

# Neuroscience

## Bachelor of Science (BS.NEUR)

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 <sup>+</sup> or higher level	-	
	_____ SBM	Scientific Endeavor	NSCI 100	-	
	_____ SBM	Science in Context	NSCI 171-199	-	
	_____ SBM	Human Beh. & Soc. Inst	ECON 111, 112; GEOG 101, 102; PS 101, <b>PSYC 101</b> <sup>2</sup> , SOC 101	-	
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	
<b>Total Core Credits</b>				<b>36</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 <sup>3</sup>	3
BIOL 210 <sup>PR</sup>	3	CHEM 114 <sup>PR</sup>	3	Free Elective <sup>3</sup>	3
BIOL 210L <sup>PR</sup>	1	CHEM 114L <sup>PR</sup>	1	Free Elective <sup>3</sup>	3
BIOL 213 <sup>PR</sup>	3	CHEM 241 <sup>PR</sup>	3	Free Elective <sup>3</sup>	3
BIOL 213L <sup>PR</sup>	1	CHEM 241L <sup>PR</sup>	1	Free Elective <sup>3</sup>	3
MATH 121 <sup>2</sup> , 123 <sup>2</sup> , or 125 <sup>2</sup>	3-4	CHEM 242 <sup>PR</sup>	3	Free Elective <sup>3,4</sup>	1-2
PSYC 101 <sup>2</sup>	3	CHEM 242L <sup>PR</sup>	1		
PSYC 220	4	Neuroscience Elective*	3		
NEUR 211	3	Neuroscience Elective*	3		
NEUR 212 <sup>PR</sup>	3	Neuroscience Elective*	3		
NEUR 310 <sup>PR</sup>	3	Science Elective*	3-4		
NEUR 480 <sup>PR</sup>	3	Science Elective*	4		
<b>Total Major Credits 34-35</b>		<b>Total Major Credits 32-33</b>		<b>Total Elective / Other Credits 16-18</b>	

### Total Credits Required for Graduation = 120

\*In addition to the major sequence requirements, a Neuroscience Major must also complete three neuroscience elective courses and two science elective courses from the following list. At least one (1) of these courses must include a laboratory component. (Some courses will require the laboratory component, as determined by the instructor):

Science Electives				
Science Electives		Neuroscience Electives		
BIOL 221 & 221L	BIOL 326 & 326L	PHYS 111 & 111L**	NEUR 341	NEUR349 & 349L
BIOL 222 & 222L	BIOL 336 & 336L	PHYS 112 & 112L**	NEUR 342	NEUR 390
BIOL 314 & 314L	BIOL 380		NEUR 345	NEUR 391
BIOL 323 & 323L	BIOL 447 & 447L		NEUR 346	BIOL 380
BIOL 353	BIOL 450 & 450L		NEUR 348	BIOL 456

\*\* In preparation for graduate or professional school, Pre-Health students should complete the two-semester sequence in Physics (PHYS 111, PHYS 111L, PHYS 112, and PHYS 112L) and Calculus (MATH 125).

#### 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."

See reverse side for a suggested sequence

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# Neuroscience

## 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 121 <sup>2</sup> , 123 <sup>2</sup> or 125 <sup>2</sup>	3-4
Core Course <sup>1</sup>	3	PSYC 101 <sup>PR</sup> Introduction to Psychology	3
HCE 101 Holy Cross Experience	1		
	<b>15</b>		<b>14-15</b>
Summer	Credits		
Fall	Credits	Spring	Credits
NEUR 211 Neuroscience I	3	NEUR 212 <sup>PR</sup> Neuroscience II	3
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
BIOL 213 <sup>PR</sup> Cell & Molecular Biology	3	Science Elective*	3-4
BIOL 213L Cell & Molecular Biology Lab	1	Core Course <sup>1</sup>	3
Core Course <sup>1</sup>	3	Core Course <sup>1</sup>	3
	<b>14**</b>		<b>16-17**</b>
Summer	Credits		
Fall	Credits	Spring	Credits
Neuroscience Elective*	3	Neuroscience Elective*	3-4
PSYC 220 Psychological Statistics	3	Core Course <sup>1</sup>	3
Core Course <sup>1</sup>	3	Core Course <sup>1</sup>	3
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>15</b>		<b>15-16</b>
Summer	Credits		
Fall	Credits	Spring	Credits
NEUR 310 <sup>PR</sup> Research Methods in Neuroscience	3	NEUR 480 <sup>PR</sup> Senior Seminar	3
Science Elective*	3-4	Core Course <sup>1</sup>	3
Core Course <sup>1</sup>	3	Free Elective <sup>3</sup>	3
Core Course <sup>1</sup>	3	Neuroscience Elective*	3
Free Elective <sup>3</sup>	3	Free Elective <sup>3</sup>	3
	<b>15-16</b>		<b>15</b>
<b>Total Credits Required for Graduation = 120</b>			

### NOTES:

\*\*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*).

<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 121, 123, or 125 will satisfy the Quantitative Reasoning Core requirement, and PSYC 101 will satisfy the Human Behavior & Social Institutions Core requirement.

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

<sup>PR</sup> Course has a prerequisite – check college catalog.