

Biology

Bachelor of Science (BS.BIOL)

Core Requirements				Credits	Notes/Instructions
College Sem.	_____	Quest for Meaning	CSEM 100	3	†A student may be required to take ENGL 105 and/or MATH 100 based on placement exams administered prior to their first semester at King's College. ENGL 105 and MATH 100 are 3-credit courses and will count as free electives. †† The Intercultural Competence requirement can be satisfied by taking a 100-level language class for 3 credits or participating in an approved Study Abroad experience. SBM = Satisfied By Major requirement(s) and credit(s) listed below.
Communication & Creative Expression	_____	Writing	ENGL 110 [†]	3	
	_____	Oral Communication	COMM 101	3	
	_____	Literature	ENGL 140-149	3	
	_____	The Arts	ARTS 100-149	3	
Citizenship	_____	History	HIST 100-149	3	
	_____	Intercultural	FREN/GERM/SPAN 100-level or Study Abroad ^{††}	3	
	_____	Global Connections	ECON 150-199; GEOG 150-199; HIST 150-199; PS 150-199; SOC 150-199	3	
Quantitative & Scientific Reasoning	_____ SBM	Quantitative Reasoning	MATH 120 [†] or higher level	-	
	_____ SBM	Scientific Endeavor	NSCI 100	-	
	_____ SBM	Science in Context	NSCI 171-199	-	
	_____	Human Beh. & Soc. Inst	ECON 111, 112; GEOG 101, 102; PS 101, PSYC 101, SOC 101	3	
Wisdom, Faith, & the Good Life	_____	Introduction to Phil.	PHIL 101	3	
	_____	Phil. Investigations	PHIL 170-199; MSB 287	3	
	_____	Theology & Wisdom	THEO 150-159	3	
	_____	Theology & the Good Life	THEO 160-169	3	
Total Core Credits				39	

Major Requirements	Credits	Major Requirements	Credits	Electives ³ / Other Requirements	Credits
BIOL 113 ²	3	CHEM 113 ²	3	HCE 101 Holy Cross Exp.	1
BIOL 113L	1	CHEM 113L	1	Free Elective	3
BIOL 210 ^{PR}	3	CHEM 114 ^{PR}	3	Free Elective	3
BIOL 210L	1	CHEM 114L	1	Free Elective	3
BIOL 213 ^{PR}	3	CHEM 241 ^{PR}	3	Free Elective	3
BIOL 213L	1	CHEM 241L	1	Free Elective	2-3
BIOL 270 ^{4,PR} (spring)	1	CHEM 242 ^{PR}	3		
BIOL 370 ^{5,PR}	2	CHEM 242L	1		
BIOL 470 ^{6,PR} (spring)	2	MATH 125	4		
BIOL Elective*	4	MATH 128	4		
BIOL Elective*	4	PHYS 111	3		
BIOL Elective*	4	PHYS 111L	1		
BIOL Elective*	3	PHYS 112 ^{PR}	3		
BIOL 490 / RIC ⁷	3	PHYS 112L	1		
Total Major Credits	35	Total Major Credits	32	Total Elective / Other Credits	14-15

Total Credits Required for Graduation = 120

*In addition to the Major Sequence requirements, a Biology Major must also complete a minimum of five (5) upper-level courses (minimum of three with lab). In addition, one of these courses must be research intensive (consult with Biology advisor).

Biology Electives ^{PR}		
BIOL 310 Computer Modeling in Biology & Env. Sci	BIOL 349 Animal Behavior	BIOL 416 Parasitology
BIOL 314 Microbiology	BIOL 350 Developmental Biology	BIOL 420 Botanical Pharmacology
BIOL 323 Genetics	BIOL 353 Biochemistry	BIOL 430 Ecology
BIOL 326 Immunology	BIOL 355 Comparative Vertebrate Anatomy	BIOL 447 Physiology
BIOL 330 Introductory Bioinformatics	BIOL 380 Neuroendocrinology	BIOL 450 Molecular Genetics: DNA Science
BIOL 336 Cell Biology	BIOL 401 Special Topics in Env. Science	BIOL 456 Molecular Mechanism of Brain Disorders

General Information:

A student must earn a minimum of 120 credit hours to be awarded the baccalaureate degree. The number of credit hours required for graduation may be higher in certain major programs or if the student elects to pursue a second major. Beyond the requirements of the Core Curriculum and of a student's chosen major program, the balances of the credit hours required for graduation are "free electives."

