Psychology

Psychology encompasses a range of phenomena and levels of analysis in pursuit of three goals: to deepen understanding of cognitive and neural mechanisms of sensation, perception, learning, and emotion; to probe the biological and evolutionary foundations of animal behavior; and to clarify the social perception and assessment of individuals and groups. The concentration offers an array of course options, including study in quantitative methods, laboratory techniques, and senior seminars on specialized topics. Students take upper-level courses in the field’s major sub-disciplines, including perception and cognition, behavioral neuroscience, and social psychology. The concentration in Psychology prepares students for careers in clinical psychology, business, policy-related research positions, law, and education.

The A.B. concentration requires 12 courses. The Sc.B concentration additionally requires 1 laboratory course and 4 approved science courses, totaling a toal of 17 required courses.

Common Core
The introductory course, “CLPS 0010 Mind, Brain, and Behavior,” surveys the broad territory of the scientific study of the mind, as uniquely represented by our department. The course maps the breadth of the science of the mind, focusing on fascinating questions, garnered insights, common commitments, and successful techniques and approaches. The course could be taken by students interested in the CLPS concentrations or as an introduction at the beginning of one’s college career or as an integration after having completed a number of specialized courses in a particular concentration.

Careers in Psychology and related fields require familiarity with statistics. Therefore, the Psychology concentration requires a course in Quantitative Methods (CLPS 0900). CLPS 0900 is a prerequisite for most of the laboratory courses, so concentrators should plan to take this course by their fourth semester. The department does not grant concentration credit of AP Statistics, regardless of score. Students who feel that CLPS 0900 is too elementary can complete an approved alternative course (e.g., APMA 1650, CLPS 2906).

Foundation
To provide students with a solid foundation of knowledge in their area of concentration and to minimize redundancy, the Psychology concentration requires four foundation courses in Social/Personality, Perception/Cognition, Development, and Learning/Animal Behavior/Behavioral Neuroscience.

Electives
Each concentrator will take four additional courses that allow the student to go into depth in some of the relevant topics. These electives must include at least two courses in one of the four foundation topics (i.e., Social/Personality, Perception/Cognition, Development, and Learning/Animal Behavior/Behavioral Neuroscience). The courses designed to count as electives will often have foundation courses as prerequisites and may include laboratory courses, content courses, or seminars.

Research Methods and Capstone
Another element in the Psychology concentration is a research methods course that builds on the introductory statistics course (which will be a prerequisite) but exposes students to a variety of topics in research of the mind: to empirical methods (e.g., surveys, chronometry, eye tracking, brain imaging), to common designs (e.g., factorial experimental, correlational, longitudinal), to research ethics, and to best practices of literature review. Concentrators will additionally take either a seminar course or an independent research course to serve as their capstone experience.

Additional requirements for Sc.B.
In line with university expectations, the Sc.B. requirements include a greater number of courses and especially science courses. The definition of “science” is flexible. A good number of these courses will be outside of CLPS, but several CLPS courses might fit into a coherent package as well.

In addition, the Sc.B. degree also requires a lab course to provide these students with in-depth exposure to research methods in a particular area of the science of the mind.

Honors Requirement
The Research Methods course will serve as a requirement for admission to the Honors Program in Cognitive Science, Cognitive Neuroscience, and Psychology. Previously, any lab course served as this requirement. This practice not only demanded a large number of lab courses as part of the CLPS curriculum but also suffered from frequent mismatches between the type of research the student wished to pursue and the type of lab course available in the relevant semesters. A more general research methods course is likely to prepare students better and more broadly than any single lab course can.

FOR DETAILED UPDATES, PLEASE REFER TO THE COGNITIVE, LINGUISTIC, AND PSYCHOLOGICAL SCIENCES (CLPS) UNDERGRADUATE PAGE.

