

**Neuroscience (NESC) Theme  
2019-2020 Academic Requirements**

COURSES	PLANNED	COMPLETED
<b>Lab Rotations</b>		
GBS 795- Lab Rotation 1 (1 hour)	1 <sup>st</sup> Fall	
GBS 796- Lab Rotation 2 (1 hour)	1 <sup>st</sup> Fall	
GBS 797- Lab Rotation 3 (1 hour)	1 <sup>st</sup> Spring	
GBS 794- Lab Rotation 4 (1 hour), if needed	1 <sup>st</sup> Summer	
<b>Core Courses</b>		
GBS 707- Basic Biochemistry and Metabolism (2 hours)	1 <sup>st</sup> Fall	
GBS 708- Basic Genetics and Molecular Biology (2 hours)	1 <sup>st</sup> Fall	
GBS 709- Basic Biological Organization (2 hours)	1 <sup>st</sup> Fall	
GBS 701- Core Concepts in Research: Critical Thinking/Error Analysis (1 hr)	1 <sup>st</sup> Fall	
<b>Module Courses- Exceptions require approval of theme director</b>		
GBS 747- Neuroanatomy (January, 2 hours)	1 <sup>st</sup> Spring	
GBSC 729- Cell Neurophysiology (February, 2 hours)	1 <sup>st</sup> Spring	
GBS 714- Developmental Neuroscience (March, 2 hours)	1 <sup>st</sup> Spring	
GBSC 727- Neuro Systems (April, 2 hours)	1 <sup>st</sup> Spring	
<b>Theme Required Courses</b>		
GBS 730- Intro to Neurobiology, Dauphin Island (6 hours)	Incoming Summer	
GBS 737- Neuro Student Summer Seminar Series (1 hour)	Every Summer	
NBL 703- Neurobiology Seminar Series (1 hour) - Attend 1 <sup>st</sup> year, but do not register	Every fall & spring, 2 <sup>nd</sup> year to graduation	
<b>GBS Required Courses</b>		
GRD 717- Principles of Scientific Integrity (3 hours)	1 <sup>st</sup> Summer	
Grant-writing/Scientific-writing (2 hours) - Course selected: GBS 716, GBS 725, GBS 768, GBSC 726, GRD 709		
Biostatistics (3 hours) -Course selected: GRD 770, BST 611, BST 612, BY 755, PY 716	2 <sup>nd</sup> year	
Journal Clubs (1 hour) -Chosen in consultation with mentor	Every fall & spring, 2 <sup>nd</sup> year to graduation	
Three Advanced Courses (3 hours each) -Chosen in consultation with mentor and thesis committee		
Research (Non-dissertation & Dissertation) - Student must complete 24 hours total of dissertation research	Every semester beyond lab rotations	

**Notes:**

- Students must be registered for 9 hours each semester, for a total of 27 hours per year. Equity and Diversity Scholars must register for 32 hours total per year. Any hours over must be approved by the program.
- Students must be admitted to candidacy for a minimum of 1 year before the thesis defense

**Additional Theme Requirements:**

- Publications: At least one published first author paper & one submission to a journal. Co-author papers are encouraged.
- Presentations: At least two presentations at a national or international scientific meeting (poster and/or oral).