Neuroscience

Bachelor of Science (BS.NEUR)

Core Requir	ements		Credits	Notes/Instructions
College Sem.	Quest for Meaning	CSEM 100	3	†A student may be
Communication & Creative Expression	Writing Oral Communication Literature The Arts	ENGL 110† COMM 101 ENGL 140-149 ARTS 100-149	3 3 3 3	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
Citizenship	History Intercultural Global Connections	HIST 100-149 FREN/GERM/SPAN 100-level or Study Abroad++ ECON 150-199; GEOG 150-199; HIST 150-199; PS 150-199; SOC 150-199	3 3 3	MATH 100 are 3-credit courses and will count as free electives. †† The Intercultural
Quantitative & Scientific Reasoning	SBM Quantitative Reasoning SBM Scientific Endeavor SCIENCE in Context Human Beh. & Soc. Inst	MATH 120 [†] or higher level NSCI 100 NSCI 171-199 ECON 111, 112; GEOG 101, 102; PS 101, PSYC 101 ² , SOC 101	- - -	Competence requirement can be satisfied by taking a 100- level language class for 3 credits or participating in an approved Study
Wisdom, Faith, & the Good Life	Introduction to Phil. Phil. Investigations Theology & Wisdom Theology & the Good Life	PHIL 101 PHIL 170-199; MSB 287 THEO 150-159 THEO 160-169	3 3 3 3	Abroad experience. SBM = Satisfied By Major requirement(s) and credit(s) listed below.
		Total Core Credits	36	

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	3
BIOL 210 ^{PR}	3	CHEM 114 ^{PR}	3	Free Elective ³	3
BIOL 210LPR	1	CHEM 114LPR	1	Free Elective ³	3
BIOL 213 ^{PR}	3	CHEM 241 ^{PR}	3	Free Elective ³	3
BIOL 213L ^{PR}	1	CHEM 241LPR	1	Free Elective ³	3
MATH 121 ² , 123 ² , or 125 ²	3-4	CHEM 242 ^{PR}	3	Free Elective ^{3,4}	1-2
PSYC 101 ²	3	CHEM 242LPR	1		
PSYC 220	4	Neuroscience Elective*	3		
NEUR 211	3	Neuroscience Elective*	3		
NEUR 212 ^{PR}	3	Neuroscience Elective*	3		
NEUR 310 ^{PR}	3	Science Elective*	3-4		
NEUR 480 ^{PR}	3	Science Elective*	4		
Total Major Credits	34-35	Total Major Credits	32-33	Total Elective / Other Credits	16-18

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			Neuroscie	oscience 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 112L, 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 <u>or</u> 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."

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.

BIOL 113L Evolution & Diversity Lab CHEM 113' General Chemistry I CHEM 113' General Chemistry I CHEM 113' General Chemistry I CHEM 114' General Chemistry I Lab Core Course¹ 3	Fall	Credits	Spring	Credit
CHEM 113/ General Chemistry 3	BIOL 113 ² Evolution & Diversity	3	BIOL 210 ^{PR} Organisms & Their Ecosystems	3
CHEM 113. General Chemistry Lab	BIOL 113L Evolution & Diversity Lab	1	BIOL 210L Organisms & Their Ecosystems Lab	1
Core Course	CHEM 113 ² General Chemistry I	3	CHEM 114PR General Chemistry II	3
Core Course ¹ HCE 101 Holy Cross Experience 15 14 Summer Credits Fall Credits Spring Cre NEUR 211 Neuroscience I 3 NEUR 212**Neuroscience II CHEM 241**Organic Chemistry I CHEM 241**Organic Chemistry I Lab 1 CHEM 242**Organic Chemistry II CHEM 241**Organic Chemistry I Lab BIOL 213**Cell & Molecular Biology Bi	CHEM 113L General Chemistry I Lab	1	CHEM 114L General Chemistry II Lab	1
HCE 101 Holy Cross Experience 15 Summer Credits Fall Credits Spring Cre NEUR 211 Neuroscience I CHEM 241** Organic Chemistry I CHEM 241** Organic Chemistry I BIOL 213** Cell & Molecular Biology 3 Science Elective* 3 Core Course¹ 14** Summer Credits Fall Credits Spring Cre Credits 14** 16- Summer Credits Fall Credits Spring Cre Neuroscience Elective* 3 Neuroscience Elective* 3 Neuroscience Elective* 3 Neuroscience Elective* 3 Core Course¹ 3 Neuroscience Elective* 3 Core Course¹ 5 Core Course¹ 15 Summer Credits Fall Credits Spring Cre Neuroscience Elective* 3 Neuroscience Elective* 3 Core Course¹ 3 Core Course¹ 3 Core Course¹ 5 Free Elective³ 3 Core Course¹ 5 Summer Credits Fall Credits Spring Cre Neuroscience Elective* 3 Neuroscience Elective* 3 Core Course¹ 5 Summer Credits Fall Credits Spring Cre Neuroscience Elective* 3 Neuroscience Elective* 3 Core Course¹ 5 Summer Credits Free Elective³ 3 Free Elective³ 3 Free Elective³ 5 Free Elective³ 5 Free Elective³ 7 Free Elective³ 7 Free Elective³ 8 Free Elective* 1 Series Elective* 1 Series Elective* 1 Series Elective* 1 Series Elective* 3 Neuroscience Elective* 5 Free Elective³ 7 Free Elective³ 7 Free Elective³ 7 Free Elective³ 7 Free Elective* 7 Free Elective* 8 Free Elective* 1 Series Elective* 3 Neuroscience Elective* 5 Free Elective* 7 Free Elective* 8 Free Elective* 1 Series Elective* 3 Series Elective* 5 Free Elective* 7 Free Elective* 8 Free Elective* 9 Series Elective* 1 Series Elective	Core Course ¹	3	MATH 121 ² , 123 ² or 125 ²	3-4
Tell	Core Course ¹	3	PSYC 101 ^{PR} Introduction to Psychology	3
Summer Credits Spring Chem 242" Organic Chemistry Second Che	HCE 101 Holy Cross Experience	1		
Fall Credits Spring Cre		15		14-1
NEUR 211 Neuroscience I 3 NEUR 212 PR Neuroscience II CHEM 241 PR Organic Chemistry I 3 CHEM 242 PR Organic Chemistry II Lab 1 CHEM 242 Organic Chemistry II Lab II CHEM 242 Organic Chemistry II Lab III CHEM 242 Organic Chemistry II Lab II Lab II Lab II CHEMISTRY	Summer	Credits		
NEUR 211 Neuroscience 3	Fall	Credits	Spring	Cred
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BIOL 213 ^{PR} Cell & Molecular Biology 3 Science Elective* 3 BIOL 2131 Cell & Molecular Biology Lab 1 Core Course¹ 14" 16- Summer Credits Fall Credits Spring Cre Neuroscience Elective* 3 Neuroscience Elective* 3 Core Course¹ The Summer		1		1
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Free Elective ³ 3 Free Elective ³				3
15-16				3
15-16		45.46		
		15-16		1:

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).

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

² 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.

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

PR Course has a prerequisite – check college catalog.