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 SBM 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 ² , PSYC 101, 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 114L ^{PR}	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 125 ²	4	CHEM 242 ^{PR}	3	Free Elective ³	3
PSYC 101 ²	3	CHEM 242LPR	1		
PSYC 220	4	Science Elective*	4		
NEUR 211	3	Science Elective*	4		
NEUR 212 ^{PR}	3	Science Elective*	3-4		
NEUR 310 ^{PR}	3	Science Elective*	3-4		
NEUR 480 ^{PR}	3				
Total Major Credits	35	Total Major Credits	30	Total Elective / Other Credits	19

Total Credits Required for Graduation = 120

*In addition to the major sequence requirements, a Neuroscience Major must also complete four science elective courses from the following list. At least two (2) of these courses must include a laboratory component. (Some courses will require the laboratory component, as determined by the instructor):

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

^{**} In preparation for graduate or professional school, Pre-Healing Arts students should complete the two-semester sequence in Physics (PHYS 111, PHYS 111L, PHYS 112, and PHYS 112L).

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.

Fall 2019	Credits	Spring 2020	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 114PR 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	PSYC 101 ^{PR} Introduction to Psychology	3
HCE 101 Holy Cross Experience	1		
	15		15
Summer 2020	Credits		
Fall 2020	Credits	Spring 2021	Credits
NEUR 211 Neuroscience I	3	NEUR 212 ^{PR} Neuroscience II	3
CHEM 241 ^{PR} Organic Chemistry I	3	CHEM 242 ^{PR} Organic Chemistry II	3
CHEM 2411 Organic Chemistry I Lab	1	CHEM 242L Organic Chemistry II	3 1
BIOL 213 ^{PR} Cell & Molecular Biology	3	Science Elective*	4
	1	Core Course ¹	3
BIOL 213L Cell & Molecular Biology Lab Core Course ¹		Core Course-	3
Core Course-	3		
	14**		14**
Summer 2021	Credits		
Fall 2021	Credits	Spring 2022	Credits
Science Elective*	4	Science Elective*	3-4
PSYC 220 Psychological Statistics	4	Core Course ¹	3
Core Course ¹	3	Core Course ¹	3
Core Course ¹	3	Core Course ¹	3
Free Elective ³	3	Free Elective ³	3
	17		15-16
Summer 2022	Credits		
Fall 2022	Credits	Spring 2023	Credits
NEUR 310 ^{PR} Research Methods in Neuroscience	3	NEUR 480 ^{PR} Senior Seminar	3
Science Elective*	3-4	Core Course ¹	3
Core Course ¹	3-4	Free Elective ³	3
Core Course ¹	3	Free Elective ³	3
Free Elective ³	3	Free Elective ³	3
	15-16		15

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 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.

 $^{^{\}mbox{\scriptsize PR}}$ Course has a prerequisite – check college catalog.