arts & Humanities	3	
Open Arts & Humanities	3	
Social & Behavioral Sciences		
<i>6 credits in PSYC, SOCL, ANTH, ECN, COMM, GEOG, GEST, INST, POLS</i>		
Open Social & Behavioral Sciences	3	
Open Social & Behavioral Sciences	3	
Science		
<i>6 credits in BIOL, MBIO, CHEM, SCIE, ENVS, PHYS</i>		
Open Science	3	
Open Science	3	
Total General Education Credits	30	

OPEN ELECTIVES		
take 4-6 elective courses (varies by credits/course)		
Total Open Electives Credits	18	

CONCENTRATIONS		
<i>There are no specific concentrations noted for this major.</i>		
Total Concentration Credits		

MAJOR		
Course	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 PHYS 2400: Physics I/Lab (4 credits)	4	FW W
AND		
PHYS 2360: General Physics II/Lab (4 credits) or PHYS 2500: Physics II/Lab (4 credits)	4	FW W
Select one 3000-level PHIL course from the following:	3	
PHIL 3010: Ethical Issues in Communication (3 credits)		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 Major Credits (not electives)	49	

MAJOR ELECTIVES		
Course	Credits	Frequency
Any 3000/4000-level BIOL course(s), excluding BIOL 3600*		
BIOL 2600: Medical Terminology	3	FW
CHEM 3650: Biochemistry/Lab	4	FW
MATH 2001 Introduction to Mathematical Models in Biology or	3	FE
MATH 2200: Calculus II	4	FW
Total Major Elective Credits	20	

* Note: Major Electives may include no more than 3 credits from the following:
 BIOL 4900: Special Topics in Biology (3 credits); BIOL 4950: Internship in Biology (3 credits);
 BIOL 4990: Independent Study in Biology (3 credits)
 Frequency Key: F-Every Fall; W-Every Winter; FO - Odd Year Fall; FE - Even Year Fall; WO - Odd Year Winter; WE - Even Year Winter

TOTAL CREDITS: 120

