In order to declare the System/Behavioral Neuroscience major, students must complete Psych 3313 and Neuro 3000 with grades of 'B' or higher in both classes and earn a minimum 3.0 cumulative GPA.

I. Core Requirements
Take all 4 of the courses below

- **Psych 3313 Introduction to Behavioral Neuroscience**
  3hrs | Au, Sp, Su | (Pre-reqs: Psych 1100)

- **Neuro 3000 Introduction to Molecular/Cellular Neuroscience**
  3hrs | Au, Sp | (Pre-reqs: Bio 1113)

*Students must complete Psych 3513 and Neuro 3050 with a 'C' or higher in both classes*

- **Psych 3513 Introduction to Cognitive Neuroscience**
  3hrs | Au, Sp | (Pre-reqs: Psych 1100)

- **Neuro 3050 Structure & Function of the Nervous System**
  3hrs | Au, Sp | (Pre-reqs: Bio 1113 & Neuro 3000)

II. Data Analysis Requirement
Take 1 of the 4 courses below

- **Psych 2220 Introduction to Data Analysis in Psychology**
  3hrs | Au, Sp, Su | (Pre-reqs: Psych 1100 & Math 1140)
  | Au, Sp | (Honors Version)

- **Stats 2480 Statistics for Life Sciences**
  3hrs | Sp | (Pre-reqs: Math 1151)

- **Stats 2450 Introduction to Statistical Analysis**
  3hrs | Au | (Pre-reqs: Math 1151)

- **MolGen 5650 Analysis & Interpretation of Biological Data I**
  3hrs | Au | (Pre-reqs: Math 1150 & 10hrs 3000-level Bio)

III. Specialization Requirements
Choose at least 5 specialization courses from the options below

- **Psych 4305 Intro to Psychopharmacology**
  3hrs | Au, Sp | (Pre-reqs: Psych 3313 & Neuro 3000)
  *Not Open to Students With Credit For Psych 3305*

- **Psych 4501 Advanced Behavioral Neuroscience**
  3hrs | Sp | (Pre-reqs: B or higher in 3313 & Neuro 3000)

- **Neuro 4623 Biological Clocks and Behavior**
  3hrs | Sp | Spring '16 '18 | (Pre-reqs: Neuro 3000)

- **Psych 4644 Hormones & Behavior**
  3hrs | Sp | (Pre-reqs: Psych 3313 & Neuro 3000)
  *Not Open to Students With Credit For Neuro 5644*

- **Psych 5600 Psychobiology of Learning & Memory**
  3hrs | Sp | (Pre-reqs: Psych 3313 & Neuro 3000)

- **Psych 5602 Behavioral Genetics**
  3hrs | Sp | (Pre-reqs: Psych 3313 & Neuro 3000)

- **Psych 5603 Stem Cells and The Brain**
  3hrs | Au | (Pre-reqs: Psych 3313 & Neuro 3000)

- **Psych 5622 The Development of Brain and Behavior**
  3hrs | Au | (Pre-reqs: Psych 3313 & Neuro 3000)

- **Neuro 4100 Basic & Clinical Foundations of Neurological Disease**
  3hrs | Au | (Pre-reqs: Neuro 3000)

- **MolGen 4500 General Genetics**
  3hrs | Au, Sp, Su | (Pre-reqs: Bio 1113 & 3+ hrs Bio)
  | Au, Sp | (Honors Version)

- **Biochem 4511 Intro to Biological Chemistry**
  4hrs | Au, Sp, Su | (Pre-reqs: Chem 1210/1220 & 2510)

- **EEOB 4550 Neurobiology of Behavior**
  3hrs | Au | (Pre-reqs: 2 courses in Bio)
IV. BREADTH REQUIREMENT
Choose at least 2 additional courses from the list below

- **Neuro 3025** History of Neuroscience
  3hrs | Au | (Pre-reqs: Psych 3313 & Neuro 3000)

- **Neuro 3010** Neurophysiology
  3hrs | Au | (Pre-req: Neuro 3000)

