Spring 2016 Courses for Cognitive Science Majors

The following courses satisfy degree requirements for the Cognitive Science major. Also, an Advanced Course Search tab in ISIS allows you to look up focal area courses using POS Tags starting with "COGS-…". If you believe a course qualifies to be added to one of these lists, contact Sarah Ciotola, Academic Program Coordinator (sciotol3@jhu.edu). Please provide a course description and a syllabus, if available.

Math

For Option A ("Any two of the following")

- AS.050.370 Mathematical Models of Language
- AS.110.106 Calculus I
- AS.110.107 Calculus II OR AS.110.109 Calculus II
- AS.110.201 Linear Algebra
    OR AS.110.212 Honors Linear Algebra
    OR EN.550.291 Linear Algebra & Differential Eq.
- AS.110.202 Calculus III
- AS.150.421 Mathematical Logic II
- EN.550.171 Discrete Mathematics

Option B ("All three required: Statistics sequence")
Default math option if Area A (below) is one of your focal areas

- EN.550.111 Statistical Analysis I
- EN.550.112 Statistical Analysis II

Courses by Focal Area

Area A: Cognitive Psychology & Cognitive Neuropsychology

- AS.050.203 Cognitive Neuroscience
- AS.050.315 Cognitive Neuropsych. of Visual Perception
- AS.050.345 Cognitive & Neural Basis of Executive Control
- AS.050.333 Psycholinguistics
- AS.080.203 Cognitive Neuroscience
- AS.200.336 Foundations of Mind
- AS.200.361 Tests & Measurements
- AS.200.363 Mind, Brain, Experience
- AS.200.386 Animal Cognition
- AS.376.372 Intro to Music Cognition II

Area B: Linguistics

- AS.050.325 Phonology I
- AS.050.333 Psycholinguistics
- AS.050.370 Mathematical Models of Language
- EN.600.465 Natural Language Processing

Area C: Computational Approaches to Cognition

- AS.050.370 Mathematical Models of Language
- AS.250.205 Introduction to Computing
- EN.520.415 Image Process & Analysis II
- EN.520.447 Information Theory
- EN.550.426 Introduction to Stochastic Processes
- EN.520.433 Medical Image Analysis
- EN.550.493 Mathematical Image Analysis
- EN.580.491 Learning Theory
- EN.600.226 Data Structures
- EN.600.233 Computer System Fundamentals
- EN.600.271 Automata & Computation Theory
- EN.600.363 Intro to Algorithms (EN.600.463)
- EN.600.426 Principles of Programming Languages
- EN.600.436 Algorithms for Sensor-Based Robotics
- EN.600.465 Natural Language Processing
- EN.600.468 Machine Translation
- EN.600.476 Machine Learning: Data to Models
    At most, one of the following courses:
- EN.580.200 Introduction to Scientific Computing
- EN.600.107 Intro to Programming in JAVA
- EN.600.120 Intermediate Programming

Area D: Philosophy of Mind

- AS.150.223 Formal Methods of Philosophy (AS.150.423)
- AS.150.259 Intro to the Theory of Knowledge
- AS.150.431 Intro to Philosophy of Science
- AS.200.336 Foundations of Mind

Area E: Neuroscience

- AS.050.203 Cognitive Neuroscience
- AS.050.315 Cognitive Neuropsych. of Visual Perception
- AS.050.345 Cognitive & Neural Basis of Executive Control
- AS.080.203 Cognitive Neuroscience
- AS.080.250 Neuroscience Laboratory
- AS.080.304 Neuroscience Learning & Memory
- AS.080.306 The Nervous System II
- AS.080.320 The Auditory System
- AS.080.357 Developmental Neuroscience
- AS.200.141 Foundations of Brain, Behavior & Cognition
- AS.200.304 Neuroscience of Decision Making
- AS.200.318 Quantitative Methods for Brain Sciences
- AS.200.363 Mind, Brain, Experience
- AS.200.368 Sleep, Dreams & Altered States of Consciousness
- AS.200.370 Functional Human Neuroanatomy
- AS.200.376 Psychopharmacology\

> **AS.050.318 (080.400) Practicum in Lang Disorders** (2 credits)
> This course provides the opportunity to learn about adult aphasias, language disorders which are one of the most common consequences of stroke. You will receive training in supportive communication techniques and work as a communication partner with an individual with aphasia for two hours per week. Three class meetings for orientation and reading assignments will be held on campus; training and practicum will be conducted at a local aphasia support center. Transportation required. Student must have and A- or better in AS.050.203, AS.080.203, AS.050.105, OR AS.050.311; have junior or senior status; and hold a 3.5 GPA or better. Instructor's permission required. Find more details on the Neuroscience Dept websit

Originally Posted 10/30/15. Updated 11/6/15 to remove the one-credit course AS.200.159. Updated 3/23/16 to include AS.050.370.