Requirements for the A.B. degree

STANDARD PROGRAM FOR THE A.B. DEGREE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLPS 0010</td>
<td>Mind, Brain, and Behavior</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 0900</td>
<td>Statistical Methods</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 0700</td>
<td>Social Psychology</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 0701</td>
<td>Personality</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 1700</td>
<td>Abnormal Psychology</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 0200</td>
<td>Human Cognition</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 0220</td>
<td>Making Decisions</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 0500</td>
<td>Perception and Mind</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 0600</td>
<td>Developmental Psychology</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 0610</td>
<td>Children’s Thinking: The Nature of Cognitive Development</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 0100</td>
<td>Learning and Conditioning</td>
<td>1</td>
</tr>
<tr>
<td>CLPS 0110</td>
<td>Animal Behavior</td>
<td>1</td>
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<td>BIOL 0480</td>
<td>Evolutionary Biology</td>
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<td>CLPS 1100</td>
<td>Animal Cognition</td>
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<tr>
<td>CLPS 1150</td>
<td>Memory and the Brain</td>
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<tr>
<td>CLPS 1200</td>
<td>Thinking</td>
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</tr>
<tr>
<td>CLPS 1480B</td>
<td>Cognitive Aging and Dementia</td>
<td>4</td>
</tr>
<tr>
<td>CLPS 1500</td>
<td>Perception and Action</td>
<td>4</td>
</tr>
<tr>
<td>CLPS 1510</td>
<td>Auditory Perception Laboratory</td>
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<tr>
<td>CLPS 1610</td>
<td>Cognitive Development</td>
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<tr>
<td>CLPS 1650</td>
<td>Child Language Acquisition</td>
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<tr>
<td>CLPS 1720</td>
<td>Human Resilience</td>
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</tr>
<tr>
<td>CLPS 1730</td>
<td>Psychology in Business and Economics</td>
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</tr>
<tr>
<td>CLPS 1820</td>
<td>Language and the Brain</td>
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</tr>
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<td>EDUC 1260</td>
<td>Emotion, Cognition, Education</td>
<td>4</td>
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<tr>
<td>PHIL 1770</td>
<td>Philosophy of Mind</td>
<td>4</td>
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<tr>
<td>CLPS 1400</td>
<td>The Neural Bases of Cognition</td>
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<tr>
<td>CLPS 1480B</td>
<td>Cognitive Aging and Dementia</td>
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<tr>
<td>CLPS 1480C</td>
<td>Cognitive Control Functions of the Prefrontal Cortex</td>
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<tr>
<td>CLPS 1470</td>
<td>Mechanisms of Motivated Decision Making</td>
<td>4</td>
</tr>
<tr>
<td>CLPS 1495</td>
<td>Affective Neuroscience</td>
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CLPS 1560  Visually-Guided Action and Cognitive Processes
CLPS 1781  Thinking about the Social World
CLPS 1783  Nudge: Social Psychology for Social Change
CLPS 1900  Research Design and Methods 1

Total Credits 12

Requirements Specific for the Sc.B. degree

STANDARD PROGRAM FOR THE Sc.B. DEGREE

1

CLPS 0010  Mind, Brain, and Behavior 1
CLPS 0900  Statistical Methods 1

One approved course in Social/Personality, such as: 1
CLPS 0700  Social Psychology
CLPS 0701  Personality
CLPS 1700  Abnormal Psychology

One approved course in Perception/Cognition, such as: 1
CLPS 0200  Human Cognition
CLPS 0220  Making Decisions
CLPS 0500  Perception and Mind

One approved course in Development, such as: 1
CLPS 0600  Developmental Psychology
CLPS 0610  Children's Thinking: The Nature of Cognitive Development

One approved course in Learning/Animal Behavior/Behavioral Neuroscience, such as: 1
CLPS 0100  Learning and Conditioning
CLPS 0110  Animal Behavior

Four Approved Electives, such as: 4
BIOL 0480  Evolutionary Biology
CLPS 1100  Animal Cognition
CLPS 1150  Memory and the Brain
CLPS 1200  Thinking
CLPS 1480B  Cognitive Aging and Dementia
CLPS 1500  Perception and Action
CLPS 1510  Auditory Perception Laboratory
CLPS 1650  Child Language Acquisition
CLPS 1720  Human Resilience
CLPS 1730  Psychology in Business and Economics
CLPS 1820  Language and the Brain
EDUC 1260  Emotion, Cognition, Education
PHIL 1770  Philosophy of Mind

One Independent Study or Approved Seminar, such as: 1
CLPS 1400  The Neural Bases of Cognition
CLPS 1480B  Cognitive Aging and Dementia
CLPS 1480C  Cognitive Control Functions of the Prefrontal Cortex
CLPS 1470  Mechanisms of Motivated Decision Making
CLPS 1495  Affective Neuroscience
CLPS 1560  Visually-Guided Action and Cognitive Processes
CLPS 1781  Thinking about the Social World
CLPS 1783  Nudge: Social Psychology for Social Change
CLPS 1900  Research Design and Methods 1

One Approved Laboratory Course, such as: 1
CLPS 1180A  Canine Behavior
CLPS 1191  Animal Behavior Laboratory
CLPS 1193  Laboratory in Genes and Behavior

CLPS 1290  Laboratory in Cognitive Processes
CLPS 1490  Functional Magnetic Resonance Imaging: Theory and Practice
CLPS 1492  Computational Cognitive Neuroscience
CLPS 1510  Auditory Perception Laboratory
CLPS 1590  Visualizing Vision
CLPS 1690  Laboratory in Developmental Psychology
CLPS 1791  Laboratory in Social Cognition
CLPS 1890  Laboratory in Psycholinguistics

Four Approved Science Courses, such as: 4
BIOL 0200  The Foundation of Living Systems
BIOL 0800  Principles of Physiology
CHEM 0350  Organic Chemistry
CSCI 1430  Computer Vision
CSCI 1950F  Introduction to Machine Learning
ENGN 1220  Neuroengineering
MATH 0100  Introductory Calculus, Part II
NEUR 1030  Neural Systems
NEUR 1040  Introduction to Neurogenetics
PHYS 0030  Basic Physics

Total Credits 17

1 For the current list of approved courses in all categories, see the CLPS Psychology page.
Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Helvetica was used instead of Arial.

The editor may contact Leepfrog for a draft with the correct fonts in place.