- **Neuro 4050H** Neurogenetics
  3hrs | Au | (Pre-req: Neuro 3000)

- **Neuro 4640** Neuronal Signal Transduction
  3hrs | Sp | (Pre-req: Neuro 3000 & 3050)

- **Neuro 5790H** Developmental Neuroscience
  3hrs | Sp | (Pre-req: Neuro 3000 & 3050)

- **Ling 3701** Language and the Mind
  3hrs | Au, Sp | (Pre-req: Psych 1100)

- **Psych/CSE/Ling/Philos 5612** Introduction to Cognitive Science
  3hrs | Au | (Pre-req: 12hr in Psych/CSE/Ling/Philos)

- **Psych 5614** Cognitive Neuroscience
  3hrs | Au | (Pre-req: Psych 3313 or 3513)

- **SHS 5760** Neurology of Speech and Hearing Mechanisms
  3hrs | Sp | (Pre-req: B or higher in 2220)

- **Psych 3321** Quantitative and Statistical Methods in Psychology
  3hrs | Au, Sp | (Pre-req: Math 1511 & 1512)

- **Math 4350** Quantitative Neuroscience
  3hrs | Sp | (Pre-req: Math 1151 & 1512)

- **Psych 5608** Intro to Mathematical Psychology
  3hrs | Au | (Pre-req: Psych 3321)

- **CSE 5052** Survey of Artificial Intelligence for Non-Majors
  3hrs | Au | (Pre-req: Psych CSE 2221)

- **CSE 5526** Introduction to Neural Networks
  3hrs | Au | (Pre-req: Psych CSE 3521)

- **Econ 5870** Neuroeconomics and Decision Neuroscience
  3hrs | Sp | (Pre-req: Stat 2450 & Psych 3313)

- **Philos 5840** Advanced Philosophy of Cognitive Science
  3hrs | Au, Sp | (Pre-req: Psych 1100)

- **Neuro 4998/3193** Undergraduate Research & Individual Studies
  Pre-approval required.
  Up to 3 credit hours of any combination of Undergraduate Research (4998) and Individual Studies (3193) can be applied to the breadth requirement. 3 credit hours equals 1 course toward the breadth requirements.

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HONORS REQUIREMENT
All honors students are required to take at least one approved graduate level course. This course should be selected in conjunction with your honors advisor. A complete list of honors and graduate level courses offered can be found online at https://neurosciencemajor.osu.edu/honors.

1. **Students must meet the following requirements to declare the neuroscience major:**
   - First, meet with an advisor to officially be declared as a pre-neuroscience major
   - Complete 24 total semester credit hours
   - At least 12 of those semester credit hours must be from graded OSU coursework
   - An overall GPA greater than or equal to 3.0
   - Earn at least a “B” in Psych 3313 and Neuro 3000

2. **Honors students must take at least one honors or graduate level course.** Approved courses can be found here: http://neurosciencemajor.osu.edu/honors

3. Thirty-six (36) semester credits in approved Neuroscience coursework.

4. At least half of the major’s curriculum must be completed at Ohio State.

5. Majors will follow the Bachelor of Science curriculum for GE and other degree requirements.

6. Students are encouraged to focus on completion of core requirements before beginning their specialization coursework.

7. For courses to apply toward the major, you must earn at least a “C”.

8. To earn your degree you will need an overall GPA of at least 2.0.

9. Research experience is also strongly encouraged for students considering graduate and professional training. You may enroll in a variety of 4998 opportunities.
   http://neurosciencemajor.osu.edu/4998

10. Up to 3 hours of experiential coursework can be applied to the breadth requirements of the major. This experiential coursework can be from any combination of the following classes: Undergraduate Research (4998) and Individual Studies. Pre-approval from your neuroscience major advisor is required.

11. Students planning to graduate "With Honors in Arts and Sciences" should visit our website for information on Honors Contract requirements for neuroscience majors.
   http://neurosciencemajor.osu.edu/honors

12. Courses cannot count for both a minor and a major.