

Spring 2019 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.050.372 Foundations of Neural Network Theory
- 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.553.291 Linear Algebra & Differential Equations
- AS.150.118 Introduction to Formal Logic
- EN.553.171 Discrete Mathematics

For Math Option B – Statistics Sequence

Default math option if Cognitive Psychology/Neuropsychology is one of your focal areas. There are two Math Option B pathways.

OLD B Pathway (Three courses total, two offered SP19)

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

NEW B Pathway (Two courses total, one offered SP19)

- AS.050.201 Design & Analysis for Experimental Psychology

Courses by Focal Area

Area A: Cognitive Psychology & Cognitive Neuropsychology

- AS.050.203 Neuroscience: Cognitive previously Cognitive Neuroscience
- AS.050.206 Bilingualism
- AS.050.315 Cognitive Neuropsychology of Visual Perception
- AS.050.360 Computational Psycholinguistics NEW
- AS.200.110 Introduction to Cognitive Psychology
- AS.200.141 Foundations of Brain, Behavior & Cognition
- AS.200.385 Mind, Brain & Experience
- AS.376.372 Topics in Music Cognition

Area B: Linguistics

- AS.050.107 Language and Advertising
- AS.050.206 Bilingualism
- AS.050.320 Syntax I
- AS.050.325 Phonology I
- AS.050.360 Computational Psycholinguistics NEW

Area C: Computational Approaches to Cognition

- AS.050.360 Computational Psycholinguistics NEW
- AS.050.372 Foundations of Neural Network Theory
- AS.080.321 Computational Neuroscience
- AS.200.329 Real-World Human Data: Analysis & Visualization
- AS.200.332 Seminar in Theoretical 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
- EN.601.482 Machine Learning: Deep Learning

At most, one of the following computation courses:

- AS.250.205 Introduction to Computing
- EN.601.220 Intermediate Programming

Area D: Philosophy of Mind

- AS.150.330 Decisions, Games & Social Choice
- AS.150.459 Counterfactual Reasoning, Normative & Descriptive Aspects

Area E: Neuroscience

- AS.050.203 Neuroscience: Cognitive previously Cognitive Neuroscience
- AS.050.315 Cognitive Neuropsychology of Visual Perception
- AS.080.250 Neuroscience Laboratory
- AS.080.304 Neuroscience of Learning & Memory
- AS.080.306 Neuroscience: Cellular and Systems II
- AS.080.321 Computational Neuroscience
- AS.080.328 Behavioral Neuroscience Lab
- AS.080.348 Science of Learning
- AS.200.141 Foundations of Brain, Behavior & Cognition
- AS.200.304 Neuroscience of Decision Making
- AS.200.311 Sensory Representations in the Brain
- AS.200.329 Real-World Human Data: Analysis & Visualization
- AS.200.332 Seminar in Theoretical Neuroscience
- AS.200.369 Neuroscience of Motivation and Reward
- AS.200.385 Mind, Brain & Experience

AS.050.318 (080.400) Practicum in Lang Disorders (2 credits)

This course provides the opportunity to learn about adult aphasia, 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.