# Undergraduate Major in COGNITIVE SCIENCE (Catalog Year 2021-22)

#### **General Requirements**

- \_\_\_\_\_ Requires <u>40</u> credits, at most 21 in any one department.
- \_\_\_\_\_ The CLAS requirements for a <u>BA</u> or <u>BS</u> degree apply.
- \_\_\_\_\_At most <u>6</u> transfer credits may be applied to the plan.
- $\_$  All courses on plan require a grade of <u>C-</u> (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 <u>3 credits</u>)
- \_\_\_\_ 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 (3 credits)

- At least 3 credits are required, <u>unless</u> the ' † ' option is used.
- \_\_\_ CSE 2300W Digital Logic Design
- \_\_\_\_ CSE 2500 Introduction to Discrete Systems
- \_\_\_\_ CSE 3500 Algorithms and Complexity<sup>†</sup>
- \_\_\_\_ CSE 3502 Theory of Computation <sup>†</sup>
- \_\_\_\_ CSE 3802 Numerical Methods
- \_\_\_\_ LING 3000Q Intro to Computational Linguistics <sup>†</sup>
- \_\_\_\_ LING 3310Q Phonology<sup>†</sup>
- \_\_\_\_ LING 3410Q Semantics<sup>†</sup>
- \_\_\_\_ LING 3511Q Syntax <sup>†</sup>
- \_\_\_\_ Math 2210Q Applied Linear Algebra
- Math 2410Q Elementary Differential Equations
- \_\_\_\_ Math 3160 Probability
- \_\_\_\_ Math 3210 Abstract Linear Algebra
- \_\_\_\_ Math 3230 Abstract Algebra
- \_\_\_\_ PHIL 2211Q Symbolic Logic
- \_\_\_\_ PHIL 3214 Symbolic Logic II

#### 4. Advanced Courses (12 credits)

Must include courses from <u>at least 3</u> different departments. Can include core courses not used to satisfy the Core Courses (\$1) requirement.

- \_\_\_\_ ANTH 3200 Human Behavioral Ecology
- \_\_\_\_ ANTH 3405 Religion and Mind
- \_\_\_\_ CSE 3500 Algorithms and Complexity<sup>†</sup>
- \_\_\_\_ CSE 3502 Theory of Computation<sup>†</sup>
- LING 3000Q Intro to Computational Linguistics <sup>†</sup>
- \_\_\_\_ LING 3310Q Phonology<sup>†</sup>
- LING 3410Q Semantics <sup>†</sup>
- \_\_\_\_ LING 3511Q Syntax <sup>†</sup>
- \_\_\_\_ LING 3610W Language and Culture
- \_\_\_\_ PHIL 2208/W Epistemology
- PHIL 2210/W Metaphysics
- \_\_\_\_ PHIL 2212/W Philosophy of Science
- \_\_\_\_ PHIL 3241 Language: Meaning and Truth
- \_\_\_\_ PNB 3251 Biology of the Brain
- \_\_\_\_ PSYC 2200 Physiological Psychology
- PSYC 2208 Sensory Systems Neuroscience
- PSYC 2209 Learning & Memory: Brain to Behavior
- PSYC 2400 Developmental
- PSYC 2500 Learning
- \_\_\_\_ PSYC 3100/W History and Systems in Psychology
- \_\_\_\_ PSYC 3270 Cur. Topics in Behavioral Neuroscience
- \_\_\_\_ 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 2203 Anatomy/Physiology of Speech & Hearing
- \_\_\_\_ SLHS 2204 Speech and Language Acquisition
- \_\_\_\_ SLHS 4123 Bilingualism in Typ. & Atyp. Populations
- \_\_\_\_ SLHS 4254/W Intro. to Lang. Disorders in Children
- \_\_\_\_ SLHS 4376 Language Impairments & Literacy

#### 5. Electives (3-6 credits)

One additional course (two, if the ' † ' option is used) from the above lists, COGS 3589, COGS 3599, ANTH 4596W, or other related courses from any department, chosen with <u>advisor</u> <u>approval</u>.

1.\_\_\_\_\_\_2.

- <sup>†</sup> Option: Any of the following can be counted towards the 12 credits in <u>Advanced Courses</u> (§4) and simultaneously "check off" the <u>Formal</u> <u>Systems</u> requirement (§3): CSE 3500, 3502; LING 3000Q, 3310Q, 3410Q, 3511Q. Students using this option <u>must</u> take 6 credits in §5. Others need 3 credits in §3 and 3 credits in §5.
- \* <u>*PSYC 3470*</u> is a variable topics course and may only be counted toward the major with the advisor's approval.
- The <u>writing-in-the-major</u> requirement is fulfilled by taking any of the W courses listed on this plan.

#### NOTES:

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

University of Connecticut, College of Liberal Arts and Sciences

Cognitive Science MINOR (Catalog Year 2021-2022)

## **Course Requirements**

To earn a minor in Cognitive Science, students must complete <u>15 credits</u> at the 2000-level or above. COGS 2201 is required, plus <u>four</u> additional courses coming from at least <u>three</u> areas (A through F). No more than <u>two</u> courses may be counted from any single department.

- A. Cognition: ANTH 3250; CSE 4705; PHIL 3247/W, 3250/W; PSYC 2500, 2501.
- B. Language: LING 2010Q, 3610W; PHIL 3241; PSYC 3500.
- C. *Perception*: PHIL 3256/W; PSYC 3501, 3502.
- D. Development: PSYC 2400; PSYC 3470/W or SLHS 2204; SLHS 4254/W; 4376.
- E. Neuroscience: PHIL 3249/W; PNB 3251; PSYC 2200; 3270; SLHS 4245/W.
- F. Formal Systems: CSE 2500, 3502; LING 3000Q; 3310Q, 3410Q, 3511Q; PHIL 2211Q, 3214.

The student must earn a C (2.0) or better in each of the courses for the minor. A maximum of three credits counted towards the minor may come from transfer credit for courses equivalent to University of Connecticut courses. Substitutions are not possible for required courses in a minor.

The minor is offered by the College of Liberal Arts and Sciences. For more information, contact Prof. William Snyder, Director of Undergraduate Studies in Cognitive Science (william.snyder@uconn.edu).

Worksheet:

1. State the semester when C	OGS 2201 will be taken	n:	
2. For three of areas A-F, indicate a course that will be taken:			
Area:	Area:	Area	_:
3. Indicate one additional course to be taken in any of areas A-F: Area:			