

# BIOLOGY

## BACHELOR OF SCIENCE (BS.BIOL)

CORE Requirements	Credits	Major Requirements	Credits	Major Requirements	Credits	Free Electives <sup>2</sup>	Credits
CORE 090 First Year Exp.	1	BIOL 113	3	CHEM 113	3	Free Elective	3
CORE 100 Lib Arts Sem.	3	BIOL 113L	1	CHEM 113L	1	Free Elective	3
CORE 110 Effect Writ.	3	BIOL 210	3	CHEM 114	3	Free Elective	3
CORE 115 or 116 Oral Comm.	3	BIOL 210L	1	CHEM 114L	1	Free Elective	2-3
CORE 131 or 133 Civilization	3	BIOL 213	3	CHEM 241	3		
CORE 140 or 141-145 Forgn.	3	BIOL 213L	1	CHEM 241L	1		
CORE 150-159 Soc. Sci. <sup>1</sup>	3	BIOL 270 <sup>3</sup> ( <i>spring</i> )	1	CHEM 242	3		
CORE 160-169 Literature	3	BIOL 370 <sup>4</sup>	2	CHEM 242L	1		
CORE 170-179 The Arts	3	BIOL 470 <sup>5</sup> ( <i>spring</i> )	1	MATH 125	4		
CORE 180-189 Amer. Studies <sup>1</sup>	3	BIOL Elective*	4	MATH 128	4		
CORE 190-199 Global Studies <sup>1</sup>	3	BIOL Elective*	4	PHYS 111	3		
CORE 250-259 Syst. Theology	3	BIOL Elective*	4	PHYS 111L	1		
CORE 260-269 Mor. Theology	3	BIOL Elective*	3	PHYS 112	3		
CORE 280 Philosophy I	3	BIOL 490 / RIC <sup>6</sup>	3	PHYS 112L	1		
CORE 281-289 Philosophy II	3						
Total Credits for CORE	43	Total Credits for Major		66	Total Credits for Free Electives		11-12

### Minimum 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 majors also have the option to choose a major emphasis in Pre-Health, Molecular Biology, or Ecology (see College Catalog).

#### Biology Electives

BIOL 310 Computer Modeling in Biology & Env. Sci	BIOL 349 Animal Behavior	BIOL 416 Parasitology
BIOL 314 Microbiology	BIOL 350 Vertebrate Embryology	BIOL 420 Botany
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 Neuroscience

<sup>1</sup>Students are required to take CORE 150, CORE 180 **OR** CORE 190 to fulfill the Interdisciplinary CORE requirement.

- If a student takes CORE 150, then he/she should choose from 181 – 188 to fulfill the 18x requirement AND from 191 – 198 to fulfill the 19x requirement.
- If a student takes CORE 180, then he/she should choose from 151 – 158 to fulfill the 15x requirement AND from 191 – 198 to fulfill the 19x requirement.
- If a student takes CORE 190, then he/she should choose from 151 – 158 to fulfill the 15x requirement AND from 181 – 188 to fulfill the 18x requirement.

<sup>2</sup>Students may select “free electives” for personal enrichment **OR** for Minor and/or Second Major Requirements.

<sup>3</sup>Sophomore Seminar – Spring Semester of Sophomore Year

<sup>4</sup>Junior Seminar – Fall or Spring Semester of Junior Year

<sup>5</sup>Senior Seminar – Spring Semester of Senior Year

<sup>6</sup>Research requirement: Biology 490 or Biology Elective that is designated as a Research intensive course (RIC)

#### 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

- Use the information below as a guide when selecting courses.
- Refer to the reverse side when selecting major courses, major electives, core courses, and free electives when applicable.
- Consult your Academic Advisor prior to course registration.
- Refer to the King's College Catalog and/or website for course titles and descriptions.
- Choose one course from each CORE category as listed on the reverse side.
  - CORE courses may be taken in any order approved by the academic advisor with the following conditions:
    - CORE 100 and CORE 110 should be taken in the first year.
    - CORE 115 (or 116) should be taken within the first two years.
    - For students selecting a Foreign Language (CORE 14x), every effort should be made to register for that language in the first semester at King's.

1 <sup>st</sup> Year - Fall		cr.	1 <sup>st</sup> Year - Spring		cr.
BIOL 113 Evolution & Diversity		3	BIOL 210 Organisms & Their Ecosystems		3
BIOL 113L Evolution & Diversity Lab		1	BIOL 210L Organisms & Their Ecosystems Lab		1
CHEM 113 General Chemistry I		3	CHEM 114 General Chemistry II		3
CHEM 113L General Chemistry I Lab		1	CHEM 114L General Chemistry II Lab		1
CORE		3	MATH 125 Calculus		4
CORE		3	CORE		3
CORE 090 First Year Experience		1			
		<b>15<sup>†</sup></b>			<b>15<sup>†</sup></b>
2 <sup>nd</sup> Year - Fall			2 <sup>nd</sup> Year - Spring		
BIOL 213 Cell & Molecular Biology		3	BIOL Elective*		3
BIOL 213L Cell & Molecular Biology Lab		1	BIOL 270 <sup>3</sup> Sophomore Seminar		1
CHEM 241 Organic Chemistry I		3	CHEM 242 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		3
CORE		3	CORE		3
		<b>15</b>			<b>14<sup>†</sup></b>
3 <sup>rd</sup> Year - Fall			3 <sup>rd</sup> Year - Spring		
PHYS 111 Physics for the Life Sciences I		3	PHYS 112 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>4</sup> Junior Seminar		2	BIOL Elective Lab*		1
CORE		3	CORE		3
CORE		3	Free Elective <sup>2</sup>		3
		<b>15</b>	Free Elective <sup>2†</sup>		2-3 <sup>†</sup>
					<b>16-17</b>
4 <sup>th</sup> Year - Fall			4 <sup>th</sup> Year - Spring		
BIOL 490 or RIC <sup>6</sup> Elective with lab*		4	BIOL 470 <sup>5</sup> Senior Seminar		1
CORE		3	BIOL Elective*		3
CORE		3	BIOL Elective Lab*		1
CORE		3	CORE		3
Free Elective <sup>2</sup>		3	CORE		3
		<b>16</b>	Free Elective <sup>2</sup>		3
					<b>14</b>
<b>Minimum Credits Required for Graduation = 120</b>					

<sup>†</sup>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*).