

Cognition and Perception (CAP) Concentration

B.S. Degree in Psychology

Frequently Asked Questions



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What is the CAP concentration?

This concentration focuses an undergraduate's Bachelor of Science (B.S.) degree on courses aimed at understanding how people intelligently adapt to the functional demands of environments. Discoveries about the functioning of the brain have been accelerating in recent decades and continue to both amaze and inform us. Human beings do not passively register information that we encounter but actively select and interpret what we perceive, remember, decide, and act upon, in concert with our immediate and long-term objects and constraints. This is the case whether we are interacting with people, the environment, or advanced technologies such as vehicles, computers, or smart phones. To add the CAP concentration to your degree program, speak to your advisor (cosm-advisors@wright.edu).

What does the CAP concentration prepare me for?

A solid background in cognition and perception will prepare you well for more advanced studies in experimental psychology and related fields (e.g., graduate studies in cognition, perception, cognitive neuroscience, computer science, human factors or engineering psychology, medical school, law school) and working in applied settings. The required and recommended courses for the CAP concentration will equip you with knowledge about human performance and the analytic skills to evaluate and apply scientific data.

A few examples include:

- A cognitive psychologist and a public policy maker might ask how one divides attention and whether it is safe to drive and talk on a cell phone at the same time.
- In a court of law, knowing the impact of the power and limits of memory is paramount for gauging the weight of eyewitness testimonies.
- A perception psychologist might study the basics of vision, and a human factors specialist would use this information to help design visual displays for aircraft.

Should I go to graduate school?

Graduate school attendance depends on one's career goal. In general, the higher the level of education, the higher the degree of responsibility in one's job. For example, the principal investigator of a research project at an academic institution, a government laboratory, or at a research and development department in industry would typically have an advanced degree; a research assistant would not. An advanced degree is generally not required by many government and industrial jobs.

Besides the classes required for the B.S. degree and the CAP concentration (see next page), what other preparation will I need?

- We recommend you seek out research experiences while you are an undergraduate student. Reach out to faculty members from whom you've taken classes to see if you could serve as a research assistant in their lab. You can earn Independent Research credit (PSY 4060) or even engage in an undergraduate Honors Research project (PSY 4070) with a faculty member. Faculty members' interests are listed on the Department's webpages: <https://science-math.wright.edu/psychology/faculty-and-staff-directory>
- We also encourage you to become active in professional organizations, including Psychology Club and Psi Chi, on WSU's campus.
- Faculty occasionally have reading groups during the year or over the summer, in conjunction with activities in their labs. Additionally, the Department holds a weekly Brown Bag seminar on Fridays where Department members or community associates present colloquia.
- The Undergraduate Practicum is a course (PSY 4030) where a student does work in the community for course credit. To learn more about this program, see the Practicum webpage: <https://science-math.wright.edu/psychology/practicum-in-psychology>
- For those planning to go to graduate school, medical school, law school, or other post-baccalaureate programs, do your research on how to prepare, including pre-requisite courses, standardized tests (e.g., GRE, MCAT, LSAT) in your field. Build up your verbal, quantitative, and analytical skills during your entire undergraduate period.

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Required and Recommended Courses

This list focuses on some of the specific requirements for the CAP Concentration. The Psychology B.S. degree checklist (available on Wings Express in your degree audit) should be used as your master checklist for those requirements. Courses listed below are some of the required and recommended courses for the CAP Concentration, but you are not limited to taking only these courses to satisfy your Psychology electives requirements. For your General Electives, we strongly encourage you to select more courses in natural sciences (e.g., neurophysiology, physics), mathematics, computer science, and engineering. Please consult with a COSM advisor when planning your semesters (cosm-advisors@wright.edu) and use your degree audit (available on Wings Express) to stay up-to-date on your progress. A minimum grade of 3.2 in Psychology coursework is required to graduate with the concentration.

A. CAP-REQUIRED COURSES

- PSY 3210**, Cognition and Learning (minimum grade of C, satisfies 1 PSY Core or 1 PSY Elective)
- PSY 3710**, Perception (minimum grade of C, satisfies 1 PSY Core or 1 PSY Elective)
- PSY 3230**, Cognition and Learning Methods **or** **PSY 3730** Perception Methods (satisfies 1 PSY research method)
- PSY 3010**, Research Methods I (minimum grade of C)
- PSY 3020**, Research Methods II
- PSY 4020**, Advanced Topics in Research Methods (satisfies 1 PSY advanced research design requirement)
- CS 1160**, Introduction to Computer Programming I (satisfies 1 PSY computing skills requirement)

B. CAP-RELEVANT CAPSTONE COURSES: 4200s, 4600s, 4700s series (Select **two** from this list.)

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| PSY 4100 , How We Know What We Know Capstone | PSY 4280 , Psychological Game Theory Capstone |
| PSY 4200 , Cognitive Psychology Capstone – Various Topics | PSY 4600 , Human Factors Psychology Capstone – Various Topics |
| PSY 4220 , Psycholinguistics Capstone | PSY 4650 , Mind and Environment Capstone |
| PSY 4230 , Problem Solving & Reasoning Capstone | PSY 4700 , Advanced Topics in Perception Capstone – Various Topics |
| PSY 4240 , Attention and Performance Capstone | |

C. CAP-RECOMMENDED ELECTIVES

- PSY 2530**, Influence and Persuasion
- PSY 2940**, Mind, Body, Consciousness, and Reality
- PSY 3600**, Human Factors Psychology

Note that additional relevant topics for the following may also be available from time to time: PSY 2000 (Psychology Electives Special Topics), PSY 4200 (Cognitive Psychology Capstone Variable Topics), PSY 4600 (Human Factors Psychology Capstone Variable Topics), and PSY 4700 (Perception Capstone Variable Topics).

D. ADDITIONAL ELECTIVES TO CONSIDER

Consider taking an Independent Reading or Independent Research course, entering the Honors Program^a, or participating in a Practicum.

- PSY 4030**, Practicum in Applied Psychology (in relevant areas)
- PSY 4040**, Independent Reading^b
- PSY 4050**, Honors Seminar^a
- PSY 4060**, Independent Research^b
- PSY 4070**, Honors Research Project^a

^a Information about the Honors Program can be obtained from the Department of Psychology Office in 335 Fawcett.

^b To participate in Independent Readings or Independent Research, directly contact the faculty member with whom you are interested in working.