

# 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. (See college catalog for more information) 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		3	
	Theology & Wisdom	THEO 150-159		3	
	Theology & the Good Life	THEO 160-169		3	
<b>Total Core Credits</b>				<b>39</b>	

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

**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 <sup>PR</sup>		
BIOL 314 Microbiology	BIOL 349 Animal Behavior	BIOL 416 Parasitology
BIOL 323 Genetics	BIOL 350 Developmental Biology	BIOL 420 Botany (RIC)
BIOL 327 Immunology	BIOL 353 Biochemistry	BIOL 430 Ecology (RIC)
BIOL 330 Introductory Bioinformatics	BIOL 355 Comparative Vertebrate Anatomy	BIOL 447 Physiology
BIOL 336 Cell Biology	BIOL 401 Special Topics in Env. Science	BIOL 450 Molecular Genetics

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

### NOTES:

<sup>1</sup>Choose one course from each of the Core Requirements listed on the reverse side.

<sup>2</sup>Course 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.

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

<sup>4</sup>Sophomore Seminar – Spring Semester of Sophomore Year

<sup>5</sup>Junior Seminar – Fall or Spring Semester of Junior Year

<sup>6</sup>Senior Seminar – Spring Semester of Senior Year

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

<sup>PR</sup> 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*).