

Fall 2017 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, if available.

Required for all Cognitive Science Majors: AS.050.101 Cognition

Math

Option A (any two of the following)

- 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.150.420 Mathematical Logic I
- EN.550.171 Discrete Mathematics

Option B (all three required for the Statistics sequence)

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

- AS.200.207 Research Methods in Experimental Psychology
- EN.550.111 Statistical Analysis I
- EN.550.112 Statistical Analysis II

Courses by Focal Area

Area A: Cognitive Psychology & Cognitive Neuropsychology

- AS.050.102 Language & Mind
- AS.050.105 Introduction to Cognitive Neuropsychology
- AS.050.339 Cognitive Development
- AS.050.342 A Survey of Neuroimaging Methods for Exploring Cogn
- AS.050.344 Writing Matters: Written Language and the Brain
- AS.080.312 The Making of a Cognitive Map
- AS.200.101 Introduction to Psychology
- AS.200.130 Good Vibrations
- AS.200.132 Introduction to Developmental Psychology
- AS.200.141 Foundations of Brain, Behavior & Cognition
- AS.200.211 Sensation & Perception
- AS.376.371 Introduction to Music Cognition

Area B: Linguistics

- AS.050.102 Language & Mind
- AS.050.317 Semantics I
- EN.600.465 Natural Language Processing

Area C: Computational Approaches to Cognition

- AS.050.375 Probabilistic Models of the Visual Cortex (601.485)
- AS.200.313 Models of Mind and Brain
- AS.250.205 Introduction to Computing
- EN.520.315 Intro to Information Processing of Sensory Signals
- EN.520.412 Machine Learning for Signal Processing
- EN.520.414 Image Processing & Analysis
- EN.601.226 Data Structures
- EN.601.229 Computer System Fundamentals
- EN.601.231 Automata & Computation Theory
- EN.601.365 Knowledge Discovery from Text
- EN.601.433 Intro Algorithms
- EN.601.461 Computer Vision
- EN.601.465 Natural Language Processing
- EN.601.468 Machine Translation
- EN.601.475 Introduction to Machine Learning

At most one of the following courses:

- EN.500.200 Computing for Engineers & Scientists
- EN.601.107 Introductory Programming in Java
- EN.601.220 Intermediate Programming

Area D: Philosophy of Mind

- AS.150.193 Philosophy of Language Seminar
- AS.150.254 Philosophy of Memory
- AS.150.223 Formal Methods of Philosophy (AS.150.434)
- AS.150.245 Introduction to Philosophy of Mind
- ~~AS.150.476 Philosophy and Cognitive Science^{cancelled}~~

Area E: Neuroscience

- AS.050.105 Introduction to Cognitive Neuropsychology
- AS.050.342 A Survey of Neuroimaging Methods for Exploring Cogn
- AS.050.344 Writing Matters: Written Language and the Brain
- AS.080.105 An Introduction to Neuroscience
- AS.080.250 Neuroscience Laboratory
- AS.080.305 Neuroscience: Cellular and Systems I
- AS.080.308 Neuroeconomics
- AS.080.312 The Making of a Cognitive Map
- AS.080.345 Great Discoveries in Neuroscience
- AS.080.348 Science of Learning
- AS.080.355 Visual System
- AS.080.360 Diseases & Disorders of the Nervous System
- AS.080.370 The Cerebellum: Is it just for motor control?
- AS.200.130 Good Vibrations
- AS.200.141 Foundations of Brain, Behavior & Cognition

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 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 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's permission required. Find more details on the [Neuroscience Dept website](#).