Neuroscience

Bachelor of Science (BS.NEUR)

College Sem. Quest for Meaning CSEM 100 Communication Writing ENGL 110 ⁺ Communication Oral Communication COMM 101 & Creative Literature ENGL 140-149 Expression The Arts ARTS 100-149 History HIST 100-149 Intercultural FREN/GERM/SPAN 100-level or Study Abroad ⁺⁺ Global Connections ECON 150-199; GEOG 150-199; HIST 150-199; PS 150-199; SOC 150-199	3 3 3 3 3 3 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
Communication Oral Communication COMM 101 & Creative Literature ENGL 140-149 Expression The Arts ARTS 100-149 History HIST 100-149 Intercultural FREN/GERM/SPAN 100-level or Study Abroad ⁺⁺ Global Connections ECON 150-199; GEOG 150-199; HIST 150-199; PS 150-199; SOC 150-199;	5	based on placement exams administered prior to their first semester at King's College. ENGL 105 and MATH 100 are 3-credi
Citizenship Intercultural FREN/GERM/SPAN 100-level or Study Abroad ⁺⁺ Global Connections ECON 150-199; GEOG 150-199; HIST 150-199; PS 150-199; SOC 150-19	3	
	3 99 3	 MATH 100 are 3-credit courses and will court a free electives. † The Intercultural Competence requirement can be satisfied by taking a 100 level language class for credits or participating i an approved Study Abroad experience. (See college catalog for more information) SBM = Satisfied By Major requirement(s) and credit(s) listed below.
SBM Quantitative Reasoning MATH 120 ⁺ or higher level Quantitative & SBM Scientific Endeavor NSCI 100 Scientific SBM Science in Context NSCI 171-199 Reasoning SBM Human Beh. & Soc. Inst ECON 111, 112; GEOG 101, 102; PS 101, PSYC 101 ² , SOC 101	- - -	
Introduction to Phil. PHIL 101 Wisdom, Faith, Phil. Investigations PHIL 170-199 A the Good Life Theology & Wisdom THEO 150-159 Theology & the Good Life THEO 160-169	3 3 3 3	

Electives³/ Major Major Credits Credits Credits **Other Requirements** Requirements Requirements CHEM 113² BIOL 113² 3 3 HCE 101 Holy Cross Exp. 1 BIOL 113L 1 CHEM 113L 1 Free Elective³ 3 BIOL 210PR 3 CHEM 114PR 3 Free Elective³ 3 BIOL 210LPR Free Elective³ 1 CHEM 114LPR 3 1 BIOL 213PR 3 CHEM 241^{PR} 3 Free Elective³ 3 BIOL 213LPR 1 CHEM 241LPR 1 Free Elective³ 3 MATH 121², 123², or 125² CHEM 242PR Free Elective^{3,4} 1-2 3-4 3 **PSYC 101²** 3 CHEM 242LPR 1 PSYC 220 4 Neuroscience Elective* 3 **NEUR 211** 3 Neuroscience Elective* 3 NEUR 212PR 3 Neuroscience Elective* 3 NEUR 310PR 3 Science Elective* 3-4 NEUR 480PR 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			Neuroscience Electives				
BIOL 221 & 221L	BIOL 326 & 326L	BIOL 447 & 447L	NEUR 341	NEUR 348	NEUR 421		
BIOL 222 & 222L	BIOL 336 & 336L	BIOL 450 & 450L	NEUR 342	NEUR349 & 349L	BIOL 380		
BIOL 314 & 314L	BIOL 353	PHYS 111 & 111L**	NEUR 345	NEUR 390	BIOL 456		
BIOL 323 & 323L	BIOL 380	PHYS112 & 112L**	NEUR 346	NEUR 391			

** 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 <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	Credits	Spring	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 114 ^{PR} General Chemistry II	3
CHEM 113L General Chemistry I Lab	1	CHEM 114L General Chemistry II Lab	1
Core Course ¹	3	MATH 121 ² , 123 ² or 125 ²	3-4
Core Course ¹	3	PSYC 101 ^{PR} Introduction to Psychology	3
HCE 101 Holy Cross Experience	1		
	15		14-15
Summer	Credits		
Fall	Credits	Spring	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 241L Organic Chemistry I Lab	1	CHEM 242L Organic Chemistry II Lab	1
BIOL 213 ^{PR} Cell & Molecular Biology	3	Science Elective*	3-4
BIOL 213L Cell & Molecular Biology Lab	1	Core Course ¹	3
Core Course ¹	3	Core Course ¹	3
	14**		16-17**
Summer	Credits		
Fall	Credits	Spring	Credits
Neuroscience Elective*	3	Neuroscience Elective*	3
PSYC 220 Psychological Statistics	3	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
	15		15
Summer	Credits		
Fall	Credits	Spring	Credits
NEUR 310 ^{PR} Research Methods in Neuroscience	3	NEUR 480 ^{, PR} Senior Seminar	3
Science Elective*	3-4	Free Elective ³	3
Core Course ¹	3	Free Elective ³	3
Core Course ¹	3	Neuroscience Elective*	3
Free Elective ³	3	Free Elective ³	1-2
	45.45		
	15-16		13-14
		for Creduction - 120	
Total C	redits Required.	for Graduation = 120	

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.