Neuroscience Major

Approved September 24, 2012

Support Courses (**required**): Totals 16 Credits

- CHE 111 General Chemistry I (4) or higher
- CHE 112 General Chemistry II (4) or higher
- MAT 117 Pre-Calculus-FM (4) or higher
- PHY 210 Elements of Physics I (4) or higher

Complete **each** of the following: Totals 27-29 Credits

- PSY 101 Introductory Psychology (3)
- BIO 115 Principles of Biology I (4)
- BIO 116 Principles of Biology II (4)
- NEU 145 Introductory Neuroscience (3)
- PSY 331 Physiological Psychology (3)
- BIO 250 Genetics (4)
- BIO 279 Exp Design/Biostat-AH (3)*
- NEU 390 Independent Study/Research Elective (1-3)
- NEU 490 Neuroscience Senior Seminar I (1)
- NEU 491 Neuroscience Senior Seminar II (1)

Complete **two** of the following Neuroscience Electives: Totals 6 Credits

- PSY 131 Psychology of Stress (3; offered at J Term)
- PSY 231 Sensation & Perception (3)
- PSY 285 Drugs and Behavior-AH (3)
- PSY 332 Learning and Cognition (3)
- PSY 333 Motivation and Emotion (3)
- PHI 318 Theory and Practice of Bioethics-AV (3; offered at J Term)

Complete **one** of the following Special Topics courses (prereq or concurrent enrollment in NEU 145):

Totals 3 Credits

- NEU 301 Neurobiology of Disease (3)
- NEU 311 Psychoneuroendocrinology (3)
- NEU 281 Exploring the Brain through Traumatic Brain Injuries (3)
- NEU 291 Neuroimaging & Brain Mapping (3)

Final Major Credit Load 36-38

*PSY 211/212 Research Methods & Statistics I & II (8) can replace the BIO 279 requirement

Recommended Courses (along with those not taken in Electives & Special Topics categories):

- BIO 260 Human Anatomy & Physiology-AH (4)
- BIO 420 Vertebrate Physiology (4)
- CHE 233 Organic Chemistry I (4)
- CHE 234 Organic Chemistry II (4)
- CHE 335 Biochemistry (4)
- CIT 110 Computing & Information Technology Basics (3)
- PSY 221 Abnormal Psychology (3)
- PHY 211 Elements of Physics II (4)
- MAT 150 Calculus of One Variable I-FM (4)

Sample Four-Year Plan for Neuroscience

Updated: October 2012

JANUARY TERM	
Students admitted Fall 2007 or later are required to complete a minimum of two January terms. **Transfer students who transfer in 40 credits or more are required to complete at least one January term.**	**CR**
Neuroscience elective course	3
Advanced General Education course	3

FIRST YEAR FALL SEMESTER			FIRST YEAR SPRING SEMESTER	
Title	CR		Title	CR
LIB 100 Modes of Inquiry	3		Writing requirement (LIB 100 or ENG 111) OR Speaking requirement (LIB 110)	3
Writing requirement (LIB 100 or ENG 111) OR Speaking requirement (LIB 110)	3		MAT 117 Pre-Calculus-FM or higher	4
PSY 101 Introductory Psychology	3		NEU 145 Introductory Neuroscience	3
BIO 115 Principles of Biology I OR CHE 111 General Chemistry I	4		BIO 116 Principles of Biology II OR CHE 112 General Chemistry II	4

SOPHOMORE YEAR FALL SEMESTER			SOPHOMORE YEAR SPRING SEMESTER	
Title	CR		Title	CR
LIB 220 Democracy & Global Diversity OR Catholic Traditions (LIB 130 or LIB 135)	3		LIB 220 Democracy & Global Diversity OR Catholic Traditions (LIB 130 or LIB 135)	3
BIO 115 Principles of Biology I OR CHE 111 General Chemistry I	4		BIO 116 Principles of Biology II OR CHE 112 General Chemistry II	4
BIO 279 Experimental Design/Biostatistics (AH) OR Neuroscience Elective	3		Neuroscience Elective OR Advanced General Education Course	3
PHY 210 Elements of Physics I	4		General Electives	3

JUNIOR YEAR FALL SEMESTER			JUNIOR YEAR SPRING SEMESTER	
Title	CR		Title	CR
Neuroscience Special Topics	3		Neuroscience Elective OR Advanced General Education Course	3
BIO 279 Experimental Design/Biostatistics (AH) OR Neuroscience Elective OR Advanced General Education Course	3		Neuroscience Elective OR Advanced General Education Course	3
Advanced General Education Course	3		PSY 331 Physiological Psychology	3
NEU 390 Independent Study/Research Elective*	1-3		General Electives	3
General Electives	3		OR SEMESTER STUDYING ABROAD	

SENIOR YEAR FALL SEMESTER			SENIOR YEAR SPRING SEMESTER	
Title	CR		Title	CR
NEU 490 Neuroscience Senior Seminar I	1		NEU 491 Neuroscience Senior Seminar II	1
Advanced General Education Cluster	6		BIO 250 Genetics	4
Portfolio (LIB 305)	1		General Electives	7
General Electives	3			

*If students elect to do so, the Independent Study/Research Elective may be taken in additional semesters.