Biology

Suggested Sequence

A suggested course sequence of degree requirements is listed below. Refer to the college catalog for course titles, descriptions, and prerequisites. Always consult your Academic Advisor when planning and scheduling your classes.

Fall		Credits	Spring		Credits
BIOL 113 ² Evolution & Diversity		3	BIOL 210 ^{PR} Organisms & Their Ecosystems		3
BIOL 113L Evolution & Diversity Lab		1	BIOL 210L Organisms & Their Ecosystems Lab		1
CHEM 113 ² General Chemistry I		3	CHEM 114 ^{PR} General Chemistry II		3
CHEM 113L General Chemistry I Lab		1	CHEM 114L General Chemistry II Lab		1
Core Course ¹		3	MATH 125 ² Calculus		4
Core Course ¹		3	Core Course ¹		3
HCE 101 Holy Cross Experience		1			
		15**			15**
Summer		Credits			
Fall		Credits	Spring		Credits
BIOL 213 ^{PR} Cell & Molecular Biology		3	BIOL Elective*		3
BIOL 213L Cell & Molecular Biology Lab		1	BIOL 270 ^{4,PR} Sophomore Seminar		1
CHEM 241 ^{PR} Organic Chemistry I		3	CHEM 242 ^{PR} Organic Chemistry II		3
CHEM 241L Organic Chemistry I Lab		1	CHEM 242L Organic Chemistry II Lab		1
MATH 128 Intro. to Statistics & Data Analysis		4	Core Course ¹		3
Core Course ¹		3	Core Course ¹		3
		15			14**
Summer		Credits			
Fall		Credits	Spring		Credits
PHYS 111 Physics for the Life Sciences I		3	PHYS 112 ^{PR} Physics for the Life Sciences II		3
PHYS 111L Physics for the Life Sciences I Lab		1	PHYS 112L Physics for the Life Sciences II Lab		1
BIOL Elective*		3	BIOL Elective*		3
BIOL 370 ^{5,PR} Junior Seminar		2	BIOL Elective Lab*		1
Core Course ¹		3	Core Course ¹		3
Core Course ¹		3	Free Elective ³		3
			Free Elective ^{3,**}		2-3
		15			16-17
Summer		Credits			
Fall		Credits	Spring		Credits
BIOL 490 or RIC ⁷ Elective with lab*		4	BIOL 470 ^{6,PR} Senior Seminar		2
Core Course ¹		3	BIOL Elective*		3
Core Course ¹		3	BIOL Elective Lab*		1
Core Course ¹		3	Core Course ¹		3
Free Elective ³		3	Free Elective ³		3
			Free Elective ³		3
		16			15**
Total Credits Required for Graduation = 120					

NOTES:

¹Choose one course from each of the Core Requirements listed on the reverse side.

²Course may satisfy both a Major and a Core requirement. BIOL 113 and CHEM 113 satisfy the Scientific Endeavor and Science in Context Core requirement. MATH 125 will satisfy the Quantitative Reasoning Core requirement.

³Students may select "free electives" for personal enrichment **OR** for Minor and/or Second Major Requirements.

⁴Sophomore Seminar – Spring Semester of Sophomore Year

⁵Junior Seminar – Fall or Spring Semester of Junior Year

⁶Senior Seminar – Spring Semester of Senior Year

⁷Research requirement: Biology 490 or Biology Elective that is designated as a Research Intensive Course (RIC)

^{PR}Course has a prerequisite – check college catalog.

**The standard semester course load is five courses consisting of 15 – 17 credits. A student may take 18 credits if the science lab puts them over 17 credits (*for more information about credit loads, please see the college catalog*).