

Undergraduate Major in Cognitive Science (Catalog Year 2016-17)

General Requirements

- ___ Requires 40 credits, at most 21 in any one department.
- ___ The CLAS requirements for a BA or BS degree apply.
- ___ At most 6 transfer credits may be applied to the plan.
- ___ All courses on plan require a grade of C- (1.7) or higher.

1. Core Courses (16 credits)

- ___ COGS 2201 Foundations of Cognitive Science
- ___ COGS 3584 Seminar in Cognitive Science (1 credit)

Four of the following:

- ___ ANTH 3250 Cognitive Anthropology *
- ___ CSE 4705 Artificial Intelligence
- ___ LING 2010Q The Science of Linguistics
- ___ PHIL 3250/W Philosophy of Mind
- ___ PSYC 2501 Cognitive Psychology
- ___ SLHS 4245/W Neurosci. Cog. & Comm. Disorders

2. Research (6 credits)

Statistics (one of the following, for at least 3 credits):

- ___ PSYC 2100(W)Q Principles of Research in Psych.
- ___ STAT 2215Q Introduction to Statistics II
- ___ STAT 3025Q Statistical Methods (Calculus level)

Methods (one of the following, for at least 3 credits):

- ___ ANTH 3004 Cultural Research (if elected for 3 credits)
- ___ LING 3110 Experimental Linguistics
- ___ PSYC 3250/W Lab in Animal Behavior & Learning
- ___ PSYC 3251/W Lab in Physiological Psychology
- ___ PSYC 3253 Sensory Neuroscience Lab
- ___ PSYC 3450W Lab in Developmental Psychology
- ___ PSYC 3550W Lab in Cognition
- ___ PSYC 3551W Lab in Psycholinguistics
- ___ PSYC 3552 Lab in Sensation and Perception

3. Formal Systems Courses (0-3 credits)[†]

- ___ CSE 2300W Digital Logic Design
- ___ CSE 2500 Introduction to Discrete Systems
- ___ CSE 3500 Algorithms and Complexity [†]
- ___ CSE 3502 Theory of Computation [†]
- ___ CSE 3802 Numerical Methods
- ___ LING 3310Q Phonology [†]
- ___ LING 3410Q Semantics [†]
- ___ LING 3511Q Syntax [†]
- ___ Math 2210Q Applied Linear Algebra
- ___ Math 2410Q Elementary Differential Equations
- ___ Math 3160 Probability
- ___ Math 3210 Abstract Linear Algebra
- ___ Math 3230 Abstract Algebra
- ___ Math 3412 Introduction to Field Theory
- ___ PHIL 2211Q Symbolic Logic
- ___ PHIL 3214 Symbolic Logic II

4. Advanced Courses (12 credits)

Must include courses from at least 3 different departments. Can include core courses not used to satisfy the Core Courses (§1) requirement.

- ___ ANTH 3200 Human Behavioral Ecology
- ___ CSE 3500 Algorithms and Complexity [†]
- ___ CSE 3502 Theory of Computation [†]
- ___ CSE 4095 (Spec.Top.) Natural Language Processing
- ___ LING 3310Q Phonology [†]
- ___ LING 3410Q Semantics [†]
- ___ LING 3511Q Syntax [†]
- ___ LING 3610W Language and Culture
- ___ PHIL 2210/W Metaphysics and Epistemology
- ___ PHIL 2212/W Philosophy of Science
- ___ PHIL 3241 Language: Meaning and Truth
- ___ PHIL 3247/W Philosophy of Psychology
- ___ PHIL 3249/W Philosophy of Neuroscience
- ___ PHIL 3256/W Philosophy of Perception
- ___ PNB 3251 Biology of the Brain
- ___ PSYC 2200 Physiological Psychology
- ___ PSYC 2400 Developmental
- ___ PSYC 2500 Learning
- ___ PSYC 3100/W History and Systems in Psychology
- ___ PSYC 3440 Developmental Cognitive Neuroscience
- ___ PSYC 3470 Cur.Topics in Developmental Psych. **
- ___ PSYC 3500 Psychology of Language
- ___ PSYC 3501 Sensation and Perception
- ___ PSYC 3502 Psychology of Consciousness
- ___ SLHS 2204 Speech and Language Acquisition
- ___ SLHS 4254/W Intro. to Lang. Disorders in Children

5. Electives (3-6 credits)

At least 3 credits (6, if '†' option is used) of additional courses from the lists above; COGS 3589 or COGS 3599; and/or, with advisors' approval, other related courses in any department.

1. _____
2. _____

[†] Any of the following can count towards the 12 credits in §4 and simultaneously "check off" the Formal Systems requirement (§3): CSE 3500, 3502; LING 3310Q, 3410Q, 3511Q. Students using this option must take 6 credits in §5. Others need 3 credits in §3 and 3 credits in §5.

* Recently approved option, not in 2016-17 Catalog, but already available to majors. (Please direct any questions to Prof. William Snyder.)

** PSYC 3470 is a variable topics course and may only be counted toward the major with advisors' approval.

The writing-in-the-major requirement is fulfilled by taking any of the W courses listed on this plan.

NOTES:

1. Commonly needed prerequisites: PSYC 1100 and 1101/3, for all PSYC courses in the major; STAT 1000Q or 1100Q, for all options in §2-Statistics; and at least one of PHIL 1101-1107, for most PHIL courses in the major.
2. COGS 2201 and COGS 3584 are spring-only courses; 2201 is best taken in Year 2; 3584 is best taken in Year 3 or 4.
3. Electives (§5) are similar to "Relateds," but this major does not require the usual 12 credits of 'Related Courses'.
4. Double major with Psychological Sciences is strongly discouraged, due to excessive overlap.