

# NEUROSCIENCE - BS, TRANSLATIONAL AND PRECLINICAL NEUROSCIENCE TRACK

## Program Requirements

### First Year

		Semester Credit Hours
<b>Fall</b>		
BIOL 111	Introductory Biology I <sup>1</sup>	4
CHEM 119	Fundamentals of Chemistry I <sup>1</sup>	4
ENGL 104	Composition and Rhetoric <sup>1</sup>	3
NRSC 101	Neuroscience Overview <sup>1</sup>	1
	Select one of the following: <sup>1</sup>	4
	MATH 147 Calculus I for Biological Sciences	
	MATH 151 Engineering Mathematics I	
	MATH 171 Calculus I	
	Semester Credit Hours	16

### Spring

BIOL 112	Introductory Biology II <sup>1</sup>	4
CHEM 120	Fundamentals of Chemistry II <sup>1</sup>	4
PSYC 107	Introduction to Psychology	3
	Select one of the following:	4
	MATH 148 Calculus II for Biological Sciences	
	MATH 152 Engineering Mathematics II	
	MATH 172 Calculus II	
	Semester Credit Hours	15

### Second Year

<b>Fall</b>		
CHEM 227	Organic Chemistry I <sup>1</sup>	3
CHEM 237	Organic Chemistry Laboratory <sup>1</sup>	1
PHYS 201	College Physics <sup>1</sup>	4
POLS 206	American National Government	3
VIBS 277/ NRSC 277	Essential Neuroscience - From Molecules to Nervous Systems <sup>1</sup>	3
	Semester Credit Hours	14

### Spring

BIOL 213	Molecular Cell Biology	3
CHEM 228	Organic Chemistry II <sup>1</sup>	3
CHEM 238	Organic Chemistry Laboratory <sup>1</sup>	1
PHYS 202	College Physics <sup>1</sup>	4
	American history ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> ) <sup>2</sup>	3
	General Elective <sup>4</sup>	2
	Semester Credit Hours	16

### Third Year

<b>Fall</b>		
BICH 410	Comprehensive Biochemistry I	3
NRSC 235/ PSYC 235	Introduction to Behavioral and Cognitive Neuroscience <sup>1</sup>	3
STAT 302	Statistical Methods	3
	American history ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> ) <sup>2</sup>	3
	Language, philosophy and culture ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture</a> ) <sup>2</sup>	3

Semester Credit Hours 15

### Spring

BICH 411	Comprehensive Biochemistry II	3
GENE 302	Principles of Genetics <sup>6</sup>	3
	or GENE 320/ BIMS 320 or Biomedical Genetics	
POLS 207	State and Local Government	3
	Select one of the following:	3

NRSC 300-499 (<http://catalog.tamu.edu/undergraduate/course-descriptions/nrsc/>)

PSYC 300-499 (<http://catalog.tamu.edu/undergraduate/course-descriptions/psyc/>)

Communication (<http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication>) <sup>2</sup>

Semester Credit Hours 15

### Fourth Year

<b>Fall</b>		
VIBS 450/ NRSC 450	Mammalian Functional Neuroanatomy	4
	Creative arts ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts</a> ) <sup>2</sup>	3
	Concentration elective <sup>3</sup>	6
	General elective <sup>5</sup>	3
	Semester Credit Hours	16

### Spring

BIOL 434/ NRSC 434	Regulatory and Behavioral Neuroscience	3
BIOL 435	Laboratory for Regulatory and Behavioral Neuroscience	1
	Concentration elective <sup>3</sup>	6
	General elective <sup>4</sup>	3
	Semester Credit Hours	13
	Total Semester Credit Hours	120

<sup>1</sup> Must make a C or better

<sup>2</sup> Students should complete core areas in consultation with an academic advisor, as some professional schools require specific courses.

- <sup>3</sup> Choose the NRSC-TPC concentration electives in consultation with an academic advisor. Select 6 hours from the following: BIMS 485, BIMS 481, BIOL 495, GENE 314, KINE 406, NRSC 201/VIBS 201, NRSC 401/VIBS 401, NRSC 407/VIBS 407, NRSC 485, NRSC 491, PSYC 485, PSYC 491, VIBS 102, VIBS 343, VIBS 401, VIBS 408, VIBS 422, VIBS 424/VTPP 424, VIBS 443, VIBS 447, VIBS 485, VTPP 323, VTPP 485, VTPP 491.
- <sup>4</sup> Select any 100-499 course not used elsewhere (except Math 102-104 ) Only one KINE 199 is allowed.
- <sup>5</sup> Select from any 300-499 course not used elsewhere.
- <sup>6</sup> GENE 302 must be taken concurrently with GENE 314 lab. The lab is an NRSC-TPC elective.

The graduation requirements include a requirement for 3 hours of international and cultural diversity courses and 3 hours of cultural discourse courses. A course satisfying a core category, a college/department requirement, or a free elective can be used to satisfy this requirement. See academic advisor.

Graduation requirements require 2 courses with the Writing Intensive (UWRT), or 1 course with the Writing Intensive (UWRT) and 1 course with the Oral Communication (UCRT) attribute. These courses are designed to be TPC concentration electives (ex. VIBS 102, VIBS 408, VIBS 443, VIBS 447, BIMS 491, BIOL 495) and should be chosen in consultation with an academic advisor. Writing/Communication intensive courses must be taken in the student's major to count towards graduation.