

Spring 2018 Courses for Cognitive Science Majors

The following courses satisfy degree requirements for the Cognitive Science major. An Advanced Course Search tab in SIS 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.

Math

For Math Option A (Any two)

- AS.050.370 Mathematical Models of Language
- AS.050.371 Bayesian Inference
- AS.110.106 Calculus I
- AS.110.107 OR AS.110.109 Calculus II
- AS.110.201 Linear Algebra
OR AS.110.212 Honors Linear Algebra
OR EN.553.291 Linear Algebra & Differential Equations
- AS.150.118 Introduction to Formal Logic
- AS.150.421 Mathematical Logic II
- EN.553.171 Discrete Mathematics

For Math Option B (Statistics Sequence, three courses total)

Default math option if Area A (below) is one of your focal areas

- EN.553.111 Statistical Analysis I
- EN.553.112 Statistical Analysis II

Courses by Focal Area

Area A: Cognitive Psychology & Cognitive Neuropsychology

- AS.050.203 OR AS.080.203 Cognitive Neuroscience
- AS.050.206 Bilingualism
- AS.050.315 Cognitive Neuropsych. of Visual Perception
- AS.200.110 Introduction to Cognitive Psychology
- AS.200.141 Foundations of Brain, Behavior & Cognition
- AS.200.316 Thought and Perception
- AS.200.361 Tests & Measurements
- AS.200.363 Mind, Brain, & Experience
- AS.376.372 Topics in Music Cognition

Area B: Linguistics

- AS.050.206 Bilingualism
- AS.050.240 World of Language
- AS.050.320 Syntax I
- AS.050.370 Mathematical Models of Language

Area C: Computational Approaches to Cognition

- AS.050.326 Foundations of Cognitive Science
- AS.050.370 Mathematical Models of Language
- AS.050.371 Bayesian Inference
- AS.080.321 Computational Neuroscience
- EN.520.415 Image Process & Analysis II
- EN.520.433 Medical Image Analysis
- EN.553.426 Introduction to Stochastic Processes
- EN.553.493 Mathematical Image Analysis
- EN.601.226 Data Structures
- EN.601.229 Computer System Fundamentals
- EN.601.231 Automata & Computation Theory
- EN.601.320 Parallel Programming (AS.601.420)
- EN.601.426 Principles of Programming Languages
- EN.601.433 Intro Algorithms
- EN.601.463 Algorithms for Sensor-Based Robotics
- EN.601.464 Artificial Intelligence
- EN.601.475 Machine Learning
- EN.601.476 Machine Learning: Data to Models

At most, one of the following computation courses:

- AS.250.205 Introduction to Computing
- EN.510.202 Computation and Programming
- EN.580.200 Introduction to Scientific Computing
- EN.601.107 Intro to Programming in JAVA
- EN.601.120 Intermediate Programming

Area D: Philosophy of Mind

- AS.050.326 Foundations of Cognitive Science
- AS.150.457 Color and Color Perception
- AS.150.467 Philosophic Logic
- AS.150.476 Philosophy and Cognitive Science
- AS.200.316 Thought and Perception

Area E: Neuroscience

- AS.050.203 OR AS.080.203 Cognitive Neuroscience
- AS.050.315 Cognitive Neuropsych. of Visual Perception
- AS.080.250 Neuroscience Laboratory
- AS.080.304 Neuroscience Learning & Memory
- AS.080.306 Neuroscience: Cellular and Systems II
- AS.080.320 The Auditory System
- AS.080.321 Computational Neuroscience
- AS.080.328 Behavioral Neuroscience Lab
- AS.200.141 Foundations of Brain, Behavior & Cognition
- AS.200.304 Neuroscience of Decision Making
- AS.200.311 Sensory Representations in the Brain
- AS.200.318 Quantitative Methods for Brain Sciences
- AS.200.322 Clinical Neuropsychology
- AS.200.363 Mind, Brain, & Experience
- AS.200.368 Sleep, Dreams & Altered States of Consciousness
- AS.200.369 Neuroscience of Motivation and Reward
- 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 common consequences of stroke. You will receive training in supportive communication techniques and work as a communication partner with an individual with aphasia for 2 hrs/wk. Three class meetings for orientation and reading assignments will be held on campus. Training and practicum will be conducted at an aphasia support center. Transportation required. Student must have an 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 permission required.