Neuroscience Program

- Interdisciplinary Program across two Colleges:
  Arts & Sciences (Biology, Math, and Psychology)
  Medicine (Biomedical Sciences)

- Research Areas include:
  Sensory Systems
  Ingestive Behavior and Metabolism
  Neurobiology of Social Behaviors
  Neural Plasticity and Development
  Biological Rhythms
  Neurobiology of Disease

- Graduate program has been in existence officially since 1991
  Approximately 50 faculty including post-docs
  45 grad students, 300 plus undergraduates
Why Undergraduate Degree?

- Better prepare students for advanced study in the life sciences
  - Many career options besides MD and University Professor
  - Ignoring Chemistry, Physics, and Math is a hinderance to understanding a complex system
- Change in nature and frequency of MCAT questions related to Social Sciences
  - Recognition by many schools preparing Health Professionals that mental health is a key component of healthcare
- Elimination of BIO/PSY double major
  - Encourage more hands-on experiences
  - Increase diversity in life sciences
Arts & Sciences
Foreign Language Requirement

Demonstrate proficiency in a foreign language through the Intermediate or 2000 level.

Mandatory Placement tests are required for continued study in French, German, or Spanish.

NOTE: Courses used to meet foreign language requirements can be taken for an S/U grade, also known as “Pass/Fail.”

https://artsandsciences.fsu.edu/students/undergraduate/policies-and-procedures

Collateral Courses:
Chemistry*

- CHM 1045 (3) General Chemistry I
- CHM 1045L (1) General Chemistry I Lab
- CHM 1046 (3) General Chemistry II
- CHM 1046L (1) General Chemistry II Lab

8 hours

*Results in Chemistry Minor

- CHM 2210 (3) Organic Chemistry I
- CHM 2211 (3) Organic Chemistry II

OR

- CHM 3217/L (4) One Semester Organic w/Lab
- CHM 2318 (3) One Semester Biochemistry

6-7 hours
Required Prerequisites

• BSC 2010 (3) and BSC2010L (1)
• BSC 2011 (3) and BSC2011L (1)
• CHM 1045 (3) and CHM1045L (1)
• CHM 1046 (3) and CHM1046L (1)
• PSY 2012 General Psychology (3)
• STA 2122 Intro to Applied Stats (3)
  • MAC 2311 Calculus I (4)

*Must be completed with a C- or better to take upper division courses, minimum GPA 2.8 on ALL coursework

The Major in Neuroscience

Core courses (38 hours)
  • Required Core Courses (19 hours)
  • Upper-Division Electives (17 hours)

Collateral Courses (30 to 39 hours)
  • Chemistry, physics, and math

*Minimum 2.8 GPA Overall
Required Core Courses (19 hours)

- PSY 2012 (3) General Psychology
- PSY 3213C (4) Research Methods in Psychology
- PSB 3004C (4) Physiological Psychology w/Brain Anatomy Lab
- PCB 3134 (3) Cell Structure and Function
- PCB 4843 (3) Fundamentals of Neuroscience
- PSB 4400 (2) Neuroscience Methods: Molecules to Behavior

Required Introductory Biology Courses

- BSC 2010 (3) Biological Science I
- BSC 2010L (1) Biological Science I Lab
- BSC 2011 (3) Biological Science II
- BSC 2011L (1) Biological Science II Lab

8 hours
Collateral Courses: Math

Required Math
MAC 1105 (3) College Algebra
MAC 1140 (3) Pre-Calculus
MAC 1114 (3) Trigonometry
**MAC 2311 (4) Calculus I

Additional Math
STA 2122 (3) Intro to Applied Statistics

**ALEKS Math Placement Test

Collateral Courses: Physics

PHY 2053C (4) Physics A and PHY 2054C (4) Physics B
OR
PHY 2048C (5) Physics A and PHY 2049C (5) Physics B

8-10 hours
D/F Policy

• Refers to grades less than a C– (D+, D, D–, F, U)
• Required courses in which D or F grades have been earned must be repeated
• Applies to Neuroscience, prerequisites, and collateral courses taken at FSU and all other institutions, including repeated courses
• Students who have earned more than four (4) D/F will be required to change majors

Registration

• During the first 4 days of a new semester you can drop/add a class without any sort of penalty
• Adding a class after this time will require your Dean’s and instructor’s approval
• Dropping a class after this time could make you fee liable.
• Mandatory first day of class attendance policy.
• Registrar’s website for all academic calendars: https://registrar.fsu.edu/calendar/

*Fall drop/add is August 22-27
*Summer C drop/add is June 20-25
Last Day to Drop without Academic Penalty (7th week)
*Summer C July 10, Fall October 9
Last Day to drop w/ Dean’s permission (12th week)
*Fall November 13, Summer C July 24
Practice Planning by Requirements

***Assume you passed your AP/IB/AICE exams*****

Sample schedule with alternatives (12-16 hours):

(Depending on credit)

- ENC 1101 → ENC 2135
- MAC 1105 → STA 2122
- PSY 2012 → CHM 1045/L
- BIOLOGY → BSC 2010/L
- Other LS reqs. → Foreign Lang.

1. English: Must complete ENC 1101 by Term 1 (Fall).
2. Math: MAC 1105 must completed or waived by Term 1 (Fall); Consider taking STA 2122 if have AP credit for ANY math
3. Are you ready to start your chemistry sequence?
4. Plan on FIGs (or other commitments like LLC or Honors)

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Neuroscience Orientation Part II
Neural activity vs. fMRI in the brain of an awake, resting mouse

fMRI is a slow, low-frequency average of the actual neural activity taking place in the brain. Says where ‘most’ of the activity was every few seconds.

Academic Advising
Making the most of your college experience
Neuroscience Requirements & Mapping

- Designed for graduation in 4 years
- Be aware of the milestones
- Maintain high GPA

First 2 Years: EXPLORE, ENGAGE
- Career Paths
- Prerequisites
- Certificate/Minor options
- Student Organizations

Last 2 Years: EXPERIENCE
- Core Requirements
- Build Skills
  - leadership, research, professional

Alexis Fraites
Career Liaison for College of Arts and Sciences
**Majors: Biological Science, Neuroscience, Psychology**

How can Alexis help you?
- Internship search
- Resumes and cover letters
- Research Opportunities
- Graduate school
- Career/major exploration
- Part-time/Full-time Job search

**Drop-In Career Advising Hours***

- Summer 2020: T/W/TH: 9 AM – 12 PM
- Fall 2020: T/W: 1 – 4 PM; Th: 9 AM – 12 PM

*hours subject to change, look out for weekly newsletters with updates and resources!

a.fraites@fsu.edu | 850-645-0440 | career.fsu.edu
Career Advising Services
Available Monday thru Friday
9:00 am – 4:30 pm via Zoom
during online instruction period:
https://career.fsu.edu/info

Pre-Professional Health Sciences

- Medicine
- Veterinary Medicine
- Optometry
- Dentistry
- Pharmacy
- Physician’s Assistant
- Physical Therapy

Health Professions Advisors
The Florida State University
College of Medicine
(850) 644-7678
https://med.fsu.edu/outreach/pre-health-advising-overview
FIGS- Freshman Interests Groups

• Pre-packaged cluster of popular freshman courses linked by academic interests such as Psych, Pre-Med, Pre-Law, etc....
• ONLY offered Fall Freshman year
• Includes 2-3 classes + 1 hr. colloquium
• Great way to meet like-minded classmates and register for high-demand courses
• More Info in It’s All Academic (Appendix C)
• Other engagement experiences like Chart Your Course, Intro to FSU and the Seminole Creed, Design Your Life, or Future Innovators

Registered Student Organizations

• Neuroscience Undergraduate Student Association (NUSA)
  – Open to any major
• Nu Rho Psi
  – Neuroscience Honor Society
• Connecting Experimental Lab & Life Sciences (CELLS)
  – Designed to help students get involved in research
• LOTS of health related RSOs
  – Find anything via Nole Central
  – https://nolecentral.dsa.fsu.edu/
Neuro Check-In

• MANDATORY advising meeting in your first semester on FSU campus!
• Transition progress
• Review of important semester deadlines and resources
• Discuss upcoming mapping milestones and setting up class schedule for next semester
• Emails will be coming soon…. So be on the lookout!

Advising Office

• Office Hours: Monday thru Friday 9:30 am to 12 noon and 1:30 pm to 4:30 pm (subject to change)
• Location: Psychology Dept Building (PDB) A208
• Phone: (850) 645-9565
• Email: advising@neuro.fsu.edu
• Zoom Appointments Only via Campus Connect during online instruction period
  • Check your campus e-mail account regularly
  • Ask for help with any problems or questions
• http://www.neuro.fsu